Baran Steel and Galvanizing Industry Co. Ltd.

COMPANY PREQUALIFICATION



Zaman, Tasarım, Teknoloji

Time, Design, Technology





>>> Company	>>> Financial Eligibility	
> Information4	› Financial Situation	46
> Introduction5	› Detailed Income Statement	47
› Administrative Staff7		
Organization Chart8	>>> Official Document	
>>> Quality Certificates	> Chamber Registration Certificate	49
) ISO - 9001:200810	> Turkish Trade Registry Gazette	50
) ISO - 14001:200411		
OHSAS - 18001:200812	>>> Production - Service Area	
> TS EN ISO 146113	Overview	57
> EN - 1090 - 1-2 : 200914	› Lattice Structrures	60
> WPOR (WB-FW15	> Tubular Structrures	61
	› Hot Dip Galvanizing	62
>>> Quality Management		
> Testing Laboratory17	>>> Engineering Service	
› Input Quality Plan18	> Softwares	64
Manufacturing Process Quality Plan19	/ Juliwales	04
Galvanization Process Quality Plan		
Tower Assembly Process Quality Plan22	>>> Standards	
	› Design Standarts	
>>> Capacity Report	› Product Standarts	
Introduction25	› Fasteners Standarts	
> Overview26	› Galvanizing Standarts	
> Machinery and Tools27	› Inspection & Testing Standarts	/0
Galvanizing Section28		
› Annual Manufacturing Capacity29	>>> Key References	
› Annual Capacity Calculation30	› Key References for GSM Towers	
› Annual Consuption Capacity33	› Key References for OHTL Towers	
	› Key References for Substation Steel Structures	74
>>> Details Of Machines		
> Ficep Rapid CNC Angle Trim Stapling, Cutting36	>>> Corporate Social Responsibility	
> Ficep HP12 T4 CNC Angle Trim Stapling, Cutting37	Environmental Health	
> Ficep 166 T.CNC Angle Trim Stapling, Cutting38	Occupational Health and Safety	77
> Ficep P830A CNC Sheet Processing39		
> Ficep HP16 T6 CNC Angle Trim Stapling, Cutting40	>>> Additional Files	
> Ficep P51 CNC Sheet Processing41	Integrated Manual	79
> HP-130A Plasma - CNC42		
› Abkant Pres AD-S Tandem CNC43		
> Equipment List44		







Company



>>>> COMPANY - Information

Name of Company:	BARAN STEEL & GALVANIZING	INDUSTRY CO. LTD.
Name of Company:	BARAN ÇELİK VE GALVANİZ SAN	NAYİ LTD. ŞTİ.
Place Registration:	ANKARA /TURKEY	
Chember of Industry Regisration Date :	09.05.1988	
Chember of Industry Regisration No:	3049 - 16/45	
Commercial Regisration No :	38852	
Tax Office / ID No :	Hitit / 141 002 0523	
Field of Activity :	Power Switchyards,Telecomm Radio Link, And Also Various	nergy Transmission Lines Towers and nunication Towers For GSM Antennas, TV, Types of Steel Constructions, Polygon gns Steel Constructions, any kind of Hot Dip
Number of employees :	150 - 250	
Customers :	In over 40 countries worldwi	de
Head Office / Registered Address :	Saray Mahallesi Dağyaka Cad 06980 KAZAN - ANKARA / TUR	
Phone :	+90 (312) 815 41 79 +90 (312) 815 53 52 +90 (312) 815 42 85	
Mobile Phone :	+90 (533) 613 26 69	
Fax:	+90 (312) 815 53 53	
Company Website URL:	www.barancelik.com.tr	
Company General Email :	barancelik@barancelik.com.	tr
	Mr.Alper ASLAN	alperaslan@barancelik.com.tr
Contact Persons :	Mr.Gökhan BARAN	gokhanbaran@barancelik.com.tr

>>>> COMPANY - Introduction

BARAN STEEL AND GALVANIZING INDUSTRY CO. LTD.

The company was established in the 70's in a 200m2 workshop. Driven for success and thanks to the skill and support of our workforce, we soon became a well known company in the steel structure fabrication sector.

As the demand grew, Baran Steel and Galzanizing expanded and moved to bigger premises.

By the end of the 80's, a building devoted to hot dip galvanizing was added to the facilities.

As soon as ISO-9000 Quality Management System was introduced in Turkey, Baran became one of the first companies to implement it and receive the certification.

In the years that followed, we updated our equipment with CNC technology and renewed the lines upgrading both our capacity and the quality of our services.

Today, Baran Steel and Galvanizing operates in a 9,000 m2 indoor and a 15,000m2 outdoor area with a steel structure fabrication capacity of 36,000 tons and 40,000 tons of galvanizing, featuring a wide range of products such as overhead power transmission lines, substation structures, modular masts, monopoles, lighting poles and any kind of tubular steel structures and telecommunication lattice towers.

Meeting tight deadlines, minimizing your turn around time together with strict quality guidelines, lie at the core of our success

Every part of the manufacturing process is subject to a three phase (initial, intermediate, final) quality control before reaching delivery.

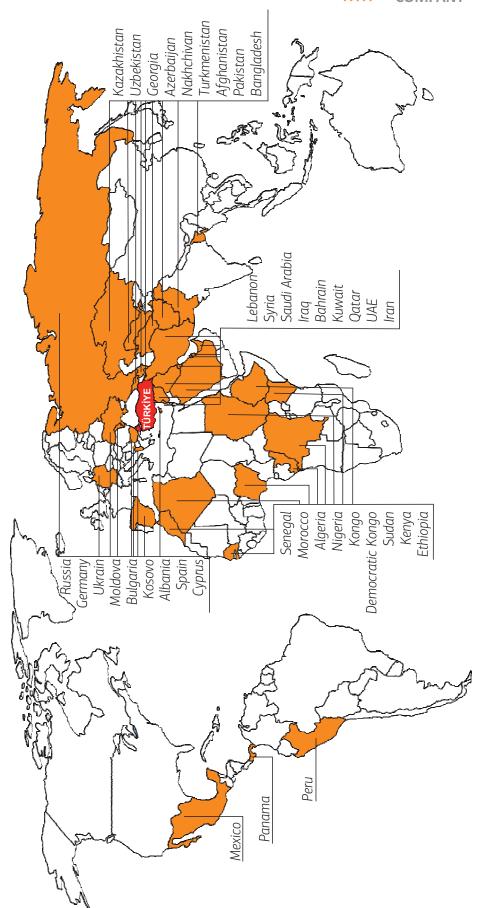
We can accommodate your shipping needs: whether it be maritime, road or air freight, our products are carefully labeled and packed in accordance with your demands, accurately following the packing lists, ensuring deliveries are met on time and within budget.





where we export

>>>> COMPANY - Where We Export?

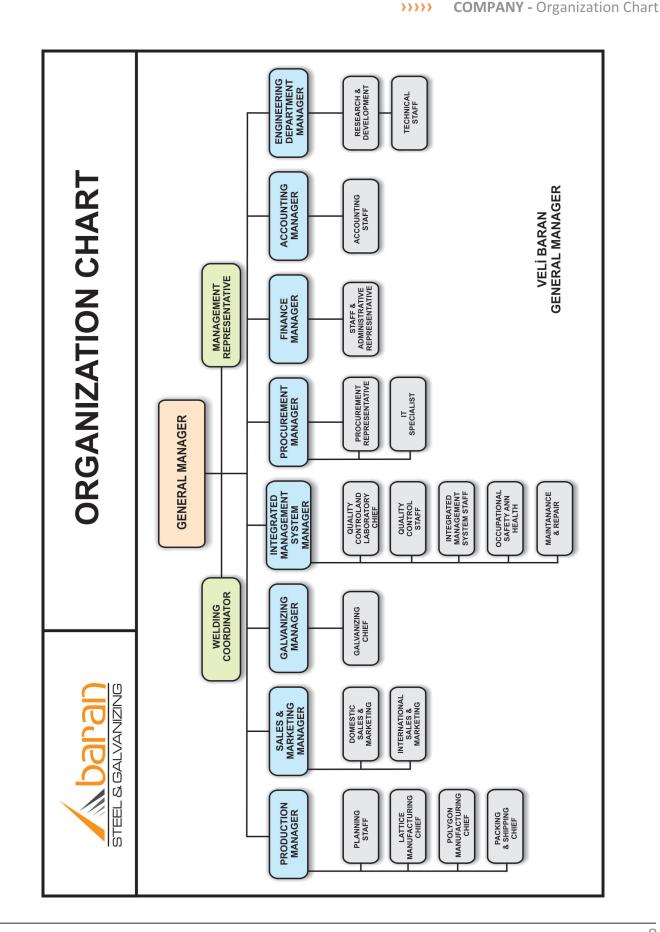




>>>> COMPANY - Administrative staff

2	Mr. Gökhan BARAN	Civil Engineer Sales and Marketing Manager	gokhanbaran@barancelik.com.tr
0	Mr. Okay BARAN	Business Galvanization Department Manager	okaybaran@barancelik.com.tr
0	Mr. Alper ASLAN	Civil Engineer Production Manager	alperaslan@barancelik.com.tr
Ω	Mrs. Fulya BARAN DUMAN	International Trade & Finance (MSC) International Trade Specialist	fulyabaran@barancelik.com.tr
0	Mr. Gökalp KIRGIZ	Civil Engineer Engineering Department Manager	gkirgiz@barancelik.com.tr
0	Mr. Murat BARAN	Civil Engineer Procurement Manager	muratbaran@barancelik.com.tr
0	Mr. Fatih BARAN	Management (MBA) Finance Manager	fatihbaran@barancelik.com.tr
0	Mr. Hakan SERDAR	Mechanical Engineer Integrated Management Manager	hakanserdar@barancelik.com.tr
0	Mr. Devrim KÖSE	Civil Technician Machine-Drawing & Construction Technician Chief Designer	devrimkose@barancelik.com.tr
0	Mr. Tuncay YILDIRIM	Civil Technician Machine-Drawing & Construction Technician Chief Designer	tuncayyildirim@barancelik.com.tr
0	Mr. Yakup ATEŞ	Business Shipping and Planning Manager	yakupates@barancelik.com.tr
0	Mr. Tayfun TASAR	Microsoft Systems Administrator IT Specialist	tayfuntasar@barancelik.com.tr







Quality Certificate

>>>> QUALITY CERTIFICATE ISO 9000:2014



>>>> QUALITY CERTIFICATES - ISO 14001:2015



>>>> QUALITY CERTIFICATES - ISO 18001:2014



>>>> QUALITY CERTIFICATES - TSE EN ISO 1461



TÜRK STANDARDLARI ENSTİTÜSÜ TÜRK STANDARDLARINA UYGUNLUK BELGESI

TURKISH STANDARDS INSTITUTION

CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

BARAN ÇELİK VE GALVANİZ SANAYİ LTD.ŞTİ.

BARAN ÇELİK VE GALVANIZ SANAYI LTD.ŞTİ.

KAZAN/ANKARA ANKARA/TÜRKİYE

KAZAN/ANKARA ANKARA / TÜRKİYE

SARAY MAH.İST. YOLU 27 KM. DAĞYAKA CAD. NO:4

SARAY MAH.İST. YOLU 27 KM. DAĞYAKA CAD. NO:4

Markanın Tanımı Description of the Mark TSE veya/or veya/or 📙 🕜 Ш

000982-TSE-01/01

01.04.1998

11.04.2018

BELGE NUMARASI

REFERENCE NUMBER OF LICENCE

BELGENİN İLK VERİLİŞ TARİHİ DATE OF FIRST ISSUE OF LICENCE

BELGENİN SON GEÇERLİLİK TARİHİ LICENCE VALID UNTIL

BELGE SAHİBİ KURULUŞUN ADI NAME OF THE LICENCE HOLDER

BELGE SAHİBİ KURULUŞUN ADRESİ ADRESS OF THE LICENCE HOLDER

ÜRETİM YERİ ADI NAME OF THE MANUFACTURING PLACE

ÜRETİM YERİ ADRESİ ADRESS OF THE MANUFACTURING PLACE

IPTAL EDILEN BELGE NUMARASI (Varsa) INDICATION OF SUPERSEDED LICENCE (if any)

TESCILLI TICARI MARKASI REGISTERED TRADE MARK

ILGILI TÜRK STANDARDI RELATED TURKISH STANDARD

14.10.03/TSE-32308

BARAN ÇELİK

TS EN ISO 1461 / Demir ve çelikten imal edilmiş malzemeler üzerine sıcak daldırmayla yapılan galvaniz kaplamalar - Özellikler ve deney metotları / 14.07.2011

BELGE KAPSAMI

SCOPE OF LICENCE

- DEMİR VE ÇELİK MALZEMELER ÜZERİNDE UYGULANAN SANTRİFÜJLENMEMİŞ SICAK DALDIRMA ÇİNKO KAPLAMALAR.

K.D.(17.08.2014) -DEMIR VE ÇELİK MALZEMELER ÜZERİNE UYGULANAN SANTRİFÜJLENMEMIŞ SICAK DALDIRMALI ÇİNKO

HÜDÜRLÜĞÜ

n, üretim yerinin Enstitümüzün belirlediği şartları karşıladığını dilemez, kismen veya okunmasını zorlaştıracak şekilde çoğalıklı RRLÜĞÜ "Adres: Necatibey Gad. No:112 06100 Bakanlıklı KEZİ BAŞKANLIĞİ; Adres: Necatibey Cad. No:112 06100 Baka

64 27, Faks: 0 312 416 66 17

https://evrakkontrol.tse.org.tr/BelgeDogrulama.aspx?p=olozsxok adresinden belgenin doğruluğunu ve geçerliliğini sorgulayınız.



1/2

>>>> QUALITY CERTIFICATES - EN-1090-1-2:2009



CERTIFICATE OF CONFORMITY OF THE FACTORY PRODUCTION CONTROL

Nr .: 0654-CPR-0289

In compliance with Regulation (EU) 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Structural steel components with corrosion protection, up to execution class EXC2 acc. to EN 1090-2, declaration method 3a table A.1 of EN 1090-1 as per Annex which is integral part of this certificate

placed on the market under the name or trade mark of

BARAN ÇELİK VE GALVANİZ SAN. LTD. ŞTİ.

Saray Mah. Dağyaka Cad. No:4 06980 Kahramankazan Ankara, TURKEY

and produced in the manufacturing plant

BARAN ÇELİK VE GALVANİZ SAN. LTD. ŞTİ.

Saray Mah. Dağyaka Cad. No:4 06980 Kahramankazan Ankara, TURKEY

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard



under system 2+ for the performances set out in this certificate are applied and that

the factory production control is assessed to be in conformity with the applicable requirements

This certificate was first issued on 12.04.2017 and will remain valid until 11.04.2020, as long as neither the harmonized standard, the construction product, the attestation and verification of constancy of performance (AVCP) methods nor the manufacturing conditions in the plant are not modified significantly; and the certificate have not been either suspended or withdrawn by the factory production control certification body.



Date: 12.04.2017



Partial reproduction of this document is prohibited

The validity of the certificate may be confirmed by contacting e-mail address. into@tuvhellas.gr
TUV HELLAS SA, 282, Mesogeion Ave, 155 62 Cholargos, Tel. ++30-210-6540195, fax ++30-210-6528025



TUV Code: 0805629



>>>> QUALITY CERTIFICATES - WPQR (BW-FW)



QUALIFICATION OF A WELDING PROCEDURE (WPQR) CERTIFICATE 09-702-02-C-03-2017-21740268

Authority:

TÜV Teknik Kontrol ve Belgelendirme

A.Ş.

pWPS No:

pWPS-135-17-BW-01

135-17-BW-01 WPQR-No.:

Revision: 0

Manufacturer:

BARAN ÇELİK VE GALVANİZ

SAN. LTD. ŞTİ.

Address:

Saray Mah. Dağyaka Cd. No:4 Kahramankazan-Ankara / Türkiye

Requirements:

EN ISO 15614-1/

Range of Approval	TEST PIECE		Range of Qualification
Welding process(es):	135-Manual		135-Manual
Type of weld, joint, execution:	BW - (bs)		BW(ss,nb),(ss,mb),(bs),(ss,gb), (ss,fb)-FW and branch connection with an angle ≥60°
Groove Shape:	v		Any Shape
Parent material and Group	EN 10025-2 S355J2+N ISO/TR 15608 1.2	1	S355j2+N (ISO/TR 15608 Steels with a specified minimum yield strength ReH ≤ 355 N/mm²)
Parent material thickness (mm):	12,0 mm		÷
Weld Metal Thickness (mm):	12,0 mm		3,0 mm ≤ t ≤ 24,0 mm (BW) 6,0 mm ≤ t ≤ 24, mm (FW)
Throat Thickness (mm):	-		-
Single run/multi run:	Multi Run		Multi Run
Pipe outside diameter(mm):			D > 500 mm ve/and D > 150 mm (Sadece PA ve PC / Only PA and PC rotated position)
Filler metal designation and size:	EN ISO 14341-A - G 4 and 1,2 mm Ø	2 4 M21/M32 3Sl1	EN ISO 14341-A - G 42 4 M21/M32 3Sl1 and 1,2 mm Ø
Shielding or backing gas/ flux designation:	ISO 14175 M21: Ar+0-	5% CO2	Is restricted to the symbol of the gas according, to ISO 14175.Content of CO2 shall not exceed 10 % of that used to qualify the procedure test.
Type of welding current and polarity:	DC(+)		DC(+)
Mode of metal transfer:	Spray Arc		Spray Arc
Heat input:	See Page-2		(0,75Q-1,25Q)
Welding positions:	PA		All Except PG and J-L045
Preheat temperature:	Min 50°C		Min 50°C
Interpass temperature:	Min 250°C		Min 250°C
Post Weld Heat Treatment and/or aging:	N/A		N/A
TEMPERATURE LIMITATION:		Impact test has been metal combination.	conducted at -20 °C with above mentioned parent and filler
EVIDENCE FOR QUALITY ASSURANCE		-	
SCOPE EXTENSION/ LIMITATION or SPEC	CIAL ADVICE FOR	-	

Certified that test welds were prepared, welded and tested satisfactorly in accordance with the requirements of the code / testing standard indicated above. This certificate is issued under the scope of ISO/IEC 17020 accreditation by TÜRKAK. The accreditation status would be verified via

https://secure.turkak.org.tr/kapsam/search under accreditation number of AB-0100-M.

Other materials acc. To EN ISO 15614-1, 8.3.1.Change of filler materials size is permitted acc. to 8.6.4 in EN ISO 15614-1

permitted acc. to 8.5.2.1 in EN ISO 15614-1.

Location - ANKARA-TURKEY Date - 22.03.2017

TÜV Teknik

TÜV Teknik Kontrol ve Belgelendirme A.Ş. Ayazmadere Cad. Pazar Sk. Bareli Plaza No; 2-4 Kat;4,Gayrettepe, İstanbul-TÜRKİYE Telefon +90 212 293 26 42• Fax +90 212 293 38 44 • E-mail: tuv-nord@tuv-turkey.com

F-726 R06

1 of 3



Quality Management

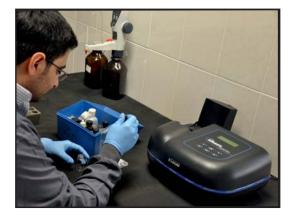


>>>> QUALITY MANAGEMENT - Testing Laboratory

All procured and supplied materials are tested in accordance with customer specification and quality standard, and if any non-conforming material are rejected and returned without any access to the stocks.

- > Test certificates are obtained from the main producers for physical & chemical properties.
- > We also send a strip of the raw materials for checking of physical & chemical properties to laboratories.

Spectro Analysis



Test Device



Test Device



- > The materials are checked physically and visually at producers place and checked again at our factory on receipt of materials.
- > The materials are finally inspected on fabrication, by our quality control department with the customer/inspecting authority before dispatching to the galvanizers.
- The materials are offered for final inspection to the customer at the galvanizers place after galvanizing with prior intimation.

Angle Sample



Dipping Solution



Mechanical Test Device





>>>> QUALITY MANAGEMENT - Input Quality Plan

				Dokür	Doküman No : PL-01	-01
		A IG VET IA I O	2	Yayın		: 02.01.2015
Capabal	INFO	NPUI QUALLIY PLAN	2	Revizy	Revizyon No : 01	
IL & GALVANIZING				Sayfa No	1:	/1
PRODUCT	CHARACTERISTICS TO BE CONTROLLED	CONTROL DEVICE	CONTROL	RELATED	RECORD	RESPONSIBLE SPECIALIST
Angle, metal sheet and profiles	Condition of the Material, Size Control, Hardness Control, Mechanical and Chemical Characteristics, Charpy Impact Testing Control	Visual Inspection, Caliper, Tape Measure, Hardness Measurement Device, Tensile Testing Device, Analysis Reports and Impact Testing Machine	Sampling Instruction	Input Control Instruction, Cast and Profile Purchasing Specification	Raw Material Acceptance Report, Input Control Report , Testing Device Report	Quality Control and Laboratory Specialist
Connectors, Bolt, anchorage, U/V bolt, washer and nut	Condition of the Material , Size Control, Mechanical Characteristics	Visual Inspection, Caliper, Tape Measure, Tensile Testing Device, Analysis Reports	Sampling Instruction	Input Control Instruction, Connectors Purchasing Specification	Input Control Report	Quality Control and Laboratory Specialist
Zinc	Condition of the Material, Crystalline structure with cut-off control	Visual Inspection, Analysis Reports	Sampling Instruction	Input Control Instruction , Zinc Purchasing Specification	Galvanize Raw material Input Control Form	Quality Control and Laboratory Specialist
HCL Acid	Condition of the Material, Density (% Concentration), Baume	Visual Inspection, Battery Hydrometer, Densimeter, Analysis Reports	Sampling Instruction	Input Control Instruction, Hydrochloride Acid Purchasing Specification	Galvanize Raw material Input Control Form	Quality Control and Laboratory Specialist
Flux	Condition of the Material, Density (% Concentration), Baume	Visual Inspection , Battery Hydrometer , Densimeter, Analysis Reports	Sampling Instruction	Input Control Instruction, Flux Purchasing Specification	Galvanize Raw material Input Control Form	Quality Control and Laboratory Specialist
Outsourced Galvanizing Input Control	Condition of the Material	Visual Inspection,	With each parcel	Input Control Instruction	Outsourced Material Entry Control Form	Quality Control Employee or Galvanization Specialist
Supplier Galvanizing Input Control	Condition of the Material, Coating thickness	Visual Inspection, Micrometer	With each parcel	Supplier Galvanizing Specification	Input Control Report	Quality Control and Laboratory Specialist
Supplier production Input Control	production Condition of the Material, Size Control	Visual Inspection, Caliper, Tape Measure	With each parcel	Supplier Production Specification, Production Cards	Input Control Report	Quality Control and Laboratory Specialist

APPROVED BY	Management Representative Hakan SERDAR	
ORGANIZED BY	Integrated Management System Murat DOGANAY	

6.

5

7.

œ.

8

5

ITEM NR.



>>>> QUALITY MANAGEMENT - Manufacturing Process Quality Plan

Z	
٩	
Z	
>	
H	
7	
A	
泵	
9	
Š	
ш	
Ŏ	
2	
PROCE	
(7)	
ž	
RIN	
K	
Ĕ	
FACT	
4	
5	
Z	
⋖	
Σ	

Document Nr.	: PL-02
Date of Issue	: 20.05.2015
Revision Nr.	: 02
Page Nr.	: 1/2

ITEM NR.	PROCESS	PROCESS CHARACTERISTICS TO BE CONTROLLED	CONTROL DEVICE	CONTROL FREQUENCY	RELATED DOCUMENTS	RECORD	RESPONSIBLE SPECIALIST
÷	Input Materials	DISCUSSED IN PL-01 INPUT QU	UALITY PLAN.				Production Specialist and Quality Control Employee
2.	Raw Material Transportation	Size Control, Label Control, Quality type Control	Visual Inspection, Tape Measure and Caliper	With each request	Production Planning and Production Instruction	Daily Raw material Production Input List	Production Specialist and Black Park Crane Operator
ri ri	Shearing / Cutting	Size Control	Tape Measure	Sampling Instruction	Band Saw Operating and Maintenance Instruction Eccentric Guillotine shears OMI (Operating and Maintenance Instruction) Universal Combined Scissors OMI FICEP RAPIT 25T CNC OMI FICEP APPI 25T CNC OMI FICEP APPI 25T CNC OMI FICEP APPI 33NT CNC OMI FICEP A13.34NT CNC OMI FICEP A13.34NT CNC OMI FICEP H103A A165 T CNC OMI HCP H103A A165 T CNC OMI HCP H103A PLAZMA OMI OXY-CUT CNC OXI OXI OXI OXI OXI OXI OXI OXI OXI OXI	Traceability Form	Quality Control Employee Production Specialist and CNC / Machine Operator
4	Drilling	Size Control	Caliper	Sampling Instruction	Universal Combined Scissors FICEP RAPIT 25T CNC OMI FICEP HP 1214 CNC OMI FICEP A16.36NT CNC OMI FICEP A16.34NT CNC OMI FICEP A16.5 TO COMI FICEP A16.5 TO COMI FICEP P 10.5 TO CNC OMI FICEP P 10.5 T	Traceability Form	Quality Control Employee Production Specialist and CNC / Machine Operator
ις	Marking&Pointing	Size Control	Tape Measure, Miter	Sampling Instruction	Marking Instruction Production and Final Control Instruction	Traceability Form	Quality Control Employee Production Specialist and Operator
ø	Marking&Numeration	Item Number	Visual Inspection	Sampling Instruction	Hydraulic Numerator OMI FICEP CNC Machines Production and Final Control Instruction	Traceability Form	Quality Control Employee Production Specialist and Operator

APPROVED BY	Management Representative Hakan SERDAR
ORGANIZED BY	Production Manager Alper ASLAN



>>>>> QUALITY MANAGEMENT - Manufacturing Process Quality Plan

MANUFACTURING PROCESS QUALITY PLAN

Document Nr.	: PL-02
Date of Issue	: 20.05.2015
Revision Nr.	: 02
Page Nr.	: 2/2

ITEM NR.	PROCESS	PROCESS CHARACTERISTICS TO BE CONTROLLED	CONTROL DEVICE	CONTROL FREQUENCY	RELATED DOCUMENTS	RECORD	RESPONSIBLE SPECIALIST
7.	Notching	Size Control	Tape Measure	Sampling Instruction	Eccentric Carving Press OMI. Production and Final Control Instruction	Traceability Form	Quality Control Employee Production Specialist and Machine Operator
κċ	Bending	Size Control	Protractor	Sampling Instruction	Folding with Heat Treatment Instruction Hydraulic Press ÇBT Bending Press AD-S 2*6000 OMI Production and Final Control Instruction	Traceability Form	Quality Control Employee Production Specialist and Machine Operator
6	Face Widening	Size Control	Protractor	Sampling Instruction	Eccentric Carving Press OMI. Production and Final Control Instruction	Traceability Form	Quality Control Employee Production Specialist and Machine Operator
10.	Grinding	Size Control	Tape Measure	Sampling Instruction	Oxygen welding OMI . Shaping Machine OMI . Production and Final Control Instruction	Traceability Form	Quality Control Employee Production Specialist and Machine Operator
7.	Welding	Production Picture	Visual Inspection	Sampling Instruction	Oxygen welding OMI Generator Power Supply OMI Production and Final Control Instruction	Traceability Form	Quality Control Employee Production Specialist and Welding Operator
12.	Parcel Final Control	Conformity with the Size and Production Picture	Visual Inspection, Caliper, Tape Measure	Sampling Instruction	Production and Final Control Instruction	Traceability Form	Quality Control Employee Quality Control and Laboratory Specialist
13.	Shipment Final Control	Quantity, Packing, Bill of Lading and Invoice	Visual Inspection	ă.	Production and Final Control Instruction Shipping, Packing and Delivery Instruction	Bill of Lading and Invoice	Packing and Shipping Specialist, Accounting

APPROVED BY	Management Representative Hakan SERDAR	
ORGANIZED BY	Production Manager Alper ASLAN	



>>>>> QUALITY MANAGEMENT - Galvanazing Process Quality Plan

					Document Nr.	: PL-03
deded		A LICETACE		MA I TYTY DI ANI	Date of Issue	: 01.02.2014
	GALVANIZA	IZALION PR	cocess on	ILION PROCESS QUALLIT PLAN	Revision Nr.	: 01
. & GALVAINIZIING					Page Nr.	: 1/1
PROCESS	PROCESS CHARACTERISTICS TO BE CONTROLLED	CONTROL DEVICE	CONTROL	RELATED DOCUMENTS	RECORD	RESPONSIBLE SPECIALIST
Input Control	DISCUSSED IN PL-01 INPUT QUALITY PLAN and PL-02 PRODUCTION PROCESS QUALITY PLAN.	QUALITY PLAN and PL-0.	2 PRODUCTION PROC	ESS QUALITY PLAN.		Quality Control Employee
Pre- Acid (removal) Cleaning and Packing	Balance, Quantity, Connection Type	Visual Inspection	With each pack	Pre-acid Cleaning and Packing Instruction	9	Galvanization Specialist and Operator
Acid Bath	Baume Control for 4 pools	Battery Hydrometer	Once a day	Material Cleaning with Acid, Water and Flux Instruction	Galvanization Process Control Form	Quality Control Employee, Galvanization Specialist and Operator
Water Bath(Acid removal)	Percolation	Visual Inspection	With each hanging	Material Cleaning with Acid, Water and Flux Instruction	,	Galvanization Specialist and Operator
Flux Bath	Flux Pool Baume Control	Battery Hydrometer	Once a day	Material Cleaning with Acid, Water and Flux Instruction	Galvanization Process Control Form	Quality Control Employee, Galvanization Specialist and Operator
Racking (Hanging) and Drying	Balance, Hanger Type	Visual Inspection	With each hanging	Hanging and Drying Instruction		Galvanization Specialist and Operator
Zinc Dipping	Pool Temperature	Furnace Thermometer	With each hanging	Zinc Dipping Instruction	Galvanize Control Form	Galvanization Specialist Quality Control Employee
Zinc Pool	Zinc, Dros Level and Boiler Surface Control	Tape Measure and hook bar equipment	Once a day	Zinc Pool Operating Instruction	Galvanization Process Control Form and Zinc Boiler Surface Control Form	Galvanization Specialist Quality Control Employee
Final Control	Galvanize Thickness and Appearance Control	Micrometer and Visual Inspection	With each hanging	Galvanize Control Instruction	Galvanize Control Form	Quality Control Employee Quality Control and Laboratory Specialist
Weighing Control	Weight Weighing	Weighing Indicator Device	on Each takavil	Production and Final Control Instruction	Weighing Ticket	Galvanization Specialist Quality Control Employee
Shipment Final Control	Quantity, Packing, Bill of Lading and Invoice	Visual Inspection		Production and Final Control Instruction Shipping, Packing and Delivery Instruction	Bill of Lading and Invoice	Packing and Shipping Specialist, Accounting

APPROVED BY	Management Representative Hakan SERDAR	
ORGANIZED BY	Galvanization Manager Okay BARAN	

7

10

6

6.

7

œ

2

ITEM NR.

5



QUALITY MANAGEMENT - Tower Assemby Process Quality Plan

ᇫ
ALITY
õ
ASSEMBLY
TOWER

		Document Nr	· DI -04
DIALITY D	24	Date of Issue	: 15.02.2010
OALLIT PLAIN	LAI	Revision Nr	00:
		Page Nr	:1/2
CONTROL AETHOD AND EASUREMENT DEVICE	RELATED	RECORD	RESPONSIBLE SPECIALIST
ork Schedule-	Tower Assembly Instruction and Specifications	Worksite Records	Sales and Marketing Manager and Worksite

WORK FLOW NR	WORK / SERVICE	CRITERIA TO BE CONTROLLED	CONTROL METHOD AND MEASUREMENT DEVICE	RELATED DOCUMENTS	RECORD	RESPONSIBLE SPECIALIST
01.	The assignment of Worksite Supervisor by the Sales and Marketing Manager and establishment of worksite	Detecting the size of inputs of personnel, materials, etc. and establishment of worksite at the location of the project in order to start the work.	Work Schedule-	Tower Assembly Instruction and Specifications	Worksite Records	Sales and Marketing Manager and Worksite Supervisor
02.	Cleaning of Tower Locations	All trees, bushes or other plants	Visual Inspection	Tower Assembly Instruction	Worksite Records	Worksite Supervisor
03.	03. Tower Application	Detecting the location of the Tower in the profile as per baume and etude stakes.	Visual Inspection	Tower Assembly Instruction	Worksite Records	Worksite Supervisor
04.	Required Excavations for Tower Foot	Control of compliance with activity and project to be performed	Visual Inspection, Leveling Instrument and Tape Measure	Tower Assembly Instruction	Worksite Records	Worksite Supervisor
05.	Terracing, Stockade and Riprap Works	Elevation control for Tower foots and vicinity and water accumulation, dimensional control of Riprap work	Visual Inspection	Tower Assembly Instruction	Worksite Records	Worksite Supervisor
.90	Concrete	Performing concrete sampling test	Compression Testing Device	Tower Assembly Instruction	Supplier Concrete Report	Worksite Supervisor
07.	Reinforcing Bar	Performing iron sampling test	Tensile Testing Device	Tower Assembly Instruction	Supplier Concrete Report	Worksite Supervisor
.80	Grid Base and Base Posts	Control of iron grid bundles and Base Posts	Visual Inspection Tape Measure	Tower Assembly Instruction	Worksite Records	Worksite Supervisor

APPROVED BY	Management Representative Hakan SERDAR
ORGANIZED BY	Sales and Marketing Manager Gökhan BARAN



QUALITY MANAGEMENT - Tower Assemby Process Quality Plan >>>>

ocument Nr	: PL-04
ate of Issue	: 15.02.201
evision Nr	00:
ige Nr	: 2/2

TOWER ASSEMBLY QUALITY PLAN

Document Nr	: PL-04
Date of Issue	: 15.02.2010
Revision Nr	00:
Page Nr	: 2/2

Document Nr	: PL-04
Date of Issue	: 15.02.2010
Revision Nr	00:
Page Nr	: 2/2

111	5				INCVISION IN	80.
TEEL	TEEL & GALVANIZING				Page Nr	: 2/2
.60	09. Iron Towers	Control of type, Amount and test	Visual Inspection	Specifications	Supplier Production Acceptance and Test Report	Worksite Supervisor
10.	Iron Tower Assembly	Control of compliance to the project and assembly acceptance	Assembly Figures	Tower Assembly Instruction and Specifications	Worksite Records	Worksite Supervisor
11.	Connection of Bolts	Control of bolts by means of loosening in the first assembly and then securing in the last stage	Assembly Figures	Tower Assembly Instruction and Specifications	Worksite Records	Worksite Supervisor
12.	Grounding of Towers	Ground resistance measurement	Megger	Tower Assembly Instruction and Specifications	Worksite Records	Worksite Supervisor
13.	Cathodic Protection	Tarring Control	Visual Inspection	Tower Assembly Instruction	Worksite Records	Worksite Supervisor
14.	Wire Stringing	Project conformity control	Work Schedule-	Specifications	Worksite Records	Worksite Supervisor
15.	Provisional Acceptance	Control of deficiencies	Work Schedule- Specifications	Specifications Agreement	Provisional Acceptance Report	Worksite Supervisor
16.	Powering of Line	Control of completion or non- completion within the project scope	Work Schedule- Specifications	Specifications Agreement	Worksite Records	Worksite Supervisor
17.	Final Acceptance	Control of commitments during the warranty period.	Work Schedule- Specifications	Specifications Agreement	Final Acceptance Report	Worksite Supervisor
18.	Final Accounting and Invoicing	Review and verification of all stages of the project in order to receive funds for the project	Work Schedule- Specifications	Specifications Agreement	Final Acceptance Report	Sales and Marketing Manager and Worksite Supervisor

APPROVED BY	Management Representative Hakan SERDAR	
ORGANIZED BY	Sales and Marketing Manager Gökhan BARAN	



Capacity Report



>>>> CAPACITY REPORT - Introduction



Atatürk Bulvarı No: 193 Kavaklıdere / ANKARA Phone: 0 312 417 12 00 Fax: 0 312 417 52 05

Reference No: 4/503049-956 26/04/2016

DOCUMENT

Reference: Your letter of the date 26/04/2016.

BARAN ÇELİK VE GALVANİZ SANAYİ LTD. ŞTİ., our member with the registry number 3049 had filed an application at our Chamber and requested a document indicating data concerning their quantity of production in case they maintain works for three shifts at their factory located at the address Saray Mahallesi Dağyaka Caddesi No: 4 KAZAN/ANKARA.

Subsequent to the inspection of the capacity report by our Chamber's experts, the following conclusion was reached regarding works maintained for three shifts:

Power transmission line poles, GSM, TV and radio link antenna towers, range and lighting poles and steel construction: 14.844 x 3 = 44,532 tonnes per annum.

This document had been drawn and approved by our Chamber for submission to the relevant authorities and issued to the applying member.

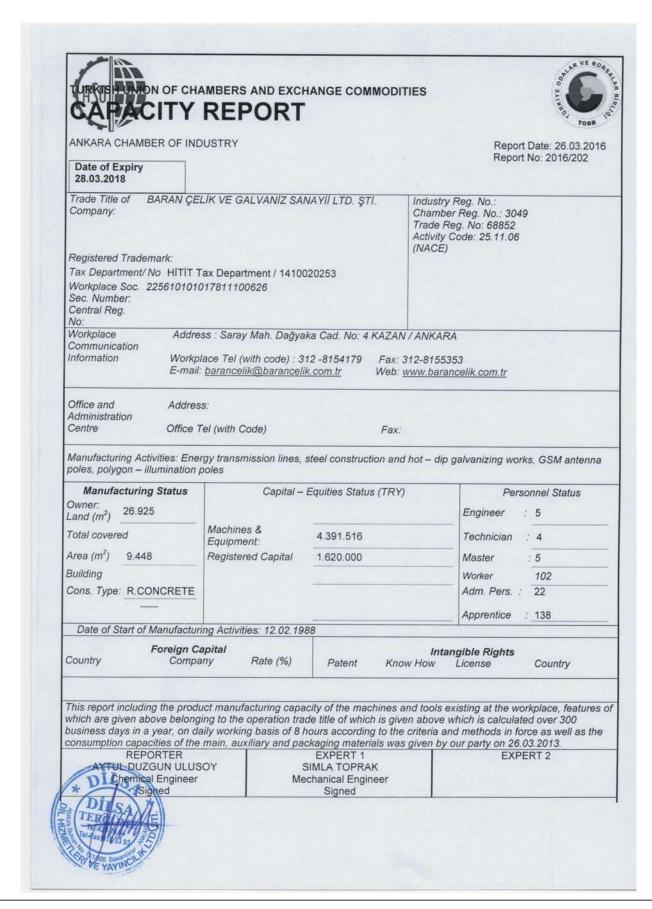
Best regards,
//Signature// //Seal//
Caner HASTAŞ
Documentation Works Manager







>>>> CAPACITY REPORT - Owerview





>>>> CAPACITY REPORT - Machinery and Tools

TABLE: I MACHINERY AND EQUIPMENT Mah. Dağyaka Cad. No: 4 KAZAN / ANKARA Description and Tech. Features FICEP RAPID 25 T CNC ANGLE TRIM STAPLING, CUTTING MACHINE FICEP HP 12 T4 CNC ANGLE TRIM STAPLING, CUTTING MACHINE FICEP 16.36.NT. CNC ANGLE TRIM STAPLING, CUTTING MACHINE	Score	Local/Imported	Power (KW)
FICEP RAPID 25 T CNC ANGLE TRIM STAPLING, CUTTING MACHINE FICEP HP 12 T4 CNC ANGLE TRIM STAPLING, CUTTING MACHINE FICEP 16.36.NT, CNC ANGLE TRIM STAPLING, CUTTING MACHINE			Power (KW)
STAPLING, CUTTING MACHINE FICEP HP 12 T4 CNC ANGLE TRIM STAPLING, CUTTING MACHINE FICEP 16.36.NT. CNC ANGLE TRIM STAPLING, CUTTING MACHINE	0		
CUTTING MACHINE FICEP 16.36.NT. CNC ANGLE TRIM STAPLING, CUTTING MACHINE			0.0
CUTTING MACHINE	0	1	0.0
	0	I	0.0
FICEP 16.34.NT. CNC ANGLE TRIM STAPLING, CUTTING MACHINE	0	L	0.0
FICEP 166 T CNC ANGLE TRIM STAPLING, CUTTING MACHINE	0	1	0.0
FICEP P803A CNC SHEET PROCESSING MACHINE (FOR FLAG)	30	I.	0.0
FICEP HP16 T6 CNC ANGLE TRIM STAPLING, CUTTING MACHINE	0	t .	0.0
MACHINE (FOR FLAG)	30	T.	0.0
UNIVERSAL CUTTING DRILLING STAPLING MACHINE	0	L	0.0
STAPLING MACHINE	0	T.	0.0
FICEP BRAND UNIVERSAL CUTTING DRILLING STAPLING MACHINE (FOR FLAG)	15	1	0.0
ECCENTRIC PRESS 40 TONS	37	L	0.0
ECCENTRIC PRESS 60 TONS	47	L	0.0
	91	L	0.0
			0.0
AUTOMATIC CHILL CTINE CUEL TO			0.0
2 M)		L	0.0
	1000000		0.0
OVERHEAD TRAVELLING CRANE			0.0
			0.0
			0.0
CNC PLASMA STAND (2M V AM)			0.0
CNC OXYGENIC CLITTING STAND			0.0
			0.0
THE PROPERTY OF THE PROPERTY O			0.0
			0.0
		·	0.0
AUTOMATIC COPY, FLAME RADIAL CUTTING			0.0
			0.0
	40	L	0.0
			0.0
			0.0
			0.0
			0.0
			0.0
	-		0.0
			0.0
			0.0
	MACHINE (FOR FLAG) FICEP HP16 T6 CNC ANGLE TRIM STAPLING, CUTTING MACHINE FICEP P51 CNC SHEET PROCESSING MACHINE (FOR FLAG) UNIVERSAL CUTTING DRILLING STAPLING MACHINE FICEP BRAND UNIVERSAL CUTTING DRILLING STAPLING MACHINE FICEP BRAND UNIVERSAL CUTTING DRILLING STAPLING MACHINE (FOR FLAG) ECCENTRIC PRESS 40 TONS ECCENTRIC PRESS 40 TONS HYDRAULIC PRESS 180 TONS HYDRAULIC PRESS 100 TONS HYDRAULIC PRESS 75 TONS AUTOMATIC GUILLOTINE SHEARS (1 M, 1.5 M, 2 M) PILLAR DRILL DESKTOP POWER DRILL OVERHEAD TRAVELLING CRANE BELT SAW TANDEM BENDING PRESS (1200 TONS) CNC PLASMA STAND (2 M X 4 M) CNC OXYGENIC CUTTING STAND TIG WELDING MACHINE UNIVERSAL TURNING LATHE PA 2.5 MT PLANING MACHINE (70 CM – 50 CM)	MACHINE (FOR FLAG) FICEP HP16 T6 CNC ANGLE TRIM STAPLING, CUTTING MACHINE FICEP P51 CNC SHEET PROCESSING MACHINE (FOR FLAG) UNIVERSAL CUTTING DRILLING STAPLING MACHINE FICEP BRAND UNIVERSAL CUTTING DRILLING STAPLING MACHINE FICEP BRAND UNIVERSAL CUTTING DRILLING STAPLING MACHINE FICEP BRAND UNIVERSAL CUTTING DRILLING STAPLING MACHINE (FOR FLAG) ECCENTRIC PRESS 40 TONS ECCENTRIC PRESS 60 TONS 47 HYDRAULIC PRESS 180 TONS HYDRAULIC PRESS 100 TONS HYDRAULIC PRESS 75 TONS AUTOMATIC GUILLOTINE SHEARS (1 M, 1.5 M, 2 M) PILLAR DRILL DESKTOP POWER DRILL OVERHEAD TRAVELLING CRANE BELT SAW TANDEM BENDING PRESS (1200 TONS) CNC PLASMA STAND (2 M X 4 M) CNC OXYGENIC CUTTING STAND CNC OXYGENIC CUTTING STAND 40 UNIVERSAL TURNING LATHE PA 2.5 MT PLANING MACHINE UNIVERSAL TURNING LATHE PA 2.5 MT PLANING MACHINE (70 CM – 50 CM) AUTOMATIC COPY, FLAME RADIAL CUTTING TRANSPORTER VEHICLE (4 WHEELS) OXYGEN WELDING SET VELDING GENERATOR 125 NUMERATOR STAND 0 GENERATORU (167 KW, 354 KW) 0 COMPRESSOR 0 BIOLOGIC REFINERY UNIT 0 CHEMICAL REFINERY UNIT 0 CHEMICAL REFINERY UNIT 0 CREASE TO THE TIME SHEARS 1 M 12	MACHINE (FOR FLAG) FICEP HP16 T6 CNC ANGLE TRIM STAPLING, CUTTING MACHINE FICEP P51 CNC SHEET PROCESSING MACHINE (FOR FLAG) UNIVERSAL CUTTING DRILLING STAPLING UNIVERSAL CUTTING DRILLING STAPLING MACHINE FICEP BRAND UNIVERSAL CUTTING DRILLING STAPLING MACHINE FICEP BRAND UNIVERSAL CUTTING DRILLING STAPLING MACHINE (FOR FLAG) ECCENTRIC PRESS 40 TONS 37 L ECCENTRIC PRESS 40 TONS 47 L HYDRAULIC PRESS 180 TONS 47 L HYDRAULIC PRESS 180 TONS 47 L HYDRAULIC PRESS 100 TONS 48 L HYDRAULIC PRESS 100 TONS 49 L HYDRAULIC PRESS 100 TONS 50 L HYDRAULIC PRESS 100 TONS 51 L HYDRAULIC PRESS 100 TONS 52 L HYDRAULIC PRESS 100 TONS 53 L HYDRAULIC PRESS 100 TONS 54 L HYDRAULIC PRESS 100 TONS 55 L HYDRAULIC PRESS 100 TONS 56 L HYDRAULIC PRESS 100 TONS 57 L HYDRAULIC PRESS 100 TONS 58 L HYDRAULIC PRESS 100 TONS 59 L L UNIVERSAL TURNING CRANE UNIVERSAL TURNING STAND 40 L CNC OXYGENIC CUTTING STAND 40 L CNC OXYGENIC CUTTING STAND 40 L UNIVERSAL TURNING LATHE PA 2.5 MT 51 L PLANING MACHINE UNIVERSAL TURNING LATHE PA 2.5 MT 51 L PLANING MACHINE UNIVERSAL TURNING LATHE PA 2.5 MT 51 L PLANING MACHINE UNIVERSAL TURNING LATHE PA 2.5 MT 51 L PLANING MACHINE UNIVERSAL TURNING LATHE PA 2.5 MT 51 L PLANING MACHINE UNIVERSAL TURNING LATHE PA 2.5 MT 51 L PLANING MACHINE UNIVERSAL TURNING LATHE PA 2.5 MT 51 L CNC OXYGEN WELDING SET 40 L WELDING GENERATOR 10 L COMPRESSOR 10 L COMPRESSOR 10 L COMPRESSOR 10 L COMPRESSOR 10 L CHEMICAL REFINERY UNIT 10 L CHEMICAL REFINERY UNIT 10 L CHEMICAL REFINERY UNIT 10 L CHEMICAL REFINERY UNIT 11 L THENDALLIC PRESS (300 TONS) 122 L AIR GRASPING GUILLOTINE SHEARS 1 M 12 L



>>>> CAPACITY REPORT - Galvanizing Section

BARAN ÇELİ					
28. 41. 32	1	COMBINED SHEARS	15	L	0.0
28. 41. 33	1	HYDRAULIC PRESS 30 TONS	31	L	0.0
	1	CHARPY IMPACT TESTING DEVICE	0	1	0.0
	1	SAMPLE NOTCHING DEVICE	0	1	0.0
	1	LOW TEMPERATURE TESTING DEVICE	0	I	0.0
Mach. Code	Qty	Description and Tech. Features	Score	Local/Imported	Power /KW
Wach, Code	Qty	Description and Tech. Features	Score	Local/Imported	Power (KW)
wach, Code	1	GALVANIZE TANK (8.40 MT. X1.10 MT.X1.45MT)	Score 0	Local/Imported	
Mach. Code	1 4	GALVANIZE TANK (8.40 MT. X1.10 MT.X1.45MT) ACID BATH (9.40 MT. X1.30 MT.X1.48MT)		The state of the s	0,0
wach, Code	1 4 1	GALVANIZE TANK (8.40 MT. X1.10 MT.X1.45MT) ACID BATH (9.40 MT. X1.30 MT.X1.48MT) WASTE ACID POOL (9.40 MT. X1.94 MT.X1.48MT)	0	The state of the s	0,0
Macri, Code	1 1 1	GALVANIZE TANK (8.40 MT. X1.10 MT.X1.45MT) ACID BATH (9.40 MT. X1.30 MT.X1.48MT) WASTE ACID POOL (9.40 MT. X1.94 MT.X1.48MT) FLUX POOL (9.40 MT. X1.30 MT.X1.48MT)	0	The state of the s	0,0 0,0 0,0
Macri, Code	1 1 1	GALVANIZE TANK (8.40 MT. X1.10 MT.X1.45MT) ACID BATH (9.40 MT. X1.30 MT.X1.48MT) WASTE ACID POOL (9.40 MT. X1.94 MT.X1.48MT) FLUX POOL (9.40 MT. X1.30 MT.X1.48MT) WATER POOL (9.40 MT. X1.30 MT.X1.48MT)	0 0	The state of the s	0,1 0,1 0,1 0,1
Macri, Code	1 1 1 1 2	GALVANIZE TANK (8.40 MT. X1.10 MT.X1.45MT) ACID BATH (9.40 MT. X1.30 MT.X1.48MT) WASTE ACID POOL (9.40 MT. X1.94 MT.X1.48MT) FLUX POOL (9.40 MT. X1.30 MT.X1.48MT) WATER POOL (9.40 MT. X1.30 MT.X1.48MT) COLLING POOL (8.50 MT. X1.23 MT.X1.48MT)	0 0 0	The state of the s	0,1 0,1 0,1 0,1 0,1
mach, code	1 1 1	GALVANIZE TANK (8.40 MT. X1.10 MT.X1.45MT) ACID BATH (9.40 MT. X1.30 MT.X1.48MT) WASTE ACID POOL (9.40 MT. X1.94 MT.X1.48MT) FLUX POOL (9.40 MT. X1.30 MT.X1.48MT) WATER POOL (9.40 MT. X1.30 MT.X1.48MT) COLLING POOL (8.50 MT. X1.23 MT.X1.48MT) MOBILE TRANSPORTER	0 0 0 0	The state of the s	0,0 0,0 0,0 0,0 0,0
wach, Code	1 1 1 1 2	GALVANIZE TANK (8.40 MT. X1.10 MT.X1.45MT) ACID BATH (9.40 MT. X1.30 MT.X1.48MT) WASTE ACID POOL (9.40 MT. X1.94 MT.X1.48MT) FLUX POOL (9.40 MT. X1.30 MT.X1.48MT) WATER POOL (9.40 MT. X1.30 MT.X1.48MT) COLLING POOL (8.50 MT. X1.23 MT.X1.48MT)	0 0 0 0 0	The state of the s	0,0 0,0 0,0 0,0 0,0 0,0 0,0
wach, code	1 1 1 1 2 3 4	GALVANIZE TANK (8.40 MT. X1.10 MT.X1.45MT) ACID BATH (9.40 MT. X1.30 MT.X1.48MT) WASTE ACID POOL (9.40 MT. X1.94 MT.X1.48MT) FLUX POOL (9.40 MT. X1.30 MT.X1.48MT) WATER POOL (9.40 MT. X1.30 MT.X1.48MT) COLLING POOL (8.50 MT. X1.23 MT.X1.48MT) MOBILE TRANSPORTER VENTILATION FAN (FOR ZINC AND ACID) NATURAL GAS BURNER	0 0 0 0 0	The state of the s	0,0 0,0 0,0 0,0 0,0 0,0 0,0
wach, Code	1 4 1 1 1 2 3 4	GALVANIZE TANK (8.40 MT. X1.10 MT.X1.45MT) ACID BATH (9.40 MT. X1.30 MT.X1.48MT) WASTE ACID POOL (9.40 MT. X1.94 MT.X1.48MT) FLUX POOL (9.40 MT. X1.30 MT.X1.48MT) WATER POOL (9.40 MT. X1.30 MT.X1.48MT) COLLING POOL (8.50 MT. X1.23 MT.X1.48MT) MOBILE TRANSPORTER VENTILATION FAN (FOR ZINC AND ACID)	0 0 0 0 0 0	The state of the s	0,0 0,0 0,0 0,0 0,0 0,0 0,0

Total: 2918

.0 = .0 BG





>>>> CAPACITY REPORT - Annual Manufacturing Capacity

ANKARA CHAMBER OF INDUSTRY- Trade Reg. No: 68852 / Tax. No: 1410020253 BARAN ÇELİK AND GALVANİZ SANAYİ LIMİTED ŞIRKETİ	
	ė

TABLE: II ANNUAL MANUFACTURING CAPACITY

Material Code	Type- Feature Commercial and Technical Name	Amount	Unit
25.11.22.00.00	ENERGY TRASMISSION LINE POLES, GSM, TV AND RADIOLINK ANTENNA POLES, POLYGON AND ILLUMINATION POLES AND STEEL CONSTRUCTION	14,844,000	Kilogram
25.61.11.30.00	HOT DIP GALVANIZING WORKS	7,680,000	Kilogram





CAPACITY REPORT - Annual Capacity Calculation

ANKARA CHAMBER OF INDUSTRY- Trade Reg. No: 68852 / Tax. No: 1410020253 BARAN ÇELİK AND GALVANİZ SANAYİ LİMİTED ŞİRKETİ

TABLE: III CALCULATION OF CAPACITY (Reason for Issue: Renewal)

Upon the application of the above-named company, the workplace was visited on 25.03.2016 and the matters given below were found out. The calculations have been made over 8 hours per day 300 days per year. Taylorism has been applied on the benches on which mass production is ongoing.

Manufacturing of energy transmission lines and GSM antenna, polygon and illumination poles (22 workers):

The stapling and cutting processes on the angle trims in sizes of $140 \times 140 \times 13$ mm are carried out in 1 FICEP 166 T NT CNC Machine. The stapling and cutting processes of a 12 meter angle trim lasts for 585 seconds and 1 meter angle trim in sizes of $140 \times 140 \times 13$ equals 27,5 kg.

3600 x 12 x 27.5 x 8 x 300 x 0,80 = 3899 tons / year

585 1000

The stapling and cutting processes on the angle trims in sizes of $180 \times 180 \times 16$ mm are carried out in 1 FICEP 16.36 NT CNC Machine. The stapling and cutting processes of a 6 meter angle trim lasts for 900 seconds and 1 meter angle trim in sizes of $180 \times 180 \times 16$ equals 43.5 kg.

3600 x 6 x 43.5 x 8 x 300 x 0,80 = 2004 tons / year

900 1000

The stapling and cutting processes on the angle trims in sizes of $100 \times 100 \times 100$ mm are carried out in 1 FICEP 13.34 NT and 1 FICEP HP 16 T6 CNC Machines. The stapling and cutting processes of a 6 meters angle trim lasts for 900 seconds and 1 meter angle trim in sizes of $100 \times 100 \times 100$ equals 15,1 kg.

The stapling and cutting processes on the angle trims in sizes of $150 \times 150 \times 14$ mm are carried out in 1 FICEP RAPID 25 T CNC Machine. The stapling and cutting processes of a 12 meters angle trim lasts for 20 minutes (weight 31.6 kg/m).

60/20 x 12 x 8 x 300 x 0.80 x 31.6 / 1000 = 2184 tons/year





>>>> CAPACITY REPORT - Annual Capacity Calculation

ANKARA CHAMBER OF INDUSTRY- Trade Reg. No: 68852 / Tax. No: 1410020253 BARAN ÇELİK AND GALVANİZ SANAYI LİMİTED ŞİRKETİ

The stapling and cutting processes on the angle trims in sizes of $60 \times 60 \times 6$ mm are carried out in 1 FICEP HP 12 T4 CNC Machine. The stapling and cutting processes of a 6 meters angle trim lasts for 15 minutes (weight 5.42 kg/m).

60/15 x 6 m x 8 x 300 x 0.80 x 5.42 / 1000 = 250 tons/year

Angle trims in sizes $40 \times 40 \times 4$ mm are processed in 3 universal cutting, drilling and stapling machine. The processing of a 6 meters angle trim lasts for 9 minutes (weight 2.42 kg).

 $3 \times 6 \text{ m} \times 60 \times 300 \times 8 \times 2.42 \times 0.70 = 488 \text{ tons/year}$

9

1000

Required Materials:

Various Angle Trims : 10,217 tons / year

The calculation of the capacity principles of the bench apart from the serial manufacturing stands has been made according to the scores defined within the book of principles named "Steel Construction Manufacturing."

Bench score : 2918 Worker score : 50 x 5 = 250

Machinery & facility score : 2918 x 1.5 = 4377 Workshop Score : 4377 + 250 = 4627 points

Required Materials:

Various Angle Trims : 4165 tons / year Var. Sheet : 231 tons / year Var. Profiles (I, U, L, T) : 231 tons / year

Inert gas welding wire $: 16 \times 10 \times 300 = 48.000 \text{ kg} / \text{year}$ Electrode calculation $: 5 \times 20.000 = 100.000 \text{ Pcs} / \text{year}$

Total production : 3899 + 2004 + 1392 + 2184 + 250 + 488 + 4627 = 14,844 tons / year

Galvanizing capacity : In the current galvanizing tank, 1200 kg material is galvanized in 1 dip and the process is completed in 18 minutes.

60/18 x 8 x 300 x 0.80 x 1.2 = 7680 tons / year;





>>>> CAPACITY REPORT - Annual Capacity Calculation

ANKARA CHAMBER OF INDUSTRY- Trade Reg. No: 68852 / Tax. No: 1410020253 BARAN ÇELIK AND GALVANIZ SANAYI LIMITED ŞIRKETI

Zinc calculation : 7,680 x 90

----- = 691 tons / year

1000

Flux : 7,680 x 0.0014 = 11 tons / year Lead : 7,680 x 0.0008 = 6 tons / year

There are 4 acid baths in the facility: Total bath capacity: $4 \times 9.40 \times 1.30 \times 1.48 \times 0.75 = 543 \text{ m}3$ $54.3 \times 1155 = 63 \text{ tons}$

The pools are discharged and re-filled 6 times a year. 73 % of the pool is composed of hydrochloric acid and 27% of water. $63 \times 6 \times 0.73 \times 0.85 = 235$ tons / year hydrochloric acid. Natural gas is used in the galvanize furnace and the actual consumption rate was defined as 455.000 m3 / year.

These and other required materials are further shown in Table IV.





>>>> CAPACITY REPORT - Annual Consumption Capacity

	TABLE : IV ANNUAL CO	ONSLIMPTIC	N CARACIT	v
Material Code	Type- Feature Technical Name	Unit		In written
24. 10. 71	Various Angle Trims (profile)	Ton	14,382	Fourteen Thousand Three
24. 10. 36		100		Hundred and Eighty-Two
24. 10. 36	Various Sheets Various Profiles (I, U, L, T)	Ton	231	Two Hundred and Thirty-On
24. 10. 71	Electrode	Ton Pcs	100,000	Two Hundred and Thirty-On
	Inert Gas Welding Wire	Ton	100,000	One Hundred Thousand Forty-Eight
24. 43. 12	Zinc	Ton	691	
	Flux	Ton		Eleven
	Lead	Ton	6	Six
	Hydrochloric Acid	Ton	235	Two Hundred Thirty Five
	Natural Gas	Cubic	455.000	Four Hundred Fifty Five
	Connection elements (bolt, nut, spacer,	meter	2 727	Thousand
	anchorage)	Ton	1.100	One Thousand and One Hundred



>>>> CAPACITY REPORT - Annual Consumption Capacity

ANKARA CHAMBER OF INDUSTRY- Trade Reg. No: 68852 / Tax. No: 1410020253 BARAN ÇELİK AND GALVANİZ SANAYİ LİMİTED ŞİRKETİ

This capacity report herein includes the information found out by the expertise staff of the concerned chamber and composed of 9 pages and prevails the capacity report approved on 27.03.2013 by TOBB (Turkish Union of Chambers and Exchange Commodities) with no 6487.

Examined by: MÜJDAT BAYRAMOĞLU Metallurgical Engineer Signed

CHAMBER APPROVAL

SIGNED & SEALED

28 MARCH 2016

CANER HASTAS Director of Document Services APPROVAL OF TURKISH UNION OF CHAMBERS AND EXCHANGE COMMODITIES

SIGNED & SEALED

M. ALI BAYRAM Director of Industry TURKISH UNION OF CHAMBERS AND EXCHANGE COMMODITIES DATE & NO

28.03.2016 * 006561

This capacity report is valid until the "Expiry Date" written on 1st Page.

[Translator's Note: Each page of the original report bears seal of the chamber and report date as 28.03.2016]





Details of Machines



DETAILS of MACHINES - FICEP RAPID 25T CNC Angle Trim Stapling, Cutting



Ficep drilling lines for angles offers high quality, flexibility, accuracy and productivity. The use of powerful spindles, together with the new generation high performance tools make it possible to reach high rotation and feed speeds. All the benefits of dynamically drilling the angles are obvious and deliver economic processing even on large sizes.

The RAPID drilling lines are modular and can be set up with:

- > Scribing or hard stamp marking
- > Single or double shearing
-) High speed sawing

The tough tolerance limits and various angle sizes set in some contract specifications can easily be handled by these drilling lines. The working cycle is automatically managed by the CNC through specific software programs.

The angles are loaded on transfer arms and automatically fed on to the conveyor track. The system is designed for automatic clamping, Material is conveyed with a controlled axis feed through the machine and every process takes place sequentially.

The pieces, scrap or remnants completed after the saw or shear are then unloaded in an organized process and offloaded at predetermined positions on the unloading area.

Model	RAPID 25T
Maximum angle mm	250x250x40
Maximum drilling diameter mm	40
Drill heads	2
Tools per head	3 (6)
Spindle power	19 (27) kW
Spindle speed rpm	3500
Connection	HSK A80
Cutting	shearing or circular saw
Marking	option



>>>> DETAILS of MACHINES - Ficep HP12 T4 CNC Angle Trim Stapling, Cutting



Model HP 12		HP 12 T4	Marking capacity			
			Daisy wheel marking unit	kN	80	
Max. available strength	kN	650	Cassettes marking unit	kN	1000	
Max. standard diameter	mm.	30 (32)	Fonts available daisy wheel unit	no.	38	
Diameter x thickness mm.		32 x 13	Fonts available cassettes unit	no.	4/8	
(410N/mm²)		ACTION S	Multi-function unit (optional)			
Diameter x thickness	mm.	30 x 13	30 x 13 Max. available power		900	
(510 N/mm ²)	l/mm²)		Drilling capacity (optional)			
Diameter x flange	no.	2	Drilling angle min		40×40	
Angles (410 N/mm²)	min.mm.	30x30	1		x4	
	\$5500000000000000000000000000000000000	x3		maxi. mm.	120x120	
	maxi. mm.	120×120			x15	
		x13 Max. drill diameter		mm.	40	
Cutting capacity			Diameter per flange	no.	1 (3)	
Max. shearing power	kN	1800	Spindle speed	RPM	180-1000	
Disk saw capacity	mm		Forward speed	mm./1'	60-160	



>>>> DETAILS of MACHINES - Ficep A 166 T CNC Angle Trim Stapling, Cutting





Model	THE LAND	A 164T	A 166T
Max, force available			
Max. standard diameter	kN	800	800
Diameter max. standard	mm.	32	32
Diameter x thickness (410 N/mm sq.)	mm.	32x19	32x19
Diameter x thickness (510 N/mm sq.)	mm.	26x19	26x19
Diameters per flange	no.	2	3
Angles (410 N/mm sq.)			
	min. mm.	40x40x4	40x40x4
	maxi. mm.	160x160x19	160x160x19
Shearing capacity			
Maximum shear force	kN	2200	2200
Marking unit capacity (optional)			
Maximum force available	kN	80	80
Characters available	no.	38	38
Character size	mm.	16x8	16x8
Multifunctions unit (optional)			
Maximum force available	kN	900	900
Drilling capacity			
Angle to be drilled	- 1		
	min. mm.	40x40x4	40x40x4
	maxi. mm.	160x160x20	160x160x20
Morse taper	no.	4	4
Max. diameter to be drilled	mm.	31,75 - 40	31,75 - 40
Spindle speed	RPM	180-620	180-620
Feed speed	mm/1' -	60-160	60-160
Control unit			
Ficep ARIANNA series			
Controlled axes	no.	5	7

MARKING, PI	MARKING, PUNCHING, NOTCHING AND SHEARING LINES FOR ANGLES, U-CHANNELS AND FLATS						
Model	Max. angle mm.	Shear, force kN	Punching force kN	Diam. per flange			
A 166T	160X160X19	2200	800	3			



>>>> DETAILS of MACHINES - Ficep P830A CNC Sheet Processing







Punch Press:

Max punching force, throughout the entire stroke: kN 800

No. of independent punches: 3

Punching capacity based on Steel: 400N/mm2

Tensile strength: 30mmx20dia

Max hole diameter to be punched with: 46mm

Punches and dies:

The punch press id designed to accept the following tools:

Standard punch (27mm dia max.) Standard punch (27mm dia / 40 dia) Standard punch (40dia / 46dia)

Standard die

Coordinate table:

Coordiante table with 2 axes controlled by servomotors, having the following positioning stroke:

X axis max. 1000mm Y Axis max. 500mm

The coordinate table is provided with a pinchers holding cart, fitted with two pinchers, which can be manually positioned along the X axis to clamp the plate to be processed.

The standard pincher jaws are designed to clamp:

plates from 3 to 25mm thick (punching unit)

plates from 3 to 40mm thick (only with optional drilling unit)

The coordinate table is also supplied with two stationary ball type supports for plate handling during the working operations.



>>>> DETAILS of MACHINES - Ficep HP16 T6 CNC Angle Trim Stapling, Cutting





Model		HP 12 T4	HP 16 T2	HP 16 T4	HP 16 T6
Punching capacity					
Max. available strength	kN	650	650	720	720
Max. standard diameter	mm.	30 (32)	30 (32)	32	32
Diameter x thickness (410N/mm²)	mm.	32 x 13	30 x 15	30 x 19	30 x 19
Diameter x thickness (510 N/mm²)	mm.	30 x 13	30 x 12	25 x 19	25 x 19
Diameter x flange	no.	2	1	2	3
Angles (410 N/mm²)	min.mm.	30x30 x3	30x30 x3	40x40 x4	40x40 x4
	maxi. mm.	120x120 x13	160x160 x15	160x160 x19	160x160 x19
Cutting capacity					
Max. shearing power	kN	1800	1800	2000	2000
Disk saw capacity	mm	-			
Marking capacity					
Daisy wheel marking unit	kN	80	80	80	80
Cassettes marking unit	kN	1000	1000	1000	1000
Fonts available daisy wheel unit	no.	38	38	38	38
Fonts available cassettes unit	no.	4/8	4/8	4/8	4/8
Multi-function unit (optional)					
Max. available power	kN	900	900	900	900
Drilling capacity (optional)					
Drilling angle	min. mm	40x40 x4	40x40 x4	40x40 x4	40x40 x4
	maxi. mm.	120x120 x15	160x160 x20	160x160 x20	160x160 x20
Max. drill diameter	mm.	40	40	40	40
Diameter per flange	no.	1 (3)	1 (3)	1 (3)	1 (3)
Spindle speed	RPM	180-1000	180-1000	180-1000	180-1000
Forward speed	mm/1°	60-160	60-160	60-160	60-160
Control unit					
Floep CNC Minosse series					
Axis-controlled	no.	5	3	5	7



>>>> DETAILS of MACHINES - Ficep P51 CNC Sheet Processing



PUNCHING CAPACITY				
Maximum punching capacity throughout the entire stroke and	d available on all punches	kN	800	
Material thickness with standard tools	MIN. MAX.	mm mm	3 25	
Maximum diameter		mm	46	
X and Y axes positioning stroke		mm	1000 x 500	
Maximum plate weight at a standard positioning speed		Kg	100	
Maximum plate size with programmed repositioning		mm	500 on the length	
Punches		no.	3	
Punching max. thickness with shear strength 400N/mm² dia. max. through		mm	32 x 20	
OPTIONAL				
DRILLING CAPACITY				
Monospindle drill head with a spindle rotation motor				
Maximum plate thickness		mm	40	
Maximum hole diameter		mm	40	
Motor		kW	5,5	
MARKING CAPACITY				
Available marking force		kN	800	
Marking tool		no.	1	
Characters per group		no.	8	
Size of characters (Ficep 31)		mm	16 x 8	



DETAILS of MACHINES - HP-130A PLASMA - CNC





CUTTING STANDARD

Aşağıda ISO 9013 Standardına göre 20 sn. süreli düz kesim için muhtelif plazma sınıflandırmasına göre kesim açıları verilmiştir. Delik kesimlerinde bu açılar daha fazla olacaktır.

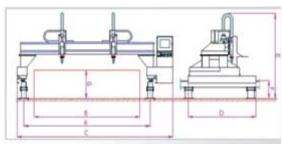
According to ISO 9013 standards 20 seconds of mild steel cutting angles are given below.

150 9013 Range 3

ISO 9013 Range 4

ISO 9013 Range 5

10 mm Açı / Angle : 3,18° 12 mm Açı / Angle : 2,58° 20 mm Açı / Angle : 1,87° 10 mm Açı / Angle : 6,33° 12 mm Açı / Angle : 5,15° 20 mm Açı / Angle : 3,74° 10 mm Açı / Angle : 9,75° 12 mm Açı / Angle : 8° 20 mm Açı / Angle : 5,9°



	GENEŞLİK WIDTH	1500	2000	2500	3000	4000
	A	2300	2800	3300	3800	4800
CRESNO N		1680	2180	2680	3180	4180
	C	3200	3700	4200	4700	5700
	D	2000	2000	2000	2000	2000
	E	2500	2500	2500	2500	2500
	F	475	475	475	475	475
Ī	6	700	700	700	700	700

- Electro-welded structure.
- Dual side rack, pinion and AC Servo motor on X axis.
- Rack, pinion and AC Servomotor on Y axis.
- Plasma generator 100/200 Amper Precision Plasma 130/260/460 Amper.
- Optional marking.
- Multi head oxy fuel cutting possibilities.
- Automatic oxy fuel ignition.
- Automatic torch height control.
- Look ahead for program blocks for the sharp corners. Efficient high speed machining is obtained by not reducing the speed at equal lead in and lead out contours.
- Working with standard DIN/ISO G Codes possible.
- Resume.
- Possibility of working with DXF,ESSI and NC toolpath files.
- Overriding all parameters while the machine is working possible.
- Free AJAN Drawing software.
- Plasma Mode Switch is done easily through the keyboard.
- 15 meter/min cutting speed.
- Ventilation system is optional.



>>>> DETAILS of MACHINES - Abkant Pres AD-S Tandem CNC



AD-S Series		Unit	1260
Bending force		ton	60
Bending length	(A)	mm	1250
Distance between columns	(B)	mm	1050
Y rapid speed		mm/sec	200
Y working speed		mm/sec	10
Y return speed		mm/sec	120
Crowning		-	Mot.
Daylight	(D)	mm	433
Table width	(G)	mm	104
Table height	(F)	mm	790
Depth of pit	(F1)	mm	-
Stroke	(C)	mm	160
Throat depth	(E)	mm	365
Support arms		amount	2
Back gauge finger blocks		amount	2
Speed of travel in X-axis		mm/sec	350
Travel in X-axis		mm	500
Speed of R-axis(max.)		mm/sec	300
Travel in R-axis		mm	200
Motor power		kw	4
Oiltank capacity		lt	60
Length	(L)	mm	2490
Width	(W)	mm	1285
Height	(H)	mm	2375
Weight approx.		kg	3500

FBS Flexible Bending Solutions

Advanced technologies for bending large sheet metal for extremely diversified uses in different industries while avoiding long, expensive welding operations which even takes the risk of material stability.

FBS focuses also to minimise the large work pieces handling before, during and after the bending operations and respects the next process. By this way offers:

- > Flexibility of bending varies for diversified uses
- Accuracy for large and high spring-back sheets
- Lowers setup times by automation of loading and unloading
- Increases your employees' safety

On high tonnage mega press breaks, "box construction" frame is used which is the most stable machine body in the world utilised technology for press brakes. Stability and rigidity of box constructions is approved by our references all around the world and finite element analysis on the computers.

Axe and Status can provide you with all the support and Flexible Bending Solutions and offer turnkey automatic bending cells complete with the facility for loading and unloading.

>>>> DETAILS of MACHINES - Equipment List

Equipment List

Machine	Origin	Capability / Detail	
FICEP RAPID 25T CNC	Italy	250*250*22, Ø40 mm cutting-piercing & marking	1
FICEP HP 12 T4 CNC	Italy	120*120*13, Ø32 mm cutting-piercing & marking	1
FICEP HP 16 T6 CNC	Italy	160*160*19, Ø32 mm cutting-piercing & marking	1
FICEP P 51 CNC	Italy	3-25 mm, Ø32 mm metal sheet processing	1
FICEP A 16.36 NT CNC	Italy	160*160*19, Ø32 mm cutting-piercing & marking	1
FICEP A 13.34 NT CNC	Italy	130*130*13, Ø32 mm cutting-piercing & marking	1
FICEP P 803 A CNC	Italy	3-25 mm, Ø32 mm metal sheet processing	1
FICEP 166 T CNC	Italy	160*160*19, Ø32 mm cutting-piercing & marking	1
Hydraulic (Ficep SPA)	Italy	Ø32 mm , 26 mm cutting- drilling	1
Hydraulic Metal Sheet Copy(Ficep)	Italy	Ø32 mm , 16mm drilling	1
Universal Combine Scissors	Russia	Ø32mm, 10 mm cutting-drilling	6
Eccentric Gyotine Scissors	Turkey	2-18 mm cutting	4
Crane	Turkey	10 ton -2x3 ton- 5 ton	26
Hydraulic Press	Turkey	profile and sheet bending	5
Magnetic Drilling Machine	Turkey	Ø32 mm , 20 mm drilling	10
Gas metal arc welding – Oxygen welding	Turkey	Welding	17
Oxy –Cut CNC	Turkey	100 mm metal sheet cutting , 1,5*6 mt	1
Drilling – CNC - matkap	Turkey	Ø35 mm , 1500*3000mm	1
CNC bending machine AD-S 2*6000 Tandem	Turkey	18 mm –St52 sac – 12mt Bending	1
HP-130A Plasma - CNC	Turkey	1-25 mm sensitive sheet cutting	1
Universal turning lathe	Slovakia	Round materials processing	1
Planing machine	Russia	Angle iron surface cutting(70cm-50cm)	2
Milling machine	Taiwan	Surface milling , indention ,vs.	2
Generator (Volvo-Penta)	Sweden	167 kVa - 354 kVa	2

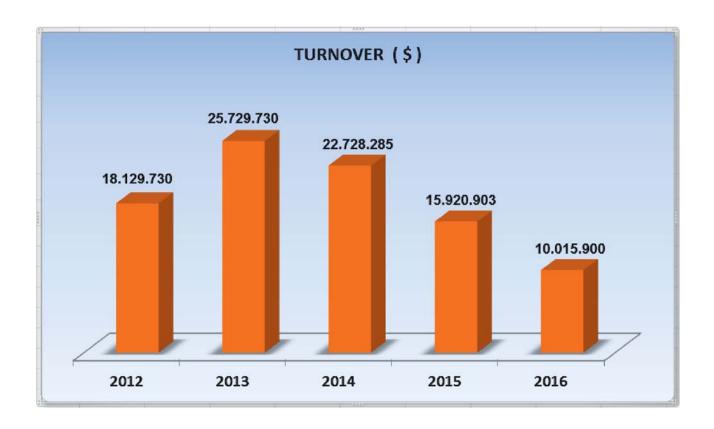
Galvanizing Facility

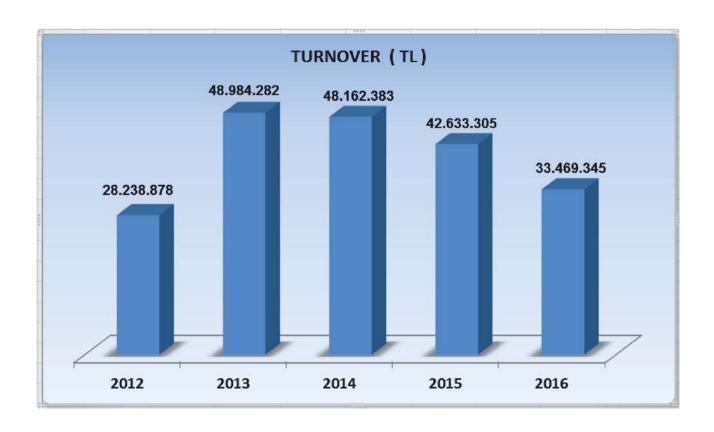
Pool Type	Diamention mm / Single Dip	Operational Capailty /status	Number
Zinc	8250 x 950 x 1400 (Double Dşips 12,30mt)	Apprx. 450 0C - 1500 kgs	1
Acid	9400 x 1300 x 1480 + 9400 x 1940 x 1480	1232 Baume	1+4
Flax	9400 x 1300 x 1480	3522 Baume	1
Water	8150 x 1230 x 1480 + 9400 x 1300 x 1480	Normal Amblant Temperature	2+1



Financial Eligibility

>>>> FINANCIAL ELIGIBILITY - Financial Situation







>>>> FINANCIAL ELIGIBILITY - Detailed Income statement

	Galvaniz San. Ltd.Şt NCOME STATEMENT	i.		
	PRIOR PE	RIOD	CURRENT I	PERIOD
USD	31.12.20		31.12.2	
A - GROSS SALES		14.728.313,42		10.114.522,28
1- Domestic Sales	11.914.377,66		5.234.361,24	
2- Export Sales	2.723.647,91		4.781.538,63	
3- Other Sales	90.287,85		98.622,41	
B - SALES DISCOUNTS (-)		-66.909,08		-154.305,16
1- Sales Returns (-)	-66,909,08	33,333,33	-154.305,16	20 11000/20
5.0 2- Sales Discounts (-)				
612 3- Other Discounts (-)				
C - NET SALES		14.661.404,35		9.960.217,12
D - COST OF SALES(-)		-10.611.748,28		-7.567.518,21
1- Cost of Goods Solds(Product) (-)	-10.423.753,57	2010221/ 10/20	-7.458.527,80	, 100, 1010,121
2- Cost of Commercial Goods Sold (-)	-187.994,71		-108.990,42	
3- Cost of Services Sold (-)				
4- Cost of Other Sales (-)				
GROSS PROFIT/LOSS		4.049.656,07		2.392.698,90
E - OPERATING EXPENSES (-)		-838.146,27		-745.303,48
1- Research and Development Expenses (-)		0501210/27		, 101000,10
2- Marketing, Selling and Distribution Expenses (-)				
3- General Administrative Expenses (-)	-838.146.27		-745.303,48	
OPERATING PROFIT/LOSS	-030.110,27	3.211.509,80	713.303,10	1.647.395,43
F - INCOME AND PROFIT FROM OTHER OPERATIONS		939.525,10		613.312,72
8-10 1- Dividend Income from Participations		333,323,10		015.512,72
2- Dividend Income from Subsidiaries				
2- Dividend Income from Subsidiaries 3- Interest Income	4.140,17		6.441,28	
4- Commission Income	4.140,17		0.441,20	
5- Provisions No Longer Required	75.40			
6- Gains on Marketable Securities' Sales	75,42		F00 002 2C	
7- Foreign Exchange Gain	932.108,81		590.092,36	
8- Discount on Interest Gain				
9- Gains from Inflation Adjustment	2 200 70		46 770 07	
10- Other Income and Profit from Operations	3.200,70	400 600 44	16.779,07	07407005
G - EXPENSES AND LOSS FROM OTHER OPERATIONS		-429.690,14		-374.370,05
1- Commision Expenses (-)				
2- Provision Expenses (-)				
35. 3- Losses on Marketable Securities' Sales(-)				
4- Foreign Exchange Losses (-)	-424.476,11		-372.903,19	
5- Interest Expenses on Discounted Notes (-)				
6- Loss from Inflation Adjustment (-)			0.000.00	
7- Other Expenses and Losses (-)	-5.214,03		-1.466,86	
H - FINANCIAL EXPENSES (-)		-38.040,62		-1.181,90
1- Short-Term Borrowing Expenses (-)	-38,040,62		-1.181,90	
2- Long-Term Borrowing Expenses (-)		0.400.00.00		
OPERATIONAL PROFIT/(LOSS)		3.683.304,13		1.885.156,19
I - EXTRAORDINARY INCOME AND PROFIT		17.989,56		4.339,60
1- Income and Profit Relating to Previous Years	6.747,91		3.241,63	
2- Other Extraordinary Expenses and Loss (-)	11.241,66	.,	1.097,97	
J - EXTRAORDINARY EXPENSE AND LOSS		-4.867,33		-337,00
1- Idle Capacity Expenses and Losses (-)				
2- Previous Period Expenses and Losses (-)	-1.682,09		-337,00	
3- Other Extraordinary Expense and Loss (-)	-3.185,24			
PROFIT/(LOSS) FOR THE PERIOD		3.696.426,37		1.889.158,79
K - PROVISIONS FOR TAXATION AND OTHER LEGAL LIABILITIES(-)		-741.905,83		-278.454,58
NET PROFIT/(LOSS) FOR THE PERIOD		2.954.520,54		2.167.613,37



Official Documents



>>>> OFFICIAL DOCUMENT - Chamber Registration Certificate



ANKARA CHAMBER OF INDUSTRY

Atatürk Bulvarı No:193 Kavaklıdere / ANKARA Tei:0 312 417 12 00 Faks: 0 312 417 52 05 www.aso.org.tr aso@aso.org.tr

Section: REGISTRATION SERVICE

Date: 13.03.2017

CHAMBER REGISTRATION CERTIFICATE

Title : BARAN ÇELİK VE GALVANİZ SANAYİ LİMİTED ŞİRKETİ

Address :Saray Mah. Dağyaka Cd. NO:4 KAHRAMANKAZAN / ANKARA

Comercial Register No : 68852

Registration Date To Chamber: 09/05/1988

Registration No To Chamber : 3049
Registered Capital To Chamber : 1.620.000,00 TL

Grade : EXCELLENT

Where To Submit : To Whom it may concern

Field Of Activity : Hot dip galvanizing works. Manufacture of machines and materials related to these operations. Construction and construction works in all types, entering into

related tenders, steel pole, pipe and profile pole construction, steel construction.

The Industrial company whose title and Commercial register number written above is a member of our Chamber.

This Certificate is given at the request of the concerned.

Secretary General

Sedat ALTUNSABAK
Registration Officer







TURKISH TRADE REGISTRY GAZETTE

February 16, 1988 - Issue no: 1957

From the Office of Ankara Commercial Register

Registry No: 68852

Commercial Title

Baran Steel and Galvanization Industry Limited

It is announced that the company Commercial Title and Commercial Registry Number of which are cited above and the article of association is presented below has notified our Office of its commencement of activities at the local premise(commercial residence) of the address Büyük Sanayi Akçan Sokak No: 2/D in Ankara and provided our Office of required documents and the said company was registered on the date February 12, 1988 as per the pertinent provisions of the Turkish Code of Commerce.

Baran Steel and Galvanization Industry Limited Article of Association

Foundation

Article 1

A limited liability company is established between founders whose first names, family names, nationalities, and addresses of residence are presented below.

- 1- Republic of Turkey citizen
 - Resident at the address Bahçelievler 4. Cadde 89/5 Ankara
 - Veli Baran
- 2- Republic of Turkey citizen
 - Resident at the address Onurlu Sokak No:6 Kalaba Ankara
 - Celal Mirza
- 3- Republic of Turkey citizen
 - Resident at the address Esat Caddesi Esat Apt. 58/8 Ankara
 - Bekir Baran
- 4- Republic of Turkey citizen
 - Resident at the address Çamlıca Mahallesi Temel Enerji Bl. D/7 Demetevler Ankara
- Adem Baran

Title of the Company

Article 2

Title of the Company is "Baran Çelik ve Galvaniz Sanayi Limited Şirketi."

Company HQ and Branches





The Company has its headquarters in Ankara.

The Company, on the condition of notifying the Ministry of Commerce, may establish branches in Turkey and abroad.

Objective and Subject of the Company

Article 4

The following items constitute the objective and subject of the Company:

- a) Works of metal coating, metal polishing, electro –galvanization, hot-dip galvanized coating and manufacture, export, and import of machinery, substances, and materials required for conduct of these works.
- b) Manufacture of steel poles, pipes, and shaped poles; works of steel construction, and manufacture, export, and import of steel materials.
- c) Trade in steel materials, steel industry products, iron, gussets, plates, molding, chemical materials, dyes, and manufacture (if available), export, and import of substances and materials required for these operations.
- d) Works of construction and associated works at construction of all sorts of dwellings, beach houses, industrial facilities, sites, and buildings, sports venues and fields, garage and parking lots, all sorts of road, sewage network, bridge construction works, excavation works at all sorts of construction works and the like, participation in tender process relevant to such works, procurement of pertinent services for such works, transfer and acquirement of awarded tenders.
- e) Trade in hydraulic, pneumatic materials, hardware machine tools, hydraulic and pneumatic construction vehicles, agricultural machinery, all sorts of spare parts and accessories of such items, and manufacture, if available, of said items.
- f) Construction and operation of all sorts of touristic facilities, hotels, motels, guesthouses, and holiday villages.
- g) Acting as a representative for domestic and foreign manufacturers and other enterprises.
- h) Authorizing and operating domestic and foreign distribution, representation, agency, and contact offices pertaining to the field of activities and making agreements thereof in the name of other companies.
- i) The Company may establish temporary or permanent partnerships and cooperation with domestic and foreign companies and real persons to achieve its objectives. It may participate in existing companies. It may make all sorts of interactions to invest in



existing or prospective companies and to benefit from legislative provisions of incentives pertaining to foreign capital's investments in Turkey.

- j) The Company cooperates with all sorts of domestic and foreign legal entities and real persons in order to directly obtain required permits, trademarks, royalties, licenses, warrants, commercial titles, industrial drawings and materials, copyrights, and patents. It assigns these, either fully or partially, to third persons or acquires such items from third person holders. It makes agreements of technical knowledge and know-how.
- k) For the Company's needs:

Purchase and, if necessary, sale of all sorts of buildings and land and materials and immaterial rights considered as immovable under the Turkish Civil Code, making necessary credits interactions for such operations, making contracts of tenancy, taking middle- and long-term loans, giving and receiving securities in the form of mortgage, pledging and other sorts and cancelling, if necessary, such securities.

In case it is desired that the Company engage in works other than mentioned above that are deemed beneficial, the board of partners may in future decide on expanding the objective and subject of the Company.

Necessary permission should be acquired from the Ministry of Commerce to serve this end.

Duration of the Company

Article 5

Duration of the Company is 100 (one hundred) years, starting from the date of its registration and announcement.

Capital

Article 6

Capital of the Company totaling to 100,000,000 (one hundred million) TL is divided into 1,000 (one thousand) individual shares each amounting 100,000 (one hundred thousand) TL.

Of this amount;

25,000,000 (twenty-five million) TL corresponding to 250 (two hundred and fifty) shares by Veli Baran,

25,000,000 (twenty-five million) TL corresponding to 250 (two hundred and fifty) shares by Celal



25,000,000 (twenty-five million) TL corresponding to 250 (two hundred and fifty) shares by Bekir Baran,

25,000,000 (twenty-five million) TL corresponding to 250 (two hundred and fifty) shares by

Have been fully pledged and ¼ of the amount has been actually submitted.

The remaining ¾ is to be subscribed according to the scheme decided by the board of partners.

Announcement

Article 7

Announcements of the Company shall be made at least 7 days prior in a newspaper at the location of the Company headquarters, save for the cases stipulated under the Article 37 of the Turkish Code of Commerce.

Management of the Company

Article 8

Acts and interactions of the Company are conducted by one director or several directors assigned by the board of partners.

Directors may assign their duties and authority partially to other directors or to partners who are not directors. Nevertheless, such assignment does not grant the title of director.

Veli Baran, a partner of the Company, has been assigned as the director for the first three years.

Representation

Article 9

The Company is represented by directors. Signatures that bind the Company are determined, registered, and announced by the board of partners. Authority of representing and binding the Company under the Company seal and individually on single signature has been, until a second decision, has been assigned to Company partner and director Veli Baran.

Changing the Directors

Article 10

Directors may be changed by the decision of partners who represent more than half of the subscribed main capital of the Company.

Auditor

Article 11

The Company shall have one or more auditors in case the number of partners exceeds twenty.

Submission of Balance Sheets to the Ministry





Whether the number of partners exceeds twenty or not, annually issued balance sheet of profit and loss shall be submitted to the Ministry of Industry and Commerce in two certified copies and within a month following the most recent meeting.

Accounting Year

Article 13

Accounting year of the Company starts on the first day of month January and ends on the 31st day of month December insofar that the first accounting year of the Company starts on the definite date of its establishment and ends on the last day of month December.

Distribution of Profit

Article 14

Net profit is the amount that remains after subtracting all sorts of costs. A reserve fund of 5% is primarily deposited from the net profit each year.

The remaining amount of the net profit is distributed to shareholders on the rate of their subscribed capital contribution shares. An amount of 10% of the net profit decided to be distributed to contributors and shareholders is further deposited as per Article 466 Paragraph 2 Subparagraph 3 of the Turkish Code of Commerce and is included in the general reserve fund.

Decisions such as distributing a part of the profit to shareholders and investing the profit on the Company's behalf or dealing the profit to employees as premium payments may only be reached by shareholders who represent at least 51% of the Company's capital.

Reserve Fund

Article 15

Reserve fund is deposited until it reaches the rate 20% of the Company's capital. Depositing the reserve fund is resumed in case the amount falls under this rate.

The profit may only be distributed to shareholders after statutory deposit and reserve fund and other deposits required by law and this Article of Association are subtracted from the net profit.

Legislative Terms

Article 16

Turkish Code of Commerce provisions are to be applied in issues not found in this Article of Association.

Temporary Article (Stamp Duty)

Stamp duty relevant to this Article of Association shall be paid to the competent tax office within three months.

Company's Founding Partners:



- 1- Veli Baran Signature
- 2- Celal Mirza Signature
- 3- Bekir Baran Signature
- 4- Adem Baran Signature

File No: 10.04(0120.3/46928)

Article of Association of Baran Steel and Galvanization Industry Limited has been inspected and the Company is allowed establishment under Article 509 of the Turkish Code of Commerce.

In the name of the Minister

Department Director

Ali Gençler

Official Seal and Signature

Name of the bank of deposit: Akbank

Branch: Büyük Sanayi Çarşısı

Amount deposited: 25,000,000 TL

Date and number of deposit letter: February 11, 1988 – 217 (50.A) (12/E – 19792)

[Seal]

SAME AS THE ORIGINAL COPY

April 27, 2012

[Signature]

Certified by Arzu ERDEM

Manager, Turkish Trade Registry Gazette





Production - Services Area

>>>> PRODUCTION - SERVIS AREA - Overwiev



>> Facilitles

The company was established in the 70's in a 200m2 workshop. Driven for success and thanks to the skill and support of our workforce, we soon became a well known company in the steel structure fabrication sector.

As the demand grew, Baran Steel and Galzanizing expanded and moved to bigger premises.

By the end of the 80's, a building devoted to hot dip galvanizing was added to the facilities.

As soon as ISO-9000 Quality
Management System was Introduced In
Turkey, Baran became one of the first
companies to implement it and receive
the certification.

In the years that followed, we updated our equipment with CNC technology and renewed the lines upgrading both our capacity and the quality of our service.

Today, Baran Steel and Galvanizing operates in a 11,000 m2 Indoor and a 17,000m2 outdoor area with a steel structure fabrication capacity of 36,000 tons and 40,000 tons of galvanizing,

featuring a wide range of products such as overhead power transmission lines, substation structures, modular masts, monopoles, lighting poles and any kind of tubular steel structures and telecommunication lattice towers.





PRODUCTION - SERVIS AREA - Overwiev

>> Supply

Baran Steel and Galvanizing has a large range of stock, enabling us to ship your order in the shortest time possible. This includes most brackets, towers and columns and a selection of our most popular poles.



Part of the control to the control t

>> Design - Engineering

Baran Steel and Galvanizing has a dedicated approach to problem solving. To attain the most cost effective design and develop feasible engineering solutions, we provide consultancy services to cater for custom fabrication.

Engineering and architectural designs are prepared, analyzed and optimized in a computerized environment.

These highly sophisticated softwares directly translate designs to manufacturing data providing workshop drawings for CNC machines.

>> Quality

Meeting tight deadlines, minimizing your turn around time together with strict quality guidelines, lie at the core of our success.

Every part of the manufacturing process is subject to a three phase (Initial, Intermediate, final) quality control before reaching delivery.





>>>> PRODUCTION - SERVIS AREA - Overwiev





Delivery

We can accommodate your shipping needs: whether it be maritime, road or air freight, our products are carefully labeled and packed in accordance with your demands, accurately following the packing lists, ensuring deliveries are met on time and within budget.

We have a great deal of experience in organising shipments to countries across the world and have selected a small number of expert shipping companies to service these markets, with containers shipping weekly.

>> Product Range

Baran is the one of the first and well-known factory with advanced machinery, designed and invested with the concept of designing and producing of towers for energy substations, GSM & TV & Radio link Antennas,

EnergyTransmission Lines and also various types of steel constructions, polygon illumination poles,traffic signs steel constructions, highway guardrails.

Our dedicated knowledgeable people are able to support you in finding the best product for your needs. There are many technical services available, including advising on site specific foundations and providing specific calculations and information to satisfy your client's needs.

Our product range is extensive - we have many other solutions - let us know what, how and where you want and we'll find the answer.















When a product is manufactured for the first time at Baran Steel and Galvanizing, a prototype is first prepared, then evaluated. Mass production will only start when all possible problems are ruled out.

We use cutting edge software to produce 3D models and detailed drawings of our products to submit for the approval of our customers.

In case of application of a new design;

prototypes are manufactured, assembled and checked by the joint work of our design and prototype teams.

If requested by the customer, the supervisors of the customer can also participate the checking of prototypes.

After all of the details are fully checked on the prototype and all revisions (if any) are applied to the workshop drawings, the serial manufacturing is commenced.

>>>> PRODUCTION - SERVIS AREA - Lattice Structures

>> Lattice Structures

All our operations are conducted prioritizing work safety and environmental health, all necessary precautions taken at each stage of production.

Our standard of excellence also covers our extensive stock of raw material for increased flexibility in structure options, delivery schedules and custom projects.

The data prepared by the engineering department is exported to the CNC machines ensuring the programmed parameters are delivered error free. Quality control data is recorded at every stage of the manufacturing process by our own on site inspectors.







>>>> PRODUCTION - SERVIS AREA - Tubular Structures

>> Tubular Structures

CNC technology is also part of the tubular manufacturing facility with its upgraded lines. Every procedure including shearing, bending, drilling and welding is done as per the parameters exported from the engineering models directly to the machines ensuring precision and repeatability.

To be able to meet a wide range of demands, we work with CNC cutting edge technology. High tensile steel of up to 12 mts long by 18 mm thick is bent in our 1,200 ton capacity brake press.

For cutting 8.0 mm or thicker plates, we use oxygen cutting technology. For precision cutting we have a 24 mt long plasma machine.









As for drilling, we can handle up to 90 mm plates with our drilling line. Tubular structures of less than 50 cm in diameter are welded in our camera controlled automatic feed conveyor welding machine while materials of a bigger diameter are processed manually.

When a tubular product is manufactured for the first time, a prototype is first prepared, then evaluated. Mass production will only start when all possible problems are ruled out.

At a specialized workshop we take care of custom jobs everything from anchorage to the renewables of our own machines.



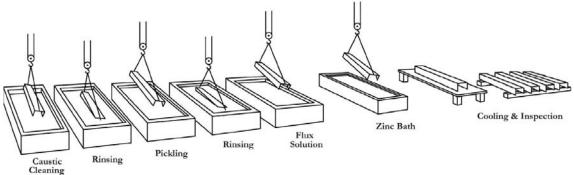
>>>> PRODUCTION - SERVIS AREA - Hot Dip Galvanizing



>> Hot Dip Galvanizing

Galvanization is the process of applying a protective zinc coating to metal,in order to prevent rusting and galvanic corrosion.

Although galvanization can be done with electrochemical and electro deposition processes, the most common method in current use is hot-dip galvanization, in which steel parts are submerged in a bath of molten zinc.



Baran galvanizes in its own facilities using only the highest quality raw material with proven quality procedures according to national and international standards.(EN ISO 1461)

It is the policy of Baran to produce fully supporting and providing the necessary resources for the preservation of the environment and the health of the workforce.

Our products are shipped to the customer only after their quality and conformance to customer specifications can be assured. We have;

GALVANIZE TANK (8.40 MT. X 1.10 MT.X 1.45MT)
ACID BATH (9.40 MT. X 1.30 MT. X 1.48MT)
WASTE ACID POOL (9.40 MT. X 1.94 MT.X 1.48MT)
FLUX POOL (9.40 MT. X 1.30 MT.X 1.48MT)
WATER POOL (9.40 MT, X 1.30 MT.X 1.48MT)
COLLING POOL (8.50 MT. X 1.23 MT.X 1.48MT)
MOBILE TRANSPORTER
VENTILATION FAN (FOR ZINC AND ACID)
NATURAL GAS BURNER

VENTILATION FAN (FUEL) VENTILATION FAN (FUEL)







Engineering Services

>>>> ENGINEERING SERVICE - Software

We use cutting edge software to produce 3D models and detailed drawings of our products to submit for the approval of our customers.

These softwares are:

1. XSteel / TEKLA

Steel Structure Modelling

2. Pls-Pole / POWERLINE

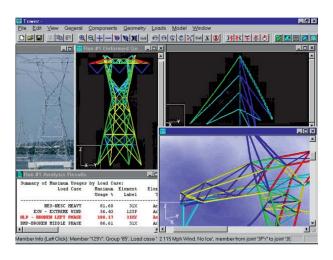
Pole Design and Analysis

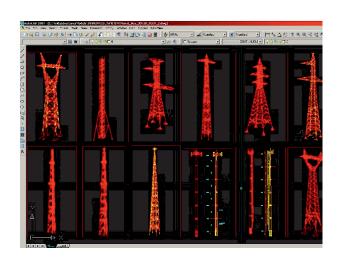
3. Tower / POWERLINE

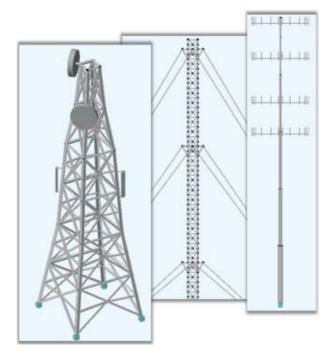
Design – Analysis and Optimization of Steel Lattice Towers

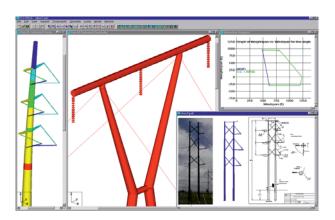
The structural calculations of telecommunication towers are made in accordance with international telecommunication tower standards such as TEIA/EIA-222F or 22G

Solutions that comply with national and international standards are used for overhead power transmission lines and substation steel structures.











Standards



>>>> ENGINEERING SERVICE - Design Standarts

OHTLTOWERS DESIGN STAN	IDARTS
DIN VDE 210:	Planning and Design of Overhead Power Lines with Rated Voltages Above 1 kV
NESC C2-2002:	National Electrical Safety Code C2
CEI - IEC 826 / 60326 :	Technical Report Loading and Strength of Overhead Transmission Line
EN 5034:	Overhead Electrical Lives Exceeding AC 45kV
ASCE Manual No: 52:	Guide for Design of Steel Transmission Towers
ASCE Manual No: 74:	Design of Electrical Transmission Line Structural Loading
ASCE Manual No: 10-90:	10-90 Design of Latticed Steel Transmission Structures
TS 648:	Building Code for Steel Structures
TS 500:	Building Code Requirements for Reinforced Concrete

ANTENNA TOWERS DESIGN STANDARTS	
TIA / EIA - 222-F:	Structural Std's for Steel Antenna Towers and Antenna Supporting Structures
BSI CP 3:	Code of Basic Data for the Design of Buildings - Chapter 5 Part 2 Loading
BS 8100:	Lattice Towers and Masts
BS 449:	Specification for the Use of Structural Steel In Building
ASCE Manual No : 52 :	Guide for Design of Steel Transmission Towers
TS 648:	Building Code for Steel Structures
TS 500:	Building Code Requirements for Reinforced Concrete
TS 498:	Design Loads for Buildings

POLES DESIGN STANDARTS	
ASCE Manual No: 72:	Design of Steel Transmission Pole Structures
EIA 222 - E :	Structural Std's for Steel Antenna Towers and Antenna Supporting Structures
TIA / EIA -222-F:	Structural Std's for Steel Antenna Towers and Antenna Supporting Structures
BSI CP 3:	Code of Basic Data for the Design of Buildings - Chapter 5 Part 2 Loading
ILE:	Technical Report Number 7 - High Mast Lighting
AASHTO:	Structural Supports For Highway Signs, Luminiares and Traffic Signals
BS 449 Part 2:	Specification For the Use of Structural Steel In Building
TS 648:	Building Code for Steel Structures
TS 498:	Design Loads for Buildings
EN 40 Part 1:	Lighting Columns - Definition and Terms
EN 40 Part 2:	Lighting Columns - Dimensions and Tolerances
EN 40 Part 3:	Lighting Columns - Materials
EN 40 part 3-1:	Lighting Columns - Part 3-1 Desing-Verification-Spesification for Characteristic Loads
EN 40 part 3-2:	Lighting Columns - Part 3-2 Desing and Verification - Verication by Testing
EN 40 part 3-3:	Lighting Columns - Part 3-3 Desing and Verification by Calculation
EN 40 Part 5:	Lighting Columns - Base Compartments and Cableways
EN 40 Part 6:	Lighting Columns - Loads



>>>>> ENGINEERING SERVICE - Product Standarts

LATTICE TOWERS DIMENSIONAL STANDARTS

ANGLES, EQUAL: EN 10056 / 1-2, ISO 657 / 1-5

ANGLES, UNEQUAL: EN 10056 / 1-2, ISO 657 / 1-5

PLATES: EN 10 029

SHEETS: EN 10 051

CHANNELS: EN 10279 (DIN 1026)

BEAMS: EN 10034 (DIN 1025)

FLAT BARS: DIN 1017

ROUND BARS: DIN EN 10060

PIPES: EN 10210 / 1-2

HOLLOW SECTIONS: EN 10210 / 1-2

LATTICE TOWERS QUALITY STANDARTS

MILD STEEL: EN 10025 / 1-6 Grade S235JR, EN 10025 /1-6 Grade S275JR

HIGH TENSILE STEEL: EN 10025 / 1-6 Grade S355JO, EN 10025 / 1-6 Grade S355JR

POLE TOWERS DIMENSIONAL STANDARTS

SHEETS: EN 10 051

PLATES: EN 10 029

CHANNELS: EN 10279 (DIN 1026)

FLAT BARS: DIN 1017

ROUND BARS: DIN 1013

PIPES: EN 10210 / 1-2

HOLLOW SECTIONS: EN 10210 / 1-2

PRODUCT DIMENSIONS: EN 40 Part 2

POLE TOWERS QUALITY STANDARTS

MILD STEEL: EN 10025 / 1-6 Grade S235JR, EN 10025 /1-6 Grade S275JR

HIGH TENSILE STEEL: EN 10025 / 1-6 Grade S355JO, EN 10025 / 1-6 Grade S355JR



>>>> ENGINEERING SERVICE - Fasteners Standarts

FASTENERS DIMENSIONAL STANDARTS			
	DIN 7990	DIN EN ISO 4014	ASME B 18.2.1
	DIN 931	DIN EN ISO 4016	ASME B 1.1
	DIN 933	DIN EN ISO 4017	ASME B 1.13M
	DIN 960	DIN EN ISO 4018	ASME B 16.5
	DIN EN 28676	DIN EN ISO 4762	ASTM A325
BOLTS:	DIN EN 1665	DIN EN ISO 7089	ASTM A490
	DIN 607	DIN EN ISO 8765	ISO 965-2
	DIN EN 14399-4	DIN EN ISO 8676	ISO 965-3
	DIN 912	DIN EN 1665	ISO 965-4
	DIN 603	BS 3692	BS 4190
	DIN 961	DIN 6914	DIN 6921
ANCHOR BOLTS:	As per customer drawings		
	DIN 439	DIN EN ISO 4032	ASTM A 563M
	DIN EN 24034	DIN EN ISO 4034	NF EN 24033
NUTS:	DIN 934	DIN EN 14399-4	BS 3692
	DIN 936	DIN 7967	BS 4190
	DIN 6915	DIN 555	
	DIN 125	DIN 6916	ASME B 18.2.2
WASHERS:	DIN 126	DIN 6917	ASTM F 436M
WASHERS.	DIN 434	DIN 6918	
	DIN 435	DIN 7989	
SPRING WASHERS :	DIN 127		
SPRING WASHERS.	DIN 128		

POLE TOWERS DIMENSIONAL STANDARTS	
BOLTS:	ISO 898 / 1 ASTM A30, ASTM A 325M, ASTM A 490M, SAEJ 429, ISO 4759-1
ANCHOR BOLTS:	ISO 898 / 1, AISI 1020, AISI 1030, AISI 1050, AISI 4140
NUTS:	ISO 898 / 2, ISO 4759-1
WASHERS:	Structural Steel
SPRING WASHERS:	Spring Steel



>>>> ENGINEERING SERVICE - Galvanizing Standarts

	GALVANIZING STANDARTS
ASTM A123:	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A153:	Zinc Coating (Hot-Dip) on Iron and Steel Hardware
EN ISO 1461:	Metallic Coatings - Hot Dip Galvanized Coatings on Fabricated Ferrous Products
ISO 1460 :	Metallic Coatings - Hot Dip Galvanized Coatings on Fabricated Ferrous Products
DIN EN ISO 1461 :	Hot Dip Galvanized Coatings on Fabricated Iron and Steel Articles Specification and Test Methods



>>>> ENGINEERING SERVICE - Inspection & Testing Standarts

MATERIAL & STEEL STRUCTURAL PRODUCTS	
EN 10025 Part 1, 2:	Hot Rolled Products of Non-Alloy Structural Steels
EN10002-1:	Mechanical Testing of Metal Products
EN 10045 Part 1, 2:	Impact Testing of Metal Products

FASTENERS	
ISO 898 / 1 :	Mechanical Properties of Fasteners

GALVANIZING	
ASTM A123:	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A153:	Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A90:	Standard Test Method for Weight of Coating on Iron and Steel Articles with Zinc and Zinc Alloy Coatings
ASTM A143 :	Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedure for Detecting Embrittlement.
ASTM A239 :	Standard Test Method for Locating Thinnest Spot in a Zinc Coating on Iron and Steel Articles by the Preece Test [Copper Sulfate Dip].
ASTM E376 :	Practice for Measuring Coating Thickness by Magnetic-Field or Eddy-Current Test Methods
EN ISO 1461:	Metallic Coatings - Hot Dip Galvanized Coatings on Fabricated Ferrous Products
DIN EN ISO 1461 :	Hot Dip Galvanized Coatings on Fabricated Iron and Steel Articles Specification and Test Methods



Key References



>>>> Key References - Telecommunication

Towers

ST	baran FEEL & GALVANIZING	KEY REFERENCES FOR TELECOMUNICATION TOWERS			
SIRA	MÜŞTERİ	PROJE ADI	MİKTAR (TON)	ÜLKE	YIL
1	BAKCELL	GSM ANTENNA TOWERS	703	AZERBAIJAN	2008
2	KULE A. Ş	GSM ANTENNA TOWERS	1876	TURKEY	2008
3	MOTOROLA BAHREİN	GSM ANTENNA TOWERS	182	BAHRAIN	2008
4	TUNÇ TELKOM	GSM ANTENNA TOWERS	1753	TURKEY	2008
5	BAKCELL	GSM ANTENNA TOWERS	488	AZERBAIJAN	2009
6	FAWZİ NAJİM ABDULLAH	GSM ANTENNA TOWERS	2452	IRAQ	2009
7	KULE A. Ş	GSM ANTENNA TOWERS	2135	TURKEY	2009
8	MOTOROLA	GSM ANTENNA TOWERS	1082	TURKEY	2009
9	BEREKATCOMPANY	GSM ANTENNA TOWERS	596	IRAQ	2011
10	ERICSSON	GSM ANTENNA TOWERS	1076	TURKEY	2011
11	NOKIA	GSM ANTENNA TOWERS	964	TURKEY	2011
12	SC SGC GROUP	GSM ANTENNA TOWERS	148	MOLDOVA	2011
13	VODAFONE	GSM ANTENNA TOWERS	1768	TURKEY	2011
14	ZTE	GSM ANTENNA TOWERS	636	TURKEY	2011
15	ALIAWDA COMPANY	GSM ANTENNA TOWERS	822	IRAQ	2012
16	REDINET HOLDING	GSM ANTENNA TOWERS	444	GEORGIA	2012
17	HUAWEI	GSM ANTENNA TOWERS	670	TURKEY	2013
18	VODAFONE	GSM ANTENNA TOWERS	934	TURKEY	2013
19	CESTRON	320+20 ANTENNA TOWERS	110	QATAR	2014
20	KULE A. Ş	GSM ANTENNA TOWERS	3065	TURKEY	2014
21	GEORGIAN EXPRESS	GSM ANTENNA TOWERS	423	GEORGIA	2015
22	KULE A. Ş	GSM ANTENNA TOWERS	550	TURKEY	2015
23	ERICSSON	GSM ANTENNA TOWERS	645	TURKEY	2016
24	GEORGIAN EXPRESS	GSM ANTENNA TOWERS	318	GEORGIA	2016
25	OMSE	ANTENNA TOWERS	107	IVORY COAST	2017



>>>> Key References -Over Head Transmission Line

Towers

1 CİHAN METAL INDUSTRY 154 KV HABİPLER (İSTANBUL V) - HADİM 692 TURKEY 195	S 1	baran EEL&GALVANIZING	KEY REFEREN TELECOMUNICATI		ERS	
2 SEVDA ENGINEERING 154KV EŞEN II HES - FETHİYE SS OHTL 664 TURKEY 195 3 ENERTED-BARAN 154 KV YEŞİL HİSAR - DERİNKUYU OHTL 527 TURKEY 195 4 KOLİN CONSTRUCTION 154 KV ATATÜRK-URFA ÇİM. DSİ POMPA 397 TURKEY 200 5 YİLTAŞ CONSTRUCTION 154 KV ATATÜRK-URFA ÇİM. DSİ POMPA 397 TURKEY 200 6 DOĞAL ENERGY CO. 154 SARAYLAR RES-AKHİSAR OHTL 280 TURKEY 200 7 ENERTED LTD. 154 KV SAGAP (KAPAKLI)RES-BILORSA SS 220 TURKEY 200 8 ÖZAŞ ENERGY 154 KV SAGAP (KAPAKLI)RES-BILORSA SS 220 TURKEY 200 9 METRO ELECTRIC CO. 220KV /110 KV OHTL TOWERS 1.117 TURKEY 200 10 DOĞUŞ İNŞBTE ENERJİ 380KV BOYABAT HES KURŞUNLU OHTL 4.832 TURKEY 201 11 BTE ENERGY 380 KV NEW ENERGY TEPEÖREN HES OHTL 2.028 TURKEY 201 12 MİDDLE EAST CONS. MOE 400/132 KV OHTL TOWERS 5.463 İRAQ </th <th>SIRA</th> <th>MÜŞTERİ</th> <th>PROJE ADI</th> <th></th> <th>ÜLKE</th> <th>YIL</th>	SIRA	MÜŞTERİ	PROJE ADI		ÜLKE	YIL
3 ENERTED-BARAN 154 KV YEŞİL HİSAR - DERİNKUYU OHTL 527 TÜRKEY 195	1	CİHAN METAL INDUSTRY	154 KV HABİPLER (İSTANBUL V) - HADIM	692	TURKEY	1998
4 KOLIN CONSTRUCTION 154 KV ATATÜRK-URFA ÇİM. DSİ POMPA 397 TURKEY 200 5 YİLTAŞ CONSTRUCTION 154 KEBAN SS - ELAZİĞ SS OHTL 280 TÜRKEY 200 6 DÖĞAL ENERGY CO. 154 SARAYLAR RES-AKHİSAR OHTL 326 TÜRKEY 200 7 ENERTED LTD. 154 KV SAĞAP (KAPAKLI)RES-BİLORSA SS 220 TÜRKEY 200 8 ÖZAŞ ENERGY 154 KV SAĞAP (KAPAKLI)RES-BİLORSA SS 220 TÜRKEY 200 9 METRO ELECTRIC CO. 220KV /110 KV OHTL TOWERS 1.117 TÜRKMENISTAN 200 10 DÖĞUŞ İNŞBTE ENERJİ 380KV BÖYABAT HES KÜRŞÜNLÜ ÖHTL 4.832 TÜRKEY 201 11 BTE ENERĞY 380 KV NEW ENERĞY TEPEÖREN HES ÖHTL 2.028 TÜRKEY 201 12 MİDDLE EAST CONS. 400 KV ÖHTL TÖWERS 995 IRAQ 201 13 MİDDLE EAST CONS. MOE 400/132 KV ÖHTL TÖWERS 5.463 IRAQ 201 14 BTE ENERĞY 380 KV ARTVİN HES- DERİNER-YÜSÜFELİ 1.630 TÜRKEY 2	2	SEVDA ENGINEERING	154KV EŞEN II HES - FETHİYE SS OHTL	664	TURKEY	1999
5 YILTAŞ CONSTRUCTION 154 KEBAN SS - ELAZIĞ SS OHTL 280 TURKEY 200 6 DOĞAL ENERGY CO. 154 SARAYLAR RES-AKHİSAR OHTL 326 TURKEY 200 7 ENERTED LTD. 154 KV TEPEÖREN-TİRE-İSAKÖY OHTL 421 TURKEY 200 8 ÖZAŞ ENERGY 154 KV SAĞAP (KAPAKLI)RES-BILORSA SS 220 TURKEY 200 9 METRO ELECTRIC CO. 220KV /110 KV OHTL TOWERS 1.117 TURKMENISTAN 200 10 DOĞUŞ İNŞBTE ENERJİ 380KV BOYABAT HES KURŞUNLU OHTL 4.832 TURKEY 201 11 BTE ENERGY 380 KV NEW ENERGY TEPEÖREN HES OHTL 2.028 TURKEY 201 12 MİDDLE EAST CONS. 400 KV OHTL TOWERS 995 İRAQ 201 13 MİDDLE EAST CONS. MOE 400/132 KV OHTL TOWERS 5.463 İRAQ 201 14 BTE ENERGY 380 KV ARTVİN HES- DERİNER-YUSUFELİ 1.630 TURKEY 201 15 NEYNEVA CONSTUCTION 500 KV OHTL TOWERS 1.586 İRAQ 201	3	ENERTED-BARAN	154 KV YEŞİL HİSAR - DERİNKUYU OHTL	527	TURKEY	1999
6 DOĞAL ENERGY CO. 154 SARAYLAR RES-AKHİSAR OHTL 326 TURKEY 200 7 ENERTED LTD. 154 KV TEPEÖREN-TİRE-İSAKÖY OHTL 421 TURKEY 200 8 ÖZAŞ ENERGY 154 KV SAGAP (KAPAKLI)RES-BILORSA SS 220 TURKEY 200 9 METRO ELECTRIC CO. 220KV /110 KV OHTL TOWERS 1.117 TURKMENISTAN 200 10 DOĞUŞ İNŞBTE ENERJİ 380KV BOYABAT HES KURŞUNLU OHTL 4.832 TURKEY 201 11 BTE ENERGY 380 KV NEW ENERGY TEPEÖREN HES OHTL 2.028 TURKEY 201 12 MIDDLE EAST CONS. 400 KV OHTL TOWERS 995 IRAQ 201 13 MİDDLE EAST CONS. MOE 400/132 KV OHTL TOWERS 5.463 IRAQ 201 14 BTE ENERGY 380 KV ARTVİN HES- DERİNER-YUSUFELİ 1.630 TURKEY 201 15 NEYNEVA CONSTUCTION 500 KV OHTL TOWERS 1.586 İRAQ 201 16 ÇALIK ENERGY 220 KV OHTL TOWERS 1.305 TURKMENISTAN 201	4	KOLİN CONSTRUCTION	154 KV ATATÜRK-URFA ÇİM. DSİ POMPA	397	TURKEY	2002
7 ENERTED LTD. 154 KV TEPEÖREN-TİRE-İSAKÖY OHTL 421 TÜRKEY 200 8 ÖZAŞ ENERGY 154 KV SAGAP (KAPAKLI)RES-BİLORSA SS 220 TÜRKEY 200 9 METRO ELECTRIC CO. 220KV /110 KV OHTL TÖÜRERS 1.117 TÜRKEY 201 10 DOĞUŞ İNŞBTE ENERJİ 380KV BÖYABAT HES KÜRŞÜNLÜ ÖHTL 4.832 TÜRKEY 201 11 BTE ENERGY 380 KV NEW ENERGY TEPEÖREN HES ÖHTL 2.028 TÜRKEY 201 12 MİDDLE EAST CONS. 400 KV ÖHTL TÖWERS 995 IRAQ 201 13 MİDDLE EAST CONS. MOE 400/132 KV ÖHTL TÖWERS 5.463 IRAQ 201 14 BTE ENERGY 380 KV ARTVİN HES- DERINER-YÜSÜFELİ 1.630 TÜRKEY 201 15 NEYNEVA CONSTUCTION 500 KV ÖHTL TÖWERS 1.586 IRAQ 201 16 ÇALIK ENERGY 220 KV ÖHTL TÖWERS 2.167 TÜRKMENISTAN 201 17 BTE ENERGY 380kv SİLOPİ-CİZRE SS ÖHTL 1.305 TÜRKEY 201 <td< td=""><td>5</td><td>YILTAŞ CONSTRUCTION</td><td>154 KEBAN SS - ELAZIĞ SS OHTL</td><td>280</td><td>TURKEY</td><td>2004</td></td<>	5	YILTAŞ CONSTRUCTION	154 KEBAN SS - ELAZIĞ SS OHTL	280	TURKEY	2004
8 ÖZAŞ ENERGY 154 KV SAGAP (KAPAKLI)RES-BILORSA SS 220 TURKEY 200 9 METRO ELECTRIC CO. 220KV /110 KV OHTL TOWERS 1.117 TURKEY 200 10 DOĞUŞ İNŞBTE ENERJİ 380KV BOYABAT HES KURŞUNLU OHTL 4.832 TURKEY 201 11 BTE ENERGY 380 KV NEW ENERGY TEPEÖREN HES OHTL 2.028 TURKEY 201 12 MIDDLE EAST CONS. 400 KV OHTL TOWERS 995 IRAQ 201 13 MIDDLE EAST CONS. MOE 400/132 KV OHTL TOWERS 5.463 IRAQ 201 14 BTE ENERGY 380 KV ARTVİN HES- DERINER-YUSUFELİ 1.630 TURKEY 201 15 NEYNEVA CONSTUCTION 500 KV OHTL TOWERS 1.586 IRAQ 201 16 ÇALIK ENERGY 220 KV OHTL TOWERS 2.167 TURKMENISTAN 201 17 BTE ENERGY 380kv SİLOPİ-CİZRE SS OHTL 1.305 TURKEY 201 18 KIRAÇ 220KV /110 KV OHTL TOWERS 1.072 TURKMENISTAN 201 19 <td>6</td> <td>DOĞAL ENERGY CO.</td> <td>154 SARAYLAR RES-AKHİSAR OHTL</td> <td>326</td> <td>TURKEY</td> <td>2007</td>	6	DOĞAL ENERGY CO.	154 SARAYLAR RES-AKHİSAR OHTL	326	TURKEY	2007
9 METRO ELECTRIC CO. 220KV /110 KV OHTL TOWERS 1.117 TURKMENISTAN 200 10 DOĞUŞ İNŞBTE ENERJİ 380KV BOYABAT HES KURŞUNLU OHTL 4.832 TURKEY 201 11 BTE ENERGY 380 KV NEW ENERGY TEPEÖREN HES OHTL 2.028 TURKEY 201 12 MIDDLE EAST CONS. 400 KV OHTL TOWERS 995 IRAQ 201 13 MIDDLE EAST CONS. MOE 400/132 KV OHTL TOWERS 5.463 IRAQ 201 14 BTE ENERGY 380 KV ARTVİN HES- DERINER-YUSUFELİ 1.630 TURKEY 201 15 NEYNEVA CONSTUCTION 500 KV OHTL TOWERS 1.586 IRAQ 201 16 ÇALIK ENERGY 220 KV OHTL TOWERS 1.586 IRAQ 201 17 BTE ENERGY 380kV SİLOPİ-CİZRE SS OHTL 1.305 TURKEY 201 18 KIRAÇ 220KV /110 KV OHTL TOWERS 1.072 TURKMENISTAN 201 19 IMPLUS CO. LTD. OHTL TOWERS 374 BULGARIA 201 20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 UZBEKISTAN 201 21 BTE ENERGY (SAMSUNG) 380 KV ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJİ 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 KV / 132 KV / 230 KV / OHTL TOWERS 384 ETIOPYA 201 24 MAST ENERJI 154 KV OHTL TOWERS 384 ETIOPYA 201	7	ENERTED LTD.	154 KV TEPEÖREN-TİRE-İSAKÖY OHTL	421	TURKEY	2007
10 DOĞUŞ İNŞBTE ENERJİ 380KV BOYABAT HES KURŞUNLU OHTL 4.832 TURKEY 201 11 BTE ENERGY 380 KV NEW ENERGY TEPEÖREN HES OHTL 2.028 TURKEY 201 12 MIDDLE EAST CONS. 400 KV OHTL TOWERS 995 IRAQ 201 13 MIDDLE EAST CONS. MOE 400/132 KV OHTL TOWERS 5.463 IRAQ 201 14 BTE ENERGY 380 kV ARTVİN HES- DERİNER-YUSUFELİ 1.630 TÜRKEY 201 15 NEYNEVA CONSTUCTION 500 KV OHTL TOWERS 1.586 IRAQ 201 16 ÇALİK ENERGY 220 KV OHTL TOWERS 2.167 TÜRKMENISTAN 201 17 BTE ENERGY 380kV SİLOPİ-CİZRE SS OHTL 1.305 TÜRKEY 201 18 KIRAÇ 220KV /110 KV OHTL TOWERS 1.072 TÜRKMENISTAN 201 19 İMPLUS CO. LTD. OHTL TOWERS 374 BULGARIA 201 20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 ÜZBEKISTAN 201 21 BTE ENE	8	ÖZAŞ ENERGY	154 KV SAGAP (KAPAKLI)RES-BILORSA SS	220	TURKEY	2008
11 BTE ENERGY 380 KV NEW ENERGY TEPEÖREN HES OHTL 2.028 TURKEY 201 12 MIDDLE EAST CONS. 400 KV OHTL TOWERS 995 IRAQ 201 13 MIDDLE EAST CONS. MOE 400/132 KV OHTL TOWERS 5.463 IRAQ 201 14 BTE ENERGY 380 kV ARTVIN HES- DERINER-YUSUFELI 1.630 TURKEY 201 15 NEYNEVA CONSTUCTION 500 KV OHTL TOWERS 1.586 IRAQ 201 16 ÇALIK ENERGY 220 KV OHTL TOWERS 2.167 TURKMENISTAN 201 17 BTE ENERGY 380kv SİLOPİ-CİZRE SS OHTL 1.305 TURKEY 201 18 KIRAÇ 220KV /110 KV OHTL TOWERS 1.072 TURKMENISTAN 201 19 IMPLUS CO. LTD. OHTL TOWERS 374 BULGARIA 201 20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 UZBEKISTAN 201 21 BTE ENERGY (SAMSUNG) 380 kv ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJİ 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201	9	METRO ELECTRIC CO.	220KV /110 KV OHTL TOWERS	1.117	TURKMENISTAN	2009
12 MIDDLE EAST CONS. 400 KV OHTL TOWERS 995 IRAQ 201 13 MIDDLE EAST CONS. MOE 400/132 KV OHTL TOWERS 5.463 IRAQ 201 14 BTE ENERGY 380 kV ARTVÍN HES- DERINER-YUSUFELÍ 1.630 TURKEY 201 15 NEYNEVA CONSTUCTION 500 KV OHTL TOWERS 1.586 IRAQ 201 16 ÇALIK ENERGY 220 KV OHTL TOWERS 2.167 TURKMENISTAN 201 17 BTE ENERGY 380kv SİLOPİ-CİZRE SS OHTL 1.305 TURKEY 201 18 KIRAÇ 220KV /110 KV OHTL TOWERS 1.072 TURKMENISTAN 201 19 IMPLUS CO. LTD. OHTL TOWERS 374 BULGARIA 201 20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 UZBEKISTAN 201 21 BTE ENERGY (SAMSUNG) 380 kv ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJİ 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201	10	DOĞUŞ İNŞBTE ENERJİ	380KV BOYABAT HES KURŞUNLU OHTL	4.832	TURKEY	2010
13 MIDDLE EAST CONS. MOE 400/132 KV OHTL TOWERS 5.463 IRAQ 201 14 BTE ENERGY 380 kV ARTVIN HES- DERINER-YUSUFELI 1.630 TURKEY 201 15 NEYNEVA CONSTUCTION 500 KV OHTL TOWERS 1.586 IRAQ 201 16 ÇALIK ENERGY 220 KV OHTL TOWERS 2.167 TURKMENISTAN 201 17 BTE ENERGY 380kv SİLOPİ-CİZRE SS OHTL 1.305 TURKEY 201 18 KIRAÇ 220KV /110 KV OHTL TOWERS 1.072 TURKMENISTAN 201 19 İMPLUS CO. LTD. OHTL TOWERS 374 BULGARIA 201 20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 UZBEKISTAN 201 21 BTE ENERGY (SAMSUNG) 380 kv ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJI 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201 24 MAST ENERJI 154 kV OHTL TOWERS 660 KIBRIS 201 <td>11</td> <td>BTE ENERGY</td> <td>380 KV NEW ENERGY TEPEÖREN HES OHTL</td> <td>2.028</td> <td>TURKEY</td> <td>2011</td>	11	BTE ENERGY	380 KV NEW ENERGY TEPEÖREN HES OHTL	2.028	TURKEY	2011
14 BTE ENERGY 380 kV ARTVÍN HES- DERINER-YUSUFELÍ 1.630 TURKEY 201 15 NEYNEVA CONSTUCTION 500 KV OHTL TOWERS 1.586 IRAQ 201 16 ÇALIK ENERGY 220 KV OHTL TOWERS 2.167 TURKMENISTAN 201 17 BTE ENERGY 380kv SİLOPİ-CİZRE SS OHTL 1.305 TURKEY 201 18 KIRAÇ 220KV /110 KV OHTL TOWERS 1.072 TURKMENISTAN 201 19 İMPLUS CO. LTD. OHTL TOWERS 374 BULGARIA 201 20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 UZBEKISTAN 201 21 BTE ENERGY (SAMSUNG) 380 kv ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJİ 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201 24 MAST ENERJI 154 kV OHTL TOWERS 660 KIBRIS 201	12	MIDDLE EAST CONS.	400 KV OHTL TOWERS	995	IRAQ	2012
15 NEYNEVA CONSTUCTION 500 KV OHTL TOWERS 1.586 IRAQ 201 16 ÇALIK ENERGY 220 KV OHTL TOWERS 2.167 TURKMENISTAN 201 17 BTE ENERGY 380kv SILOPI-CIZRE SS OHTL 1.305 TURKEY 201 18 KIRAÇ 220KV /110 KV OHTL TOWERS 1.072 TURKMENISTAN 201 19 IMPLUS CO. LTD. OHTL TOWERS 374 BULGARIA 201 20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 UZBEKISTAN 201 21 BTE ENERGY (SAMSUNG) 380 kv ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJI 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201 24 MAST ENERJI 154 kV OHTL TOWERS 660 KIBRIS 201	13	MIDDLE EAST CONS.	MOE 400/132 KV OHTL TOWERS	5.463	IRAQ	2013
16 ÇALIK ENERGY 220 KV OHTL TOWERS 2.167 TURKMENISTAN 201 17 BTE ENERGY 380kv SİLOPİ-CİZRE SS OHTL 1.305 TURKEY 201 18 KIRAÇ 220KV /110 KV OHTL TOWERS 1.072 TURKMENISTAN 201 19 IMPLUS CO. LTD. OHTL TOWERS 374 BULGARIA 201 20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 UZBEKISTAN 201 21 BTE ENERGY (SAMSUNG) 380 kv ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJİ 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201 24 MAST ENERJI 154 kV OHTL TOWERS 660 KIBRIS 201	14	BTE ENERGY	380 kV ARTVİN HES- DERINER-YUSUFELİ	1.630	TURKEY	2013
17 BTE ENERGY 380kv SİLOPİ-CİZRE SS OHTL 1.305 TURKEY 201 18 KIRAÇ 220KV /110 KV OHTL TOWERS 1.072 TURKMENISTAN 201 19 İMPLUS CO. LTD. OHTL TOWERS 374 BULGARIA 201 20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 UZBEKISTAN 201 21 BTE ENERGY (SAMSUNG) 380 kv ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJİ 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201 24 MAST ENERJİ 154 kV OHTL TOWERS 660 KİBRIS 201	15	NEYNEVA CONSTUCTION	500 KV OHTL TOWERS	1.586	IRAQ	2013
18 KIRAÇ 220KV /110 KV OHTL TOWERS 1.072 TURKMENISTAN 201 19 IMPLUS CO. LTD. OHTL TOWERS 374 BULGARIA 201 20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 UZBEKISTAN 201 21 BTE ENERGY (SAMSUNG) 380 kv ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJİ 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201 24 MAST ENERJI 154 kV OHTL TOWERS 660 KIBRIS 201	16	ÇALIK ENERGY	220 KV OHTL TOWERS	2.167	TURKMENISTAN	2014
19 IMPLUS CO. LTD. OHTL TOWERS 374 BULGARIA 201 20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 UZBEKISTAN 201 21 BTE ENERGY (SAMSUNG) 380 kv ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJİ 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201 24 MAST ENERJİ 154 kV OHTL TOWERS 660 KIBRIS 201	17	BTE ENERGY	380kv SİLOPİ-CİZRE SS OHTL	1.305	TURKEY	2014
20 METRO ELECTRIC CO. 500 KV OHTL TOWERS 163 UZBEKISTAN 201 21 BTE ENERGY (SAMSUNG) 380 kv ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJİ 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201 24 MAST ENERJI 154 kV OHTL TOWERS 660 KIBRIS 201	18	KIRAÇ	220KV /110 KV OHTL TOWERS	1.072	TURKMENISTAN	2014
21 BTE ENERGY (SAMSUNG) 380 kv ACWA -BAĞLUM CONNECTION 4.029 TURKEY 201 22 BTE ENERJİ 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201 24 MAST ENERJI 154 kV OHTL TOWERS 660 KIBRIS 201	19	IMPLUS CO. LTD.	OHTL TOWERS	374	BULGARIA	2014
22 BTE ENERJI 154 KV ENH DİREKLERİ 475 GÜRCİSTAN 201 23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201 24 MAST ENERJI 154 kV OHTL TOWERS 660 KİBRIS 201	20	METRO ELECTRIC CO.	500 KV OHTL TOWERS	163	UZBEKISTAN	2015
23 YAPI MERKEZİ A.Ş. 27,5 kV / 132 kV / 230 kV / OHTL TOWERS 384 ETİOPYA 201 24 MAST ENERJI 154 kV OHTL TOWERS 660 KIBRIS 201	21	BTE ENERGY (SAMSUNG)	380 kv ACWA -BAĞLUM CONNECTION	4.029	TURKEY	2015
24 MAST ENERJI 154 kV OHTL TOWERS 660 KIBRIS 201	22	BTE ENERJİ	154 KV ENH DİREKLERİ	475	GÜRCİSTAN	2016
	23	YAPI MERKEZİ A.Ş.	27,5 kV / 132 kV / 230 kV / OHTL TOWERS	384	ETİOPYA	2017
25 AZERBAIJAN REPUBLIC 35 kV / 110 kV OHTL TOWERS 806 AZERBAYCAN 201	24	MAST ENERJI	154 kV OHTL TOWERS	660	KIBRIS	2017
	25	AZERBAIJAN REPUBLIC	35 kV / 110 kV OHTL TOWERS	806	AZERBAYCAN	2017

>>>> Key References - Substation Steel Structures

STE	baran EL & GALVANIZING	KEY REFERENCES FOR SUBSTATION STEEL STRUCTURES				
SIRA	MÜŞTERİ	PROJE ADI	MİKTAR (TON)	ÜLKE	YIL	
1	AREVA & GÜNGÖR	380/154 kV AĞRI TM.	462	TURKEY	2005	
2	YILTAŞ CONSTRUCTION	154 kV ELAZIĞ DSİ P 20 S/S STRUCTURES	70	TURKEY	2005	
3	GÜNGÖR ELECTRİC	154 kV (5) S/S STRUCTURES	610	TURKEY	2006	
4	TEN ENERGY LTD.	154 kV OG ARTOVA ÇİM S/S STRUCTURES	68	TURKEY	2007	
5	AYKON	154 kV KARAKEÇİ S/S STRUCTURES	90	TURKEY	2008	
6	AVNI ULUTAŞ CONS.	34,5 / 154 / 380 kV S/S STRUCTURES	613	TURKEY	2009	
7	BTE ENERGY	SARAYKÖY S/S STRUCTURE	115	TURKEY	2011	
8	METRO ELEKTRIK	220 kV/110 kV S/S STRUCTURES	245	TURKMENISTAN	2011	
9	BTE ENERGY	380 kV AMBARLI S/S STRUCTURE	145	TURKEY	2011	
10	AZERBAIJAN REP UBLIC	SUBSTATION STEEL STRUCTURE	130	AZERBAIJAN	2012	
11	BTE ENERGY	380 kV S/S STRUCTURE	130	TURKEY	2012	
12	METRO ELETRIC	220 kv/110 kv S/S STRUCTURES	430	TURKMENISTAN	2012	
13	TELSA ENERGY	220 kv/110 kv S/S STRUCTURES	292	TURKMENISTAN	2012	
14	ÇALIK ENERGY	220 kV /110 kV S/S STRUCTURES	178	TURKMENISTAN	2013	
15	METRO ELECTRIC	220 kV /110 kV S/S STRUCTURES	1560	TURKMENISTAN	2013	
16	ÇALIK ENERGY	220 kV /110 kV (5) S/S STRUCTURES	790	TURKMENISTAN	2014	
17	ELKO ELECTRIC	110 KV S/S STRUCTURES	162	TURKMENISTAN	2014	
18	ULUTAŞ CONST.	34,5/154/380 kV VARIOUS S/S STRUCTURES	2355	TURKEY	2014	
19	AKSA ENERGY	SAMSUN SUBSTATION STEEL STRUCTURE	171	TURKEY	2015	
20	BEST ELECTRIC	SUBSTATION STEEL STRUCTURE	412	GURCISTAN	2015	
21	METRO ELETRIC	500 kV SUBSTATION STEEL STRUCTURE	122	UZBEKISTAN	2015	
22	ÇALIK ENERGY	220 kV/110 kV VARIOUS S/S STRUCTURES	568	TURKMENISTAN	2016	
23	АВВ	380 kV SOMA S/S STRUCTURES	325	TÜRKİYE	2016	
24	HISOTO LIMITED	KAMBURU & MANGU S/S STRUCTURE	134	KENYA	2017	
25	OMSE	SUBSTATION STEEL STRUCTURE	252	GANA	2017	



Corporate Social Responcibility



>>>>>>> CCORPORAORPORATE SOCIAL RETE SOCIAL

RESPONSIBILITYSPONSIBILITY - En- Envirvironmenonmenttal

» ISO 14001-2004

Healtal Healt

Baran Steel takes a multi-pronged approach to caring for our environment. We encourage our staff to take responsibility for the environment, and optimise the production life cycle to reduce waste, conserve energy and prevent pollution.

Our commitment to our customers and shareholders are matched by our commitments to employee health, environmental protection and social causes

Baran Steel actively upholds a comprehensive Environment, Safety and Health policy to:

- > Maintain high environmental, occupational safety and health standards through a regular system of risk assessment and management
- > Be energy efficient
- > Reduce, reuse or recycle
- > Improve environmental, occupational safety and health performances, through R&D, training, and periodic review
- > Promote internally best practices in these areas
- Comply with relevant legal requirements





>>>> CORPORATE SOCIAL RESPONSIBILITY - Occupational Healt and Safety

>> TSE ISG-OHSAS 18001

Safety First" is every employee's conviction and responsibility. Baran Steel has many safety measures in place to ensure occupational wellbeing, and all our workers undergo constant safety training.

Our approach to safety;

- Enforcing regulations
- > Creating awareness through appropriate training
- Rewarding good practices
- Punishing non-compliance
-) Improving on existing measures
- Auditing our practices to initiate corrective and preventive actions where applicable

Primary health care

Baran Steel provides doctor's consultation, follow-up treatment, vaccination and immunisation against infectious diseases, and health education.

Occupational health

We offer statutory medical examinations for workers exposed to hazards such as noise and silica, regular audiometric tests, and organise educational programmes on noise and the importance of wearing hearing protectors.

Benefits of OHSAS 18001 can be summarized as:

- > Compliance with legal and other requirements,
- Employee satisfaction,
- Reducing of absenteeism, resulting in increased productivity,
- Reducing of work-related accidents and illness
- Reducing of costs associated with accidents and illness
- Increasing of control of regulatory issues
- Potentially reducing of insurance costs



Additional Files



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	1 / 42

CONTENTS									PAGE NR
I - Contents									1-3
II - Foreword									4
III – Revision Perfor	mance	Page							5
		xceptions and Preamb	le						6
V – Scope and Appl									6-8
VI - Definitions									8-11
VII - Organizational	Inform	ation							11-13
VIII – Our Policy							14		
IX -Organizational (Chart								14
4- INTEGRATED MA	ANAGE	EMENT SYSTEM							15
ISO 9001		ISO 1400	1		TS 18001	ISO 9001	ISO 14001	TS 18001	
Quality Managemen System	nt	Conditions of the env management system	ironm		OHS management system components	4	4	4	15
General Requireme	nts	, ,				4.1	4.1	4.1	15-16
Documentation Req		nts				4.2	_		16
	an eme	1					4 4 4		
General		Documentation				4.2.1	4.4.4		16
Integrated Manual						4.2.2	-		17
Control of Documen	ıts	Control of Documents	3	Cont	rol of Documents	4.2.3	4.4.5	4.4.5	17-18
Control of Records						4.2.4	4.5.4	4.5.4	18
Management Responsibility				5	-		18		
		Environmental Policy	OH	S poli	су		4.2	4.2	
Commitment of the Management		Resources, tasks, responsibility and authorization	Resources, tasks, responsibility, accountability and authorization		5.1	4.4.1	4.4.1	18-19	
			Mar	nager	nent Review			4.6	
		Environmental Aspects	Thr ass	eat de	efinition, risk ent and control		4.3.1	4.3.1	
Customer Focus		Legal and other requirements	Legal and other requirements		5.2	4.3.2	4.3.2	19-20	
		Management review			1	4.6			
Quality Policy		Environmental Policy	ОН	S poli	су	5.3	4.2	4.2	21
Planning		1				5.4	4.3	4.3	21
Quality Objectives		Goals, objectives and program/programs		Obje	ctives and programs	5.4.1	4.3.3	4.3.3	21
Quality management System planning Goals, objectives and programs Objectives and programs		ctives and programs	5.4.2	4.3.3	4.3.3	21			
Responsibility, authority and communication					5.5		\rfloor	22	
Deener sibility	Gene	ral Requirements	Gene	ral Re	equirements		4.1	4.1	
ianu aumoniv – i		urces, tasks, nsibility and authority	Resources, tasks, responsibility,		5.5.1	4.4.1	4.4.1	22	
Management Representative	Resou	urces, tasks, nsibility and authority	Resources, tasks, responsibility,		5.5.2	4.4.1	4.4.1	22	
Internal Communication Communication Communication Communication		5.5.3	4.4.3	4.4.3	22				
Internal Communication	Comm		ana c						
			and c	JOHSU	itation	5.6	4.6	4.6	23

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Document Code EEK-01
Date of Issue 05.12.2014
Date of Revision 00
Page Nr 2 / 42

Review Inputs Management Review Management Review Review Outputs Management Review Management Review Resource Management Resources, tasks, Resources, tasks, Provision of Resources Resources, tasks, Resour	Date of I	Revision	1 00	
Review Outputs Resource Management Provision of Resources responsibility and authorization Human Resources General Specialization, training and awareness Competence, training and awareness Infrastructure Resources, tasks, responsibility, accountability and authorization Resources Resources, tasks, responsibility, accountability and authorization Training, awareness and competence Resources, tasks, responsibility, accountability and authorization Training, awareness and competence Resources, tasks, responsibility, accountability and authorization Work environment Product realization Realization Realization Planning of Product Realization Customer Related Processes Defining the Requirements in Relation to Product Reviewing the Reviewing the Requirements in Relation to Products Customer Communication Customer Communication Customer Communication Control of Activities Co	Page Nr	r	2 / 42	
Resource Management Provision of Resources Resources, tasks, responsibility and authorization Resources Resources, tasks, responsibility, accountability and authorization Resources Resou	5.6.2	4.6	4.6	23
Provision of Resources Resources, tasks, responsibility, accountability authorization Resources	5.6.3	4.6	4.6	23
Provision of Resources responsibility and authorization responsibility, accountability and authorization Training, awareness and competence Specialization, training and awareness Specialization Training, awareness and competence Resources, tasks, responsibility, accountability and awareness Specialization Training, awareness and competence Resources, tasks, responsibility, accountability Arco	6			24
General Specialization, training and awareness and competence (Competence, training and awareness and awareness awareness and awareness awareness and awareness awareness and awareness (Competence) and awareness awareness and awareness awareness and awareness awareness and awareness (Competence) and awareness awareness and awareness awareness and awareness awareness and awareness awareness and awareness (Competence) and awareness awareness and awarenessa.	6.1	4.4.1	4.4.1	24
Competence, training and awareness Competence Competence, training and awareness Specialization, training and awareness Resources, tasks, responsibility and authorization Work environment Product realization Implementation and activities Planning of Product Reviewing the Requirements in Relation to Products Reviewing the Requirements in Relation to Products Reviewing the Requirements in Design and Development Unputs Design and Development Control of Activities Design and Development Validation Design and Development Validation Design and Development Modifications Control of Activities Design and Development Modifications Control of Activities Design and Development Modifications Control of Activities Design and Development Modifications Control of Activities Design and Development Modifications Control of Activities Design and Development Modifications Control of Activities Design and Development Modifications Control of Activities Design and Development Modifications Control of Activities Design and Development Modifications Control of Activities Design and Development Modifications Control of Activities Design and Development Modifications Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Co	6.2			24
awareness and awareness competence Resources, tasks, responsibility and authorization Work environment Product realization Implementation and activities Control of Activities Defining the Requirements in Relation to Products Requirements in Relation to Products Customer Communication Design and Development Unputs Design and Development Control of Activities and awareness Resources, tasks, responsibility, accountability and authorization Implementation and Operation Control Implementation and Operation Control Implementation and Operation Control Resolveties Environmental Aspects Sessment and control specifications Legal and other requirements Control of Activities Control of Activities Control of Activities Operation Control Communication Design and Development Outputs Design and Development Outputs Design and Development Control of Activities Design and Development Outputs Design and Development Control of Activities Design and Development Outputs Design and Development Control of Activities Design and Development Outputs Operation Control Operation Control O	6.2.1	4.4.2	4.4.2	24
Infrastructure responsibility and authorization responsibility, accountability and authorization work environment Product realization Implementation and activities Operation Control Planning of Product Realization Control of Activities Operation Control Planning of Product Realization Control of Activities Operation Control Planning the Requirements in Relation to Product Equal and other requirements Control of Activities Operation Control Reviewing the Requirements in Relation to Products Environmental Aspects Assessment and control Reviewing the Requirements in Relation to Products Environmental Aspects Assessment and control Reviewing the Requirements in Relation to Products Environmental Aspects Assessment and control Control of Activities Operation Control Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Control of Activities Operation Control Pusign and Development Control of Activities Operation Control Operation Control Design and Development Control of Activities Operation Control Operation Control Pusign and Development Control of Activities Operation Control Operation Control Design and Development Control of Activities Operation Control Operation Control Pusign and Development Control of Activities Operation Control Operation Control Design and Development Control of Activities Operation Control Operation Control Pusign and Development Control of Activities Operation Control Operation Control Pusign and Development Control of Activities Operation Control Operation Control	6.2.2	4.4.2	4.4.2	24
Product realization Implementation and activities Operation	6.3	4.4.1	4.4.1	25
Product realization Planning of Product Realization Customer Related Processes Defining the Requirements in Relation to Product Requirements in Products Control of Activities Reviewing the Requirements in Relation to Products Control of Activities Control of Activities Control of Activities Control of Activities Control of Activities Control of Activities Communication Communication Design and development Planning of Design and Development Unputs Control of Activities Design and Development Review Design and Development Review Control of Activities Control Operation Control Control Control of Activities s Control of Activities Control Operation Control Control Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control Control Operation Control	6.4			25
Realization Customer Related Processes Defining the Requirements in Relation to Product Reviewing the Requirements in Product Reviewing the Requirements in Relation to Products Control of Activities Control of Activities Control of Activities Control of Activities Control of Activities Control of Activities Communication Design and development Design and Development Design and Development Design and Development Control of Activities	7	4.4	4.4	26
Defining the Requirements in Relation to Product Legal and other requirements	7.1	4.4.6	4.4.6	26
Defining the Requirements in Relation to Product Legal and other requirements Legal and other requirements Legal and other requirements	7.2			26
requirements Control of Activities Operation Control Risk definition, risk assessment and control specifications Control of Activities Operation Control Risk definition, risk assessment and control specifications Control of Activities Operation Control Communication Communication Design and development Planning of Design and Development Design and Development Inputs Design and Development Outputs Design and Development Control of Activities Design and Development Review Design and Development Verification Design and Development Verification Design and Development Validation Design and Development Validation Design and Development Validation Design and Development Validation Design and Development Modifications Control Purchasing Control of Activities Operation Control	7.0.4	4.3.1	4.3.1	00
Reviewing the Requirements in Relation to Products Customer Communication Design and development Planning of Design and Development Inputs Design and Development Outputs Design and Development Review Design and Development Control of Activities Design and Development Control of Activities Design and Development Control of Activities Design and Development Control of Activities Design and Development Control of Activities Design and Development Control of Activities Design and Development Control of Activities Design and Development Control of Activities Design and Development Control of Activities Design and Development Control of Activities Design and Development Verification Design and Development Validation Design and Development Modifications Control Control of Activities Departion Control Operation Control	7.2.1	4.3.2	4.3.2	26
Reviewing the Requirements in Relation to Products Customer Communication Design and development Design and Development Inputs Design and Development Outputs Control of Activities		4.4.6	4.4.6	
to Products Customer Communication Customer Communication Design and development Planning of Design and Development Design and Development Inputs Control of Activities Control of Activities Control of Activities Design and Development Outputs Design and Development Review Design and Development Control of Activities Control of Activities Control of Activities Control of Activities Control of Activities Control of Activities Operation Control Operation Control Operation Control Operation Control Operation Control Control of Activities Operation Control	7.2.2	4.3.1	4.3.1	27
Design and development Planning of Design and Development Design and Development Inputs Design and Development Control of Activities Design and Development Outputs Design and Development Control of Activities Design and Development Control of Activities Design and Development Review Control of Activities Design and Development Review Control of Activities Operation Control Design and Development Verification Control of Activities Operation Control		4.4.6	4.4.6	
Planning of Design and Development Design and Development Inputs Control of Activities Design and Development Outputs Control of Activities Design and Development Outputs Control of Activities Design and Development Review Control of Activities Operation Control	7.2.3	4.4.3	4.4.3	27
Development Design and Development Inputs Design and Development Outputs Design and Development Outputs Control of Activities Design and Development Review Control of Activities Design and Development Review Control of Activities Operation Control	7.3			27
Inputs Design and Development Outputs Design and Development Review Design and Development Review Control of Activities Control of Activities Operation Control	7.3.1	4.4.6	4.4.6	27
Outputs Design and Development Review Design and Development Verification Design and Development Verification Design and Development Validation Design and Development Validation Design and Development Validation Design and Development Modifications Control Control of Activities Operation Control	7.3.2	4.4.6	4.4.6	28
Review Design and Development Verification Design and Development Validation Design and Development Validation Design and Development Validation Design and Development Modifications Control Control of Activities Control of Activities Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control Operation Control	7.3.3	4.4.6	4.4.6	28
Verification Design and Development Validation Design and Development Modifications Control Control of Activities Control of Activities Operation Control Operation Control	7.3.4	4.4.6	4.4.6	28
Validation Design and Development Modifications Control Purchasing Control of Activities Control of Activities Operation Control Operation Control	7.3.5	4.4.6	4.4.6	28
Modifications Control Purchasing Operation Control Operation Control	7.3.6	4.4.6	4.4.6	28
	7.3.7	4.4.6	4.4.6	28
Purchasing Process Control of Activities Operation Control	7.4			28
	7.4.1	4.4.6	4.4.6	28
Purchasing Information Control of Activities Operation Control	7.4.2	4.4.6	4.4.6	29
Verification of the Purchased Product Control of Activities Operation Control	7.4.3	4.4.6	4.4.6	29
Production and service provision	7.5			30

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Steel and Galvanization Industry Ltd. Co. INTEGRATED MANUAL aran Celik ve Galvaniz Sanovi ve Ticorot Ltd. Co.

Document Code | EEK-01 Date of Issue 05.12.2014 Date of Revision 00

CELIK & GALVANIZ	Baran Çelik ve Galvaniz Sa	anavi ve Ticaret I td. Sti	Date of I	Revision	00	
24	Daraii Çelik ve Galvaniz Sa	anayı ve Ticaret Ltd. Şti.	Page Nr		3 / 42	
Control of Production a Service Provision	Control of Activities	Operation Control	7.5.1	4.4.6	4.4.6	30
Validation of Processes Production and Service Provision		Operation Control	7.5.2	4.4.6	4.4.6	31
Definition and traceabil	ity		7.5.3			32
Customer property			7.5.4			32
Preservation of the Product	Control of Activities	Operation Control	7.5.5	4.4.6	4.4.6	32
Control of monitoring a measurement equipme		Performance measurement and monitoring	7.6	4.5.1	4.5.1	32-33
Measurement, analysis and improvement	Controlling	Control	8	4.5	4.5	34
General	Monitoring and Measurement	Performance measurement and monitoring	8.1	4.5.1	4.5.1	34
Monitoring and Measur	rement		8.2			34
Customer Satisfaction			8.2.1			34
Internal Audit			8.2.2	4.5.5	4.5.5	34
	Monitoring and measurement	Performance measurement and monitoring		4.5.1	4.5.1	
Monitoring and Measurement of Processes	Conformity assessment	Conformity assessment	8.2.3	4.5.2	4.5.2	34
Monitoring and Measurement of	Monitoring and measurement	Monitoring and measuremen	t 8.2.4	4.5.1	4.5.1	35
Product	Conformity assessment	Conformity assessment		4.5.2	4.5.2	
		Investigating incidents, nonconformities, corrective and preventive action			4.5.3	36
Control of	Emergency readiness and response	Emergency preparedness and actions to be taken	8.3	4.4.7	4.4.7	36
nonconforming product	Nonconformity, corrective action and preventive action	Nonconformity, corrective action and preventive action	0.0	4.5.3	4.5.3.2	
Analysis of Data	Monitoring and measurement	Performance measurement and monitoring Nonconformity, corrective action and preventive action	8.4	4.5.1	4.5.1 4.5.3.2	37
Improvement			8.5			37
	Environmental Policy	OHS Policy		4.2	4.2	
Continual Improvemen	Goals, objectives and program/programs	Objectives and programs	8.5.1	4.3.3	4.3.3	37
	Management review	Management review		4.6	4.6	
Corrective action	Nonconformity, corrective action and preventive action	action	8.5.2	4.5.3	4.5.3.2	38
Preventive action	Nonconformity, corrective action and preventive action	Nonconformity, corrective action and preventive action	8.5.3	4.5.3	4.5.3.2	38
List of Procedures					39	
Process Interaction Chart for our Products and Services					40	
Our Work Flow in Prod	uct and Service Provision					41-42
		-				

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	4 / 42

II - FOREWORD

Our organization has established an 'Integrated Management System' in 'Energy Transmission and Communications' sector regarding Steel Construction Production and Galvanizing.

Following its completion with the appropriate procedures and documentation, our Integrated Management System has been defined in the Integrated Hand Manual you are holding. Within the scope of the Integrated Management System which we have established with standards such as TS-EN-ISO 9001, Quality Management System, TS-EN-ISO 14001 Environmental Management System and TS 18001 Occupational Health and Safety; all of our activities are being conducted to meet customer satisfaction requirements.

Our employees support the integrated management system to ensure and improve the transparency of our production and services, quality, environment and OHS regulations.

Our Integrated Hand Manual and the relevant documents are effective in the abovementioned areas upon approval by our organization's upper management. Documents are binding immediately after approval for the personnel working at relevant departments.

The Integrated Hand Manual hereby has been drawn up in order to introduce the Integrated Management System consisting of our organization's TS-EN-ISO 9001 Quality Management System, TS-EN-IS 14001 Environmental Management System and TS 18001 Occupational Health and Safety Management System and also to use as base in all applications.

Employees of all levels working at all facilities, halls, departments, projects and worksites within the scope of the Integrated Management System are obligated to get acquainted with and fully and accurately and implement this hand book and all documents this hand book refers to.

Our organization has established the Integrated Management System consisting of TS-EN-ISO 9001 Quality Management System, TS-EN-IS 14001 Environmental Management System and TS 18001 Occupational Health and Safety Management System that will meet the requirements and undertakes to implement, maintain and develop this system.

Our Integrated Hand Manual composes the primary document for the Integrated (Quality) Management System and refers to documents at sub levels for detail applications.

As well as meeting the requirements indicated in system standards that were taken as references during the preparation of the Integrated Management System's documentation, ease of implementation and the added values which will be provided to our organization by such implementations have also been considered.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	5 / 42

III - REVISION PERFORMANCE PAGE

N1	Item	Davidalan Daganlutlan	Modified Page	Revision	Date of
Nr.	Nr.	Revision Description	Number	Nr.	Publication
1		First Publication		00	05.12.2014
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

All modifications of the Integrated Hand Manual are registered on this page by Management Representative.

IV - RIGHT OF PUBLICATION / EXCEPTIONS AND PREAMBLE

All rights of the Integrated Hand Manual hereby belonging to Baran Çelik ve Galvaniz Sanayi Limited Şirketi are reserved. This manual cannot be copied, reproduced or used in part or in its entirety without consent.

There is no exempted matter at our organization within the scope of the Integrated Management System consisting of TS-EN-ISO 9001 Quality Management System, TS-EN-IS 14001 Environmental Management System and TS 18001 Occupational Health and Safety Management System.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	6 / 42

V – SCOPE AND APPLICATION

SCOPE

Baran Çelik ve Galvaniz San.Ltd.Şti is active in the business of "Steel Construction" in energy transmission and communication sector. Its production activities include: energy delivery lines, substations, switchyards, GSM-tv and radio link aerial pylons, low and high voltage pylons and potentiometers, illumination, totem and monopole pylons and hot dip galvanized production. The productions are carried out in accordance with the requirements of TEIAS and TEDAS and the standard of hot dip galvanization TS 914 EN ISO 1461.

Principal Policies of our Organization:

Through the Integrate Management System we have organized in our organization, in order to serve the basic objective which is the reason of existence of our organization:

- We have formed methods regarding the planning of our products and services and kept relevant records.
- We have determined methods required in the realization of products and services in each step and kept the relevant records.

In this context, we are aware that the basic indicators of being a reliable organization; as a result of defining, monitoring and continuously improving our processes in order to provide for the continuity of our products and services and become more flexible and strong; are increasing the quality and quantity of the number of our customers benefiting from our products and services and the economic values of our products and services. Therefore, we have established an Integrated Management System that has the relevant records and the method to measure and analyze product and service data.

Ensuring the satisfaction of our suppliers, employees, customers and business partners:

The fundamental principle in Baran Çelik ve Galvaniz Sanayi Limited Şirketi is customer focus based on the Integrated Management System we have organized and implement. Our Integrated Management System has been addressed to our ability to constantly meet the variable conditions in the relevant activities for constant improvement to maintain such ability.

Therefore, we have:

- formed methods and kept records so as to determine inappropriate products and services in all stages of production process of product and services and to take necessary precautions,
- targeted the periodical measurement of the satisfaction levels of the relevant parties,
- formed methods and kept records so as to determine and eliminate possible malfunctions in products and services or internal activities,
- formed methods and kept records so as to evaluate and select our suppliers who have an influence on the quality of our products and services,

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	7 / 42

- formed methods and kept necessary records so as to discuss the effectiveness of our Integrated Management System, take necessary precautions and perform periodical internal audits.

As an important factor, social activities which determine the quality of products and services are prominent in the region where we offer services according to relevant standards. Our Organization has developed a system which incorporates the principles of quality, environmental and occupational health and safety regarding social and cultural activities within the scope of the Integrated Management System implemented. By implementing such system:

- we intent to improve all relevant parties especially our customers, employees and business partners and meet their satisfaction.
- we have organized, adopted and kept records of policies and various activities to provide highquality, environment-friendly, reliable products and services.

Contributing in stimulating the awareness of our employees, customers, suppliers and business partners about quality, environmental and occupational health and safety through trainings:

Our Organization has developed a system for the management and training of the personnel employed within the frame of the Integrated management System implemented. By implementing such system:

- we have defined and kept the records of various terms and conditions for the process of the employment of personnel to realize the products and services,
- we have formed a method for and kept the records of orientation training to ensure for the adaptation of new personnel to their jobs and our Organization,
- we have arranged for the training of our employees about the quality of products and services and organized and kept the records of the process of meeting the need of more trainings if needed,
- we have organized and implemented the records of the details of personnel.

Ensuring constant improvement through implementing monitoring and measurement activities as per the objectives we determine:

We have devised a method in order to realize fundamental objectives as to increasing the importance of the quality of products and services, environmental awareness and occupational health and safety within the frame of relevant laws and regulations applied to our sector and to evaluate the feasibility and results of such fundamental objectives.

NORMATIVE REFERENCES

TS EN ISO 9000:2007 Quality Management Systems – Fundamentals and Vocabulary

TS-EN ISO 9001:2009 Quality Management Systems – Requirements

TS EN ISO 9004:2001 Quality Management Systems – Performance Improvement Manual

TS-EN-ISO 14001:2005 Environmental Management Systems – Requirements and Manual

TS 18001:2008 Occupational Health and Safety Management Systems - Requirements

Regulations and product standards

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	8 / 42

APPLICATION

Our Integrated (Quality) Management System is implemented in the headquarters of our Organization as stated in the introduction section of this manual, projects and sites of our Organization regarding "Steel Construction Production and Galvanization".

Control of Integrated Manual and Scope of Application

- A- The draft of the Integrated Hand Manual organized by the Management Representative is reviewed and revised. The original copy of the Integrated Manual is approved and executed by the General Manager.
- B- The documents within the frame of the Integrated Management System are distributed to the departments of our Organization in the computer environment and the control of the published documents is discussed in the Regulations on the Control of Documents and Records in the Computer Environment.
- C- The Management Representative may distribute the Integrated Manual to 3rd parties for promotion, introduction and information purposes upon the decision of the General Manager.
 - D- The main objective of our Integrated Management System explained in the Integrated Manual is;
 - ✓ to ensure to meet the needs and expectations of customers completely and in a timely fashion,
 - ✓ to eliminate the risk of environmental pollution, if not, decrease the pollution risk to a reasonable level,
 - ✓ to eliminate the risk of occupational safety, if not, decrease the safety risk to a reasonable level,
 - ✓ to ensure the understandability and implementation of our policy in each and every level of our Organization,
 - ✓ to possess a internationally accepted management system that meets the requirements of the standards of TS-EN-ISO 9001 Quality Management System, TS-EN-ISO 14001 Environmental Management System and TS 18001 Occupational Health and Safety System.

VI - DEFINITIONS

Quality: Level of satisfying the requirements of the set of structural characteristics.

Environmental: The environment comprised of air, water, earth, natural sources, flora, fauna and humans and the relationship amongst these. In this sense, the environment can be expanded to include all supply starting from organization.

Occupational Health and Safety (OHS): Conditions and factors that affect or may affect the health and safety of employees or other workers (including temporary workers and the personnel of contractors), visitors and other people in the worksite.

Integrated (Quality Management System) Manual: The document determining the Integrated Management System of our Organization which shall satisfy the requirements of TS-EN-ISO 9001 Quality Management System, TS-EN-ISO 14001 Environmental Management System and TS 18001 Occupational Health and Safety System.

Integrated (Quality) Management System: The management system required for the management and control of an organization in terms of quality, environment and OHS.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	9 / 42

Management System: The system used for determining policies and objectives and realizing such objectives.

System: The set of elements interactive with each other.

Policy: An organization's all objectives and managements regarding quality, environment, occupational health and safety officially defined by the senior management of such organization.

Customer Satisfaction: The level of satisfaction of a customer's expectation as perceived by such customer.

Senior Management: A person and/or group of persons managing an organization in the senior level.

Planning: A part of Integrated Management System that defines the resources regarding the accomplishment of required operational processes and objectives that focuses on the determination of objectives.

Continuous Improvement: Repeated activity to enhance the ability of meeting requirements.

Customer: An organization or person who purchases a product or service.

Supplier: An organization or person who supplies a product or service.

Process: A series of interactive or related activities that transform inputs into outputs.

Product: The result of a process.

Project: A single process with a starting and ending date, comprised of a series of activities which are coordinated and controlled and implemented to achieve the objective through meeting specific requirements such as time, cost and resource limitations.

Unconformity: Being unable to conform to a requirement. A deviation from the performance of a management system, laws, processes, applications or working standards which may be directly or indirectly caused by injuries, diseases, loss of product, damage to the working environment, or all of these factors together.

Corrective Action: An activity performed to eliminate the reason of a detected unconformity or unwanted situations.

Preventive Action: An activity performed to eliminate the reason of a potential unconformity or potential situations.

Environmental Aspect: An element of an organization's activities, products or services which are interactive with environment. An important environmental aspect has or may have an important environmental effect.

Environmental Effect: Any positive or negative environmental change that partially or completely result from the environmental aspects of an organization.

Environmental Management System (EMS): An important part of the management system of an organization which is used in the development and implementation of an environmental policy and management of environmental aspects of such organization.

Environmental Objective: The general environmental objective of an organization which is friendly to the environment and detected by such organization for implementation.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	10 / 42

Environmental Policy: An organization's general intentions and directions regarding the environmental performance officially announced by the senior management of such organization.

Environmental Target: The condition for detailed achievement which is applied to an organization, its departments and results from environmental objectives and which is required to be determined and met in order to achieve such objectives.

Relevant Party: A person or group of people in our outside an organization and who handles the work about the performance of such organization or who is affected by such performance.

Control Measure: An action or activity required to prevent, eliminate or minimize dangers to a reasonable level.

Critical Limit: A value/criterion which distinguishes acceptability and unacceptability from each other

Flow Chart: The schematic chart of the relation between the lines and steps or operations applied for a specified product or service.

Prevention of Pollution: Use of processes, applications, techniques, materials, products, services or energy in order to prevent, minimize or control the formation, emission or disposal of a contaminant or waste (separately or together) in order to minimize the negative environmental effects. The prevention of pollution consists of decreasing the use of sources or not using sources, changes in processes, products or services, effective use of sources, replacement, reutilization, recovery, recycling, improvement and refinery of materials or energy.

Audit: A systematic examination carried out in order to determine whether the activities regarding Integrated Management System of an organization and the result of such activities conform to the regulations and these regulations are effectively implemented and whether such activities can meet the policy and objectives of such organization. Audit is consisted of experiences, processes, procedures and the sources used for the development, implementation, improvement, achievement, review and sustainability of the policy of an organization.

Risk: The product of the results of a harmful event and such event's occurrence probability.

Risk Assessment: The assumption of the risk in all processes and the decision whether the risk can be tolerated.

Safety: Non-existence of an unacceptable risk

Acceptable Risk: The risk at a level tolerated by the organization in consideration of legal requirements and such organization's policy.

Accident (Occupational Accident): An unwanted situation which may result in death, disease, injury, damage or other losses.

Damage: Injuries, diseases, damage to products or worksite or a potential source or situation which may cause aforementioned.

Damage Assessment: The process defining the existence and characteristics of a damage.

OHS Management System: A part of whole management system which facilitates the OHS risks management regarding the activities of an organization. Such system includes the structure, activity plans,

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	11 / 42

responsibilities, experiences, processes, procedures of an organization and sources for the development, implementation, improvement, achievement, evaluation and sustainability of the policy of such organization.

Galvanization: Zinc-melt coating by hot dip method

TS-914 EN ISO 1461: Hot Dip and non-centrifuged Coatings applied on iron and steel materials

TEIAŞ: Turkish Electricity Transmission Corporation **TEDAŞ**: Turkish Electricity Distribution Corporation

GSM: Global System Mobile

Note: Above definitions have been extracted from TS-EN ISO 9001:2008 Quality Management System, TS-EN-ISO 14001:2005 Environmental Management System and TS 18001:2008 Occupational Health and Safety Management System standards, organizations and other sources.

VII – ORGANIZATIONAL INFORMATION

Baran Çelik ve Galvaniz Sanayi Limited Şirketi (Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.) was founded by Veli BARAN, Adem BARAN and Bekir BARAN in ANKARA. Baran Çelik ve Galvaniz San. Ve Tic. Ltd. Şti. has completed several facilities and projects at home and abroad. Our Company still continues its business activities at the headquarters located at Saray Mah. Dağyaka Cad. No :4 Saray-Kazan / ANKARA.

The Company embarked upon its business activities in 1970s as a small family-owned enterprise to have a place in the Energy Sector by means of producing bolted, galvanized energy transmission lines and iron pylons. In 1988, the Company included Galvanization Unit and experienced an institutional restructuring under the name **Baran Çelik ve Galvaniz San. Ltd.Şti**.

Our Company performs steel construction works for institutions like TEİAŞ and TEDAŞ, for neighboring countries, Middle Eastern and African countries, municipalities, private organizations and institutions in the domestic market along with TS 914 EN ISO 1461 Hot Dip Galvanization and contract Galvanization works.

Our Company has offered services to its customers regarding production, galvanization and all project types by means of its own equity capital under increasingly competitive conditions.

Our Company, well-known for its priority of customer satisfaction and prompt delivery of works in thy sector, continues its projects at home and mostly abroad. Since our Company acts upon the principles of:

- -Reasonable Price
- -High-quality Products and Services
- -Prompt Delivery
- -Customer Satisfaction
- -Continuous Improvement

We have always been a preferable company for our customers.

Our Products:

- 380kV 154 kV- 34,5kV Energy Transmission Lines
- 380kV 154 kV Substations, Switchyard Pylons
- GSM, TV and Radio Link Aerial Pylons

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	12 / 42

- Low and High Voltage Pylons and Potentiometers
- Monopole Aerial Pylons
- Polygon Illumination, Totem and Flag Pylons
- Highway Barriers and Posts
- Traffic Signs
- Shelter Container
- Steelwork Steel Construction Productions
- Hot Dip Galvanization

Our Company in Figures:

Total Area :27.000m²

Indoor Area : 1.500 m² for Galvanization Area (Galvanization Hall) and 9.500 m² for

Production Area (Cage Hall – Polygon Hall - Assembly/Warehouse hall)

Outdoor Area :16.000 m²
Administrative and Social Areas : 4.000 m²

Annual Production Capacity

* Fabrication Production : 36.000 ton/year * Galvanization Production : 40.000 ton/year

Our Equipment Pool

Equipments	Origin	Operational Capacity/Features	Pcs.
FICEP HP 16 T6 CNC	Italy	160*160*19, Ø32 mm cutting-drilling and numbering	
FICEP P 51 CNC	Italy	3-25 mm, Ø32 mm metal sheet processing	1
FICEP A 16.36 NT CNC	Italy	160*160*19, Ø32 mm cutting-drilling and numbering	1
FICEP A 13.34 NT CNC	Italy	130*130*13, Ø32 mm cutting-drilling and numbering	1
FICEP P 803 A CNC	Italy	3-25 mm, Ø32 mm metal sheet processing	1
FICEP 166 T CNC	Italy	160*160*19, Ø32 mm cutting-drilling and numbering	1
FICEP HP 12T4 CNC	Italy	120*120*13, Ø32 mm cutting-drilling and numbering	1
Hydraulic Flag Copying	Italy	Ø32 mm , 16mm drilling	
Hydraulic Perforation-Cutting	Italy	Ø32 mm , 26 mm cutting-drilling	
Eccentric Guillotine Sheers	Local	2-18 mm cutting	3
Crane	Local	10 ton -2x3 ton- 5 ton	
Hydraulic Presses	Local	Profile and metal sheet folding	
Transmission Morse/Magnetic Drill	Local	Ø32 mm , 20 mm drilling	
Inert Gas Welding	Local	Profile and metal sheet welding	
Oxy -Cut CNC	Ajan	100 mm metal sheet cut , 1,5*6 mt	
Drilling – CNC - Drill	Ajan	Ø35 mm , 1500*3000mm	
Ankant Pres AD-S Tandem CNC	Durmazlar	r 18 mm –St52 metal sheet – 12mt folding 2*6000	
HP-130A Plasma - CNC	Ajan	1-25 mm precise metal sheet cutting	1
Universal Tost Lathe	Slovakia	Round material processing	

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	13 / 42

Shaping Machine	Russia	Angle edge removal (70cm-50cm)	2
Molder Milling Machine	Taiwan	Surface, slot opening,vs.	1
Generator (Volvo-Penta)	Sweden	167 kVa - 354 kVa	2

Galvanization Facility:

Pool Type	Number	Pool Dimensions (mm) / Single dip	Operational
			Capacity/status
Zinc Pool	1	8250 x 950 x 1400 (12mt in double dip)	Apprx.450°C – 1500kg
Acid Pool	4+1	9400 x 1300 x 1480 + 9400 x 1940 x 1480	1232 Baume
Flax Pool	1	9400 x 1300 x 1480	3522 Baume
Water Pool	2+1	8150 x 1230 x 1480 + 9400 x 1300 x 1480	Normal Ambient
			Temperature

Refinery Units: We have Chemical Refinery and Biological Refinery Units (we have Discharge Permit License).

Some of Our References:

- TEDAŞ, TEİAŞ GENERAL DIRECTORATES AND JOINT AFFILIATES
- TURKCELL / ERICSSON TELEKOMİNİKASYON A.Ş.
- ALCATELL TELEKOMİNİKASYON A.Ş.
- ERICSSON TELEKOMİNİKASYON A.Ş (ARIA)
- ERICSSON TELEKOMİNİKASYON A.Ş (TTI AYCELL)
- PALMET TELEKOMİNİKASYON A.Ş.
- SIEMENS SANAYİ VE TİCARET A.S.
- TELSIM / MOTOROLA TELEKOMİNİKASYON SAN. LTD.ŞTİ.
- BTE ENERJİ A.Ş.
- LOTUS ENERJİ PROJE TİC.A.Ş.
- PEKER İNŞAAT TİC. VE SAN.A.Ş.
- ÇALIK ENERJİ SAN.TİC.A.Ş.
- AYKON ELK. TAAH. TİC.LTD.ŞTİ.
- EUROPOLES
- KAYEN KAYI ENERJİ YATR. A.Ş.
- ANEL ELK. PROJE TAAH. TİC.A.Ş.
- KULE A.Ş.
- HUAWEI
- ALTAHADUTH FOR TELECOMMUNICATION SERVICES
- TUNÇ TELEKOMİNİKASYON A.Ş.
- RADSAN A.Ş.
- QARTAL CONSTRUCTIONS CO.
- VODAFONE MOBIL TELEKOMINIKASYON HIZMETLERI A.Ş.

Address: Saray Mah. Dağyaka Cad. No:4 Kazan/ ANKARA/TÜRKİYE

Tel : + 090 312 815 41 79 / 815 53 52

Fax : + 090 312 815 53 53

Web : www.barancelik.com.tr

e-mail: barancelik@barancelik.com.tr

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	14 / 42

VIII - OUR POLICY

'Our Organization acting upon the regulations and legal requirements regarding Steel Construction Production and Galvanization in Energy Transmission and Communication sector, realizes its understanding of high-quality products and services by means of adopting International Standards and principles at the highest level.

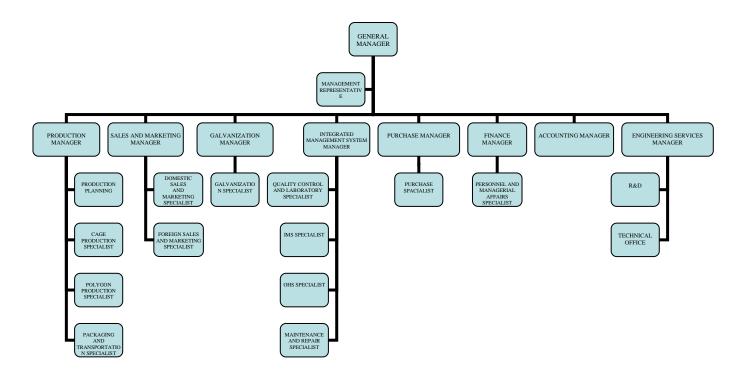
In terms of **Quality, Environment, Occupational Health and Safety**; our Company has formed and implements an integrated management system in order to prevent pollution, injuries and health problems in parallel with its objectives, understanding of management, risks and the environmental effects of our activities.

We shall continue to be one of the leader organizations in our sector by means of offering our products via prompt and reliable service, protecting environment and effectively using our sources like experienced labor, technological infrastructure and materials and through constant improvement of our system.

Our policy is to stimulate the satisfaction of our customers and employees by means of complying with the requirements of **Quality**, **Environment**, **Occupational Health and Safety Management Systems** in order to realize such objectives.'

IX - ORGANIZATION

ORGANIZATIONAL CHART



Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	15 / 42

4. INTEGRATED (QUALITY) MANAGEMENT SYSTEM

4.1 General Requirements

Baran Çelik ve Galvaniz Sanayi Limited Şirketi has formed, documented and implements an Integrated Management System complying with the requirements of the standards of TS-EN ISO 9001:2008 Quality Management System, TS-EN-ISO 14001 Environmental Management System and TS 18001 Occupational Health and Safety Management System.

The documents required for the implementation of the defined processes and the efficiency of such implementation have been drawn up and the required sources have been obtained by the senior management of our organization.

Baran Çelik ve Galvaniz Sanayi Limited Şirketi has defined and documented the processes required by the Integrated Management System, the sequence and interaction of such processes. The sequence and interaction of such defined processes in relation to our products and services have been discussed in the end of this book and the documents regarding the Integrated Management System.

The methods required for the monitoring and measurement of the processes defined below within the Integrated Management System have been defined and are being implemented via Process cards formed.

- Management Responsibility Process
- Resource Management Process
- Customer Satisfaction Process
- Galvanization Process
- Fabrication Process
- Purchase and Supplier Assessment Process
- Measurement Analyses and Improvement Process

In terms of **Management Responsibility Process**, we have considered legal requirements and the expectations of our customers, our policies, objectives related to quality, environment and OHS, legal regulations, risk analyses and levels, the requirements of product standards. The policy and objectives of our Organization have been defined according to such requirements and such activities are announced to our employees through the methods and rules of internal communication as defined in instructions. The required resources are defined and confirmed by the Integrated System Board, by management review, during OHS Board meetings or upon the decision of the Shareholders. Such decisions are executed upon the approval of the Shareholders.

According to the **Resource Management Process**; resources about human resources, training, machines and equipments, infrastructure, working environment, customer requirements, legal requirements, information on suppliers, money, time management, the requirements of the Integrated Management System, corrective / preventive actions and the effective use of such resources are discussed and defined by the Integrated System Board, management review and during the meetings of Board of Directors, or amongst

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	16 / 42

department managers or Shareholders; such decisions are submitted to and executed upon the approval of the senior management.

According to the **Customer Satisfaction Process**; customer surveys are performed, project completion certificates are obtained, the complaints of customers are received and answered and our products analyzed in Laboratories according to the Specifications and Customer expectations in agreements and product standards are confirmed with test reports.

Galvanization Process and Fabrication Process prepared within the scope of Product and Service Realization Process; legal requirements, standards, regulations, demands and expectations of customers generate the inputs of the process. The sub-processes of this process are Product Planning activities, Galvanization and its sub-processes and Steel Construction Fabrication works consisting of sub-processes such as Cutting, Drilling, Numbering, Folding, Carving, Welding, outsourced galvanization and fabrication works, delivery to the worksite and customers, on-site assembly, product definition and traceability, maintenance of machines and equipments, assessment of suppliers, purchase, control activities regarding products and services at predefined stages, gathering and analysis of information, storing and conservation of materials and products. The quality of activities during the realization of products and services, their effects on environment, the comfort of working environment and such activities' conformity to the rules of occupational health and safety are taken into consideration.

In the **Purchase and Supplier Assessment Process**; purchase details are written down and the products and services are only purchased from assessed and selected suppliers.

Measurement Analyses and Improvement Process is implemented for the whole Integrated Management System and its results are monitored and confirmed upon internal audits. The results of internal audits are evaluated and the personnel responsible for such process participate in improvement activities, then they are evaluated in the management review meetings. The needs, expectations and complaints are evaluated within the frame of Customer Relations Instruction. Surveys are performed in order to ensure the satisfaction of personnel in the organization; the results of the surveys are analyzed and submitted to the senior management. Activities required for expectations and improvements are carried out. Feedbacks from customers are received to ensure the customer satisfaction and the recommendations and complaints of our customers are evaluated through measurement analyses and the results are discussed and evaluated by the management during management review meetings. The analyses performed to this end are performed at stages predefined according to the instructions formed and the relevant records are kept.

In our Organization, all activities are planned in consideration of the environmental effects in order not to harm the environment during production, assembly and offering services. The possible environmental and OHS threats in our activities and facilities are defined, reviewed and required activities for then control of such risks are performed. The areas to be controlled regarding the threats defined, critical legal limits, monitoring methods, monitoring frequencies, procedure to be followed in case of excess of defined limit and authorities and responsibilities in relation o such procedures are defined, written down and implemented.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	17 / 42

The required controls regarding the outsourced processes within our Integrated Management System are followed in our Company or that of the Supplier.

4.2. Documentation Requirements

4.2.1. General

Our Integrated Management System documentation has been formed considering the activities we perform and our personnel's competence. Our Integrated Management System documentation consists of the following:

- a) Documented statements of our incorporation policy and objectives,
- b) Integrated Manual,
- c) 9 procedures required for effective planning, implementation and establishing control of the processes d) Records set forth in accordance with Control of Records,
- e) Our definitions indicating the tasks, qualifications and responsibilities, our plans concerning quality, environment and OHS, our forms and specifications we utilize to collect data,
- f) External documents which are controlled by us,
- g) Hardware and software such as LOGO, MICROSOFT OFFICE, XSTEEL, TOWER, WINDOWS SERVER and AUTOCAD.

Procedures explain the stages of Integrated Management System implementations and how to accomplish which tasks. They also set forth authorizations and responsibilities when needed. They refer to other documents (plans, instructions, specifications, job descriptions, forms etc.) which form up the Integrated Management System. A List of the procedures formed is provided at the end of this manual.

Our organization has conducted risk analysis concerning product and service provision as well as all processes, put this information writing and ensures its continuity.

Risk analyses have been conducted at our factory, work sites and project locations, precautions for occupational health and safety have been taken and are currently being implemented.

Our organization has identified the potential risks for the processes according to their frequency and impact in terms of environmental and occupational health within the scope of implementation of the Integrated Management System (factory, projects, work sites) and has been assessing such risks. Risks involved are being controlled through methods indicated in Environmental Aspects and Impacts Plan, Environmental Program and Performance Monitoring Plan, OHS Risks and Risk Analysis Plan as well as OHS Performance Monitoring Plan.

4.2.2. Integrated Manual

Our Integrated Management System which has been formed up to meet the requirements indicated in TS-EN-ISO 9001 Quality Management System, TS-EN-ISO 14001 Environmental Management System and TS 18001 Occupational Health and Safety Management System that is currently being implemented has been outlined in the Integrated Hand Manual. Our Integrated Manual that can be used for training, presentation and advertisement refer to implementation documents at a lower level for detail applications such as procedures, instructions and plans. In addition to our policy that involve environmental and OHS requirements; our

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	18 / 42

organization's organizational chart and the Integrated Management System processes and the interaction between the processes have also been included in the Integrated Manual.

4.2.3. Control of Documents

The documents included in our Integrated Management System have been specified above. Our records are organized, preserved and kept in the manner indicated in Control of Records Procedure.

Control of Documents Procedure has been formed up in regard to the articles of the standards. The procedure formed up covers the following matters:

The documents drawn up are controlled by the Management Representative prior to publication in terms of efficiency, reviewed by the Integrated System Board and approved by the General Manager.

It contains the requirements regarding the manners in which it is formed up, published, modified and reapproved.

It describes the identification methods for outdated documents. It also specifies the methods to keep the most updated copies of the effective documents at user units.

Matters regarding the coding, classifying and distinguishing of the documents have been explained in 'Document Coding Instructions'. The rules for identifying and distributing the external documents used, as well as controlling such documents, the rules for immediately withdrawing the outdated documents from all locations where they are utilized, accessibility to old information as well as the availability of the information related to the nature of the modifications have been explained in the respective procedure. For this purpose; documents are identified by means of CONTROLLED COPY BARAN – UNCONTROLLED COPY BARAN and CANCELLED BARAN stamps. The name, number, publication date and revision numbers of the documents can be tracked with updated document lists.

Our organization establishes control of the external documents in accordance with the document control system implemented within the scope of the respective procedure and has ensured the utilization of only updated and valid external documents.

The methods and activities concerning the control of documents performed on computer environment at our organization have been explained in Control of Documents and Records on Computer Environment Instruction.

4.2.4. Control of Records

Records indicating all system implementations conducted at our organization are kept continuously and properly by all individuals/units who perform the implementation.

Control of Records Procedure has been formed up is being implemented regarding the control of records. This procedure formed up describes the required precautions to prevent damage and deformation while the records are kept, protected and preserved, the methods to provide easy access to old records when required and traceability during archiving, retention periods and authorizations. Archiving is conducted in the archive by the department keeping the records. Methods and responsibilities to dispose of the records that expired their retention periods have been specified.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	19 / 42

Reference Documents

Control of Documents Procedure

Control of Records Procedure

Document Coding Instruction

Control of Documents and Records on Computer Environment Instruction

5. MANAGEMENT RESPONSIBILITY

5.1. Commitment of the Management

The senior management of Baran Çelik ve Galvaniz Sanayi Limited Şirketi has set forth and ensures the implementation of the methods required for the implementation, development and constant improvement of the efficiency of our Integrated Management System, to meet the customers' needs and expectations at the highest level as well as the methods required to prevent environmental pollution, accident risks and efficient utilization of natural resources. With the support they have given to the establishment and implementation of the Integrated Management System, our organization's senior management commits to fulfill their obligations for quality, environment and occupational health and safety. In accordance with the relevant instruction to assess the Integrated Management System's implementation efficiency and outcome; Integrated System Board and Management Review Meetings are held. The improvement of our Integrated Management System is accomplished through the following procedures:

- a) Fulfilling the customer requirements and the legal requirements concerning the quality, environment OHS at our company and the following up of the currency of the legal regulations,
- b) Establishing our policy: Our organization is aware of a requirement of the Integrated Management System that focuses on the customer, protects the environment, minimizes the environmental pollution and complies with occupational health and safety. All employees must perform their implementations with this mentality.

Our policy has been discussed at the Integrated System Board, confirmed and approved by the management. Our policy has been posted at various locations within our organization and announced to all employees and the public by publishing it on our web page and in the Integrated Manual. Internal and external seminars are planned and organized in order to promote the quality, environment and OHS awareness of our employees. Training sessions are planned and carried out depending on the indicated requirements. Information on matters such as the implementations of the Integrated Management System, standards, system applications as well as organizational culture etc is given to employees during these training sessions.

c) Our objectives: Our Integrated Management System has been formed up in accordance with our organizational structure. Our objectives concerning quality, environment and OHS are established in writing at the meetings that are held periodically each year. Such objectives are formed up item by item on a measurable basis. Strategies to achieve our objectives are determined and implemented. Our objectives are assessed by the periodic meetings held by the relevant departments, the Integrated System Board and management and followed up with in terms of actualization.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	20 / 42

- d) Management Review: Our organization's senior management discusses whether the Integrated Management System operates in conformity with the planned arrangements, the efficiency of product and service processes, the actualization status of quality, environment and OHS objectives, resource requirements and other matters, makes the necessary decisions thus helps the Integrated Management System's efficiency and improvement. Therefore, when modifications are made in the Integrated Management System, the integrity of the system is preserved.
- e) Resources such as personnel, infrastructure, environment, work environment etc are provided by the senior management. Resources are planned and resource requirements are discussed at the Integrated System Board, Management Review and Executive Board meetings. The senior management's approval is obtained for the resource requirements determined.

5.2 Customer Focus

The senior management of Baran Çelik ve Galvaniz Sanayi Limited Şirketi carries out its activities towards increasing customer satisfaction by working in compliance with the legal requirements, customer needs and expectations, standards, regulations and legal regulations. Progress towards improvement is realized by conducting works within the scope of the Communication Instruction. Works are performed with the purpose of fully understanding the customer needs and expectations. The results are analyzed through customer complaints and feedback. The indications acquired are announced to the relevant departments through inter corporate communication.

5.2.1 Environmental Aspects

The environmental impacts of the activities conducted at our factory, projects and work sites concerning our products and services have been indicated in the presence of our consultants at Baran Çelik ve Galvaniz Sanayi Limited Şirketi by the Integrated System Board utilizing the Environmental Aspects and Impacts Plan. The indicated environmental aspects, the significant environmental impacts and the severity of the environmental aspects of our activities are assessed by the Integrated System Board in accordance with the risk assessment method specified within the scope of the Environmental Impact Measurement and Monitoring Plan. The activities required to eliminate or alleviate the significant environmental impacts are determined and implemented by the Integrated System Board. The implementation outcomes are monitored, measured and assessed. New activities are planned and implemented when necessary. The environmental aspects are reassessed in the case of any changes in the indicated environmental aspects, changed conditions, activities conducted at projects, work sites and new implementations.

5.2.2. Threat definition, Risk assessment and Control Specifications

The methods to be implemented for the definition of occupational health and safety risks concerning the activities conducted at Baran Çelik ve Galvaniz Sanayi Limited Şirketi headquarter, projects and work sites, the prevention, alleviation, of the impacts of such activities on humans as well as the environment and stopping the reoccurrence of such impacts and accidents have been explained in the Occupational Health and Safety

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	21 / 42

Procedure. The accidents that can occur during or as a result of our activities and the accident risks are determined and their impacts are assessed in accordance with the Risk Assessment Instruction.

Occupational safety analysis method is used for the risk assessment. In this method, principally existing internal or possible external threats are determined. The combination of the possibility of occupational accidents in consequence of such threats and the severity of the harm due to such occupational accident along with the assessment of risk which may be caused by such threat are used. The implementation of the occupational safety analysis method and risk assessment is carried out in accordance with the Risk Assessment Instruction. Beside the routine activities carried out in our Organization, non-routine activities are also taken into consideration during the planning activities regarding occupational health and safety.

5.2.3 Legal and Other Requirements

In Baran Çelik ve Galvaniz Sanayi Limited Şirketi, the implementation of the Integrated Management System incorporating Quality, Environmental and OHS Management Systems is subject to the requirements of laws, regulations, legislations and standards. The importance of meeting the legal requirements regarding the activities of Baran Çelik ve Galvaniz Sanayi Limited Şirketi explained to all personnel through trainings.

All laws, regulations, legislations and standards regarding Baran Çelik ve Galvaniz Sanayi Limited Şirketi is defined as "external documents". The actuality of all external documents defined is followed according to relevant procedures, while up-to-date distributions are carried out via computer environment. Good practices of other organizations in our sector are taken into consideration in the environmental activities.

5.3. Our Policy

Our policy defined, documented and announced by the management of Baran Çelik ve Galvaniz Sanayi Limited Şirketi has been documented according to our business principles and objectives regarding Quality, Environmental and OHS Management Systems and to:

- > include the commitment of continuous improvement and development as per the requirements of Integrated Management System,
- > support and form a frame for our objectives,
- > include the roles and other particulars as regards the development of awareness of quality, environment, occupational health and safety besides the importance we place upon our employees.

We carry out internal audits in order to ensure that our policy is communicated with all departments of our organization and understood by all personnel. Our policy is reviewed and revised when necessary in accordance with developments and needs during the planned Integrated System Board meetings and management review meetings.

5.4. Planning

5.4.1. Objectives

The senior management of Baran Çelik ve Galvaniz Sanayi Limited Şirketi has defined and documented the requirements of products and services realized within the scope of all projects included in our business line and

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	22 / 42

the Quality, Environment and OHS objectives which can be measured at relevant functions and levels and which are parallel with the policy of our organization. The objectives are followed.

The objectives are defined by considering the data obtained as a result of the implementation of Integrated Management System during the Integrated System Board and management review meetings. Strategies are defined to achieve objectives and the required resources are provided by the senior management.

5.4.2. Planning of the Integrated Management System

Baran Çelik ve Galvaniz Sanayi Limited Şirketi has defined its processes in order to meet the requirements of the Integrated Management System along with objectives defined periodically. The planning of the Integrated Management System is performed to include all processes, process sequences, process interactions, necessary resources, monitoring, measurement and analyses of processes. In addition, the Integrated Management System is followed through 15 plans which are Input Quality Plan, Galvanization Process Quality Plan, Fabrication Process Quality Plan, Pylon Assembly Quality Plan, Environmental Aspects and Effects Plan, Environmental Program and Performance Monitoring Plan, OHS Threats and Risk Analysis Plan, OHS Performance Monitoring Plan, Emergency Plan, Calibration Follow-up Plan, Annual Internal Audit Plan, Annual Training Plan, Annual Machinery Maintenance Plan, Plant Layout Plan and MSDS Plan.

5.4.3 Environmental Management Program

Integrated Management System Specialist organizes Environmental Program and Performance Monitoring Plan under the supervision of consultants in order to achieve the environmental objectives defined in our organization and the Integrated System Board reviews and executes such Environmental Program and Performance Monitoring Plan. The activities to be carried out in order to minimize the harm we cause to the environment and prevent the environmental pollution, the personnel responsible for performing such activities, completion dates of activities and monitoring and measurement methods and periods are defined in the program organized. All kinds of resources needed for the implementation of the environmental programs organized are provided by the senior management of our organization.

The environmental effects are reviewed by the Integrated System Board and the Environmental Program and Performance Monitoring Plan is revised due to changes, developments, new activities and similar reasons which may take place subsequent to the execution of environmental programs.

5.5. Responsibility, Authority and Communication

5.5.1. Responsibility and Authority

"Task Definitions" defining tasks, authorities and responsibilities of all personnel managing, implementing and confirming the activities regarding Quality, Environmental and OHS Management System, such personnel's mutual relations, their supervisors and who they will represent are prepared in order to ensure the control of the processes. Emergency Staffs are formed and executed within the frame of Integrated Management System.

The task definitions organized are distributed among the relevant departments. The organizational chart approved by the senior management of Baran Çelik ve Galvaniz Sanayi Limited Şirketi has been given as a

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Colik ve Colvenia Conqui ve Ticoret I td. St

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	23 / 42

schematically in the Integrated Manual. The organizational chart approved by the General Manager is hanged on several places and in all facilities as CONTROLLED COPY BARAN.

5.5.2. Management Representative

The Integrated Management System Manager has been appointed as the **Management Representative** regardless of his/her other responsibilities. The Integrated Management System Manager performs activities under the supervision of the senior management. He organizes the meetings specified in the Communication Instruction and reports meetings, delivers meeting reports to participants, follows up the decisions given and presents all such information to the senior management as a report and establishes communication with external organizations regarding the quality, environment and occupational health and safety.

The particulars as to the activities of the Integrated System Board have been specified in the Communication Instruction. Other authorities and responsibilities of the Integrated System Manager are defined in the task definition.

5.5.3. Internal Communication

Internal communication in Baran Çelik ve Galvaniz Sanayi Limited Şirketi is established orally or in written through Internal Correspondence Form organized, meetings, notice boards, internet, computer programs, announcements, telephone calls and trainings. The efficiency and effectiveness of meetings are evaluated. The method of establishing internal communication is specified in Integrated Management System documents. The internal communication method is defined considering the awareness, sensitivity of our personnel and the importance and emergency of the information communicated. The details are given in the Communication Instruction.

The communication of Baran Çelik ve Galvaniz Sanayi Limited Şirketi with external organizations regarding quality, environment, occupational health and safety is carried out by the Management Representative in written, orally, through telephone calls, fax, e-mails or integrviews. The information regarding the communication of other departments is specified in task definitions and relevant documents.

5.6. Management Review

5.6.1. General

Management Review Meetings are planned and held by the senior management for the evaluation of the implementation of the Integrated System Management in our organization. Such activities are realized according to the Communication Instruction formed.

The issues regarding the agenda of meetings, determining the matters to by discussed, keeping records and announcement of the decisions made and keeping the meeting reports, the follow-up, coordination and control of the decisions made are specified in the Communication Instruction.

5.6.2. Review Inputs

Below specified headings are the agenda of the meetings held:

- a) Reading and evaluating the Performance Report prepared by the Management Representative,
- b) Results of the Audits, (Internal-External Audits),

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	24 / 42

- c) Emergencies and implementations regarding emergencies,
- d) Environmental Programs,
- e) Environmental and Occupational Health and Safety Risks Analyses,
- f) Customer feedbacks,
- g) Process performance, product and services conformity and conformity to legal requirements,
- h) Follow-up activities continuing after the previous management review,
- i) Changes which may affect the Integrated Management System,
- j)Policy, objectives and recommendations on improvements,
- k) Demands and expectations of participants.

5.6.3. Review Outputs

The decisions made during the meetings are reported by the Management Representative. During the management review meetings, the below decisions are made:

- a) Improvement of the Integrated Management System and the processes of such system,
- b) Increasing the customer satisfaction, minimizing the effects and risks of product and service quality, environmental and occupational health and safety risks and effects and their constant improvement,
- c) Defining the needs for resources

Reference Documents

Occupational Health and Safety Procedure

Communication Instruction

Risk Assessment Instruction

Environmental Aspects and Effects Plan

Environmental Program and Performance Monitoring Plan

OHS Threats and Risk Analysis Plan

OHS Performance Monitoring Plan

Internal Correspondence Plan

6. RESOURCE MANAGEMENT

6.1 Provision of Resources

The senior management provides for what is needed in order to implement, sustain the Integrated Management System and to implement the corrective and preventive actions which come out as a result of the occupational health and safety requirements, threat analyses and risk assessments. In addition, it defines the resources required for increasing the customer satisfaction by means of meeting their demands at maximum level, minimizing low-quality, environmental and occupational health and safety effects and preventing pollution. The senior management provides for the resources.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	25 / 42

6.2. Human Resources

6.2.1. General

When needed, Baran Çelik ve Galvaniz Sanayi Limited Şirketi employs its personnel on the basis of laws and documents. The organization of the activities is carried out by the Finance Manager and the Integrated System Manager. The approval of the General Manager is sought for the employment of new personnel. In our organization, we train our new personnel on quality and occupational health and safety, environment and the work requirements and rules in our organization in order to ensure their adaptation to our organization in a short time.

6.2.2 Competence, Training and Awareness

The training, experience and other qualifications of the personnel considering the titles and activities of all personnel working in Baran Çelik ve Galvaniz Sanayi Limited Şirketi have been defined. Provision of training and training activities are carried out in accordance with the Training Instruction.

Our organization tries to provide highest-quality training needed by all personnel implementing, managing, confirming and affecting such activities considering that the formation, sustainability and improvement of the Integrated Management System is the task of all personnel.

Training requirements are determined by the Integrated Management System Manager according to the demands received from all departments. Having sought for the opinion of the General Manager, Integrated System Manager prepares the Annual Training Plan. Before issuing the prepared training plan, such plan is reviewed by the Integrated System Board and approved by the General Manager.

Such training activities are realized in and outside the organization by expert trainers and the results of training are evaluated as specified in the Training Instruction.

Our personnel is informed on the relation between the activities they perform and the quality, environmental and occupational health and safety while how they can contribute in the quality of products and services and occupational health and safety. We keep records of training, competences and experiences.

6.3 Infrastructure

Baran Çelik ve Galvaniz Sanayi Limited Şirketi defines the need for infrastructure required for the appropriate realization of products and services it offers as a result of the activities performed and implements and ensures the sustainability of such infrastructures needed.

All kinds of equipments and machinery which are essential in terms of environment within the frame of the infrastructure in production facilities of the product and services and in Baran Çelik ve Galvaniz Sanayi Limited Şirketi are provided by the senior management. Occupational Health and Safety Procedure has been formed in terms of occupational health and safety; risk analysis have been carried out and required measures have been taken and infrastructural needs have been satisfied. The activities are controlled according to the OHS Performance Measurement and Monitoring Instruction.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	26 / 42

6.4 Work Environment

The senior management provides for the conditions required for the motivation of employees and increasing their performance and efficiency levels. Departments regarding software and hardware equipments, management building, office stationeries and social facilities have been created for a comfortable work environment for department and project personnel.

The entries and exits of personnel in our plant are controlled through entry and exit card reading system. The security is maintained by the permanent guards. The employees are transported to our organization in service vehicles. The food is provided from and served by catering companies. In our organization, we have reserved places for Social needs such as teahouses, meeting and training rooms.

The environment conditions required for environmental, occupational health and safety have been ensured for both employees and customers. All threats which may result in contamination and injuries have been eliminated by means of defining threats and carrying out risk analyses. In addition, negative effects on work environment and poor resources such as insufficient illumination, extremely hot-cold room temperatures have been eliminated. The needs for resources which cannot be satisfied in a short time are covered in plans and the environment conditions are guaranteed.

Reference Documents

Occupational Health and Safety Procedure
OHS Performance Measurement and Monitoring Instruction
Workplace General Working Instruction
Training Instruction
OHS Performance Monitoring Plan

7. PRODUCT AND SERVICE REALIZATION

7.1. Planning of Product and Service Realization

All processes for realization of products and services at Baran Çelik ve Galvaniz Sanayi Limited Şirketi are planned and improved within the scope of the constant improvement principal. The consistency of the plans and projects with the other processes of the Integrated Management System is carefully considered when such plans and projects for product and service improvement are being formed up.

During the product and service realization planning; all phases of the product and service realization, the interactivity of the processes, control points and criteria have been documented with the instructions prepared. Planning of products and services at our organization is carried out as indicated in the instructions pertaining to customer demands, laws and product and service planning. The precautions which can be taken against accident risks and potential threats that have been identified in terms of product and service quality, environment, occupational health and safety have been indicated in process phases. In this context, OHS Threats and Risk Analysis Plan have been formed up and are being implemented in terms of environmental and occupational health and safety per the Risk Assessment Instruction. Production Planning and Production Instruction which specifies the controls to be performed during and at the end of production phases have been

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	27 / 42

formed up. Controls are performed considering the relevant standards, regulations and the established acceptance-rejection criteria. Production instructions and product quality plans that indicate the controls to be performed, the records to be kept and personnel in charge have been formed up. Requests, reviews, all activities that are in contract phases and the extent of meeting customer requirements are explained in the Customer Relations Instruction. Request and delivery planning is done utilizing the shipping, packaging and delivery instruction.

Reference Documents

Customer Relations Instruction

Risk Assessment Instruction

Shipping, Packaging and Delivery Instruction

Other Production, Control, Operating and Maintenance Instructions

7.2. Customer Related Processes

7.2.1. Defining the Requirements In Relation to Product and Services

Baran Çelik ve Galvaniz Sanayi Limited Şirketi conducts its design and production as indicated in the standards in compliance with the regulations. The input requirements that are purchased have been discussed in the Input Quality Plan and standards. Customer orders are received, reviewed and then request and delivery planning is carried out.

Customer Relations Instruction discusses receiving and reviewing the requests and all activities in contract phases. Customer requests are received in writing in order to fully understand the customer's wishes and expectations. The requirements specified by the customers, requirements not specified by the customer but defined and known to be required for the intended purpose, the relevant legal and regulation requirements and other additional requirements if any are determined by our organization. Our organization manufactures products that are in compliance with regulations and standards. The extent of meeting the customer requirements are measured by the Customer Relations Instruction.

7.2.2. Reviewing the Requirements In Relation to Product and Services

No matter what the procedures are, the specifications of Baran Çelik ve Galvaniz Sanayi Limited Şirketi product and services are reviewed by our organization. Review criteria are:

- Requirements specified by the customer (standard and technical specification criteria, customer demands),
- Requirements not specified by the customer but defined and known to be required for the intended purpose (regulations and law)
- Legal requirements and additional requirements determined by our organization related to Baran Çelik ve Galvaniz Sanayi Limited Şirketi products and services are reviewed in terms of work feasibility, our organization's efficiency in meeting the customer demands, our organization's workload intensity and capacity, proximity and distance of the delivery location, whether the project is domestic or abroad, our technological capability, the resource investment required, technical criteria, quality requirements, material characteristics etc.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	FFK-01
2000::0::0	
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	28 / 42

Customer requests may be accepted following similar review activities conducted or rejected if they are not in compliance with the legal requirements and not in the interests of our organization. Our customer related activities are carried out within the scope of the Customer Relations Instruction.

7.2.3. Customer Communication

Customer Communication is performed within the scope of Customer Communication Instruction and Communication Instruction. Sales and Marketing Manager and Production Manager are in charge of customer relations at our organization. All activities within the scope of contracts placed are conducted by department and individuals who were put in charge within the Integrated Management system and their records are kept. Relations of the departments with the customers have been discussed In Customer Relations Instruction and Communication Instruction.

Reference Documents

Communication Instruction

Customer Relations Instruction

7.3- DESIGN and DEVELOPMENT

Design Instruction has been documented and its continuity has been ensured in order to assure that the requirements indicated for the desired product quality are met, controlled and confirmed.

7.3.1 Planning of Design and Development

A Design Plan is formed up for each and every one of the design and development activities at our organization by their respective people in charge. The relevant activities and responsibilities are defined in this Design Plan. Development and new design works of each product is coordinated by the Engineering Services Manager. Plans are updated as the design improves. The information regarding who will conduct which activities of the design, information flow between the relevant departments and the type of information to be transmitted are indicated in the Design Plan.

7.3.2 Design and Development Inputs

Inputs regarding the planned design/development,

- Design related requests of the individuals in charge of the departments.
- Legal requirements.
- · Customer/Administration requests.
- Technological feasibility of the product.
- Technical specifications.
- Price.
- Feasibility and production/assembly requirements at the company.

The above mentioned inputs are reviewed and documented by the personnel in charge in terms of their efficiency in meeting the requirements determined.

7.3.3 Design and Development Outputs

Acceptance requirements to include input requirements, design characteristics in phases such as operating, storage, shipping, maintenance etc have been determined and documented in order to ensure the validity and

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	29 / 42

verifiability of the product which will be obtained as the result of the design/development activities. Design outputs are reviewed prior to distribution.

7.3.4 Design and Development Review

The conformity of the design results with the specified requirements are controlled in accordance with the Design Instruction and their records preserved.

7.3.5 Design and Development Verification

In addition to design review; verifications are carried out in the appropriate phases of the design in order to ensure that design outputs meet the requirements of design inputs. Design verification measurements are recorded.

7.3.6 Design and Development Validation

During the validation period of the designed or developed product, it gets tested for the functional features specified in customers' requirements for use.

7.3.7 Design and Development Modifications Control

Modifications that need to be made in the current design and development are documented after review and approval by personnel with defined authority.

Reference Documents

Design Instruction

7.4. Purchasing

7.4.1. Purchasing Process

Purchasing and Supplier Assessment Instruction has been formed up and put into effect for purchasing activities. Purchasing planning is carried out considering the market conditions as well as our organization's needs and capacities and in line with the needs indicated by the departments. Products and services are only purchased from the organizations indicated in the Approved Supplier List which was accepted in accordance with the Purchasing and Supplier Assessment Instructions. The Integrated system requirements and product standards are taken into consideration when purchasing materials and services that affect product and service quality, environment, occupational health and safety.

Supplier companies are informed on matters regarding the quality, environment, occupational health and safety requirements. Especially the supplier companies from whom we supply materials that have a negative impact on product and service quality as well as the environment are asked by specifications to be sensitive in these matters. Efforts are made towards increasing the quality level of the suppliers' products, environmental awareness and ensuring that they conform to occupational health and safety requirements. Suppliers are encouraged to operate systematically.

7.4.2. Purchasing Information

The department placing the request at our organization makes the effort to form up the documents regarding the materials/products and services to be purchased, forward them to the suppliers and ensures that the products and services are purchased through the suppliers with good history of performance and efficiency. Purchasing specifications have been formed up in this sense. The specifications or documents that have been established include information such as the quality of the materials/product and services, control and delivery requirements as well as technical and administrative matters such as quality, environment, occupational health and safety, etc. Receiving

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	30 / 42

offers from suppliers, placing orders, definition, type, amount, characteristics, quality facts of the material, delivery time of product certifications, planning and purchasing activities are documented and implemented by the Purchasing Manager.

7.4.3. Validation of the Purchased Product

Following the delivery of the product and materials to the relevant departments of our organization, their input controls are carried out by the employee in charge of the Integrated Management System or Quality Control Personnel in accordance with the Input Quality Plan, Input Control Instruction, Purchasing specifications or documents.

When Baran Çelik ve Galvaniz Sanayi Limited Şirketi or our customers desire to carry out onsite verification, the validation arrangements are documented in the purchase documents. Such arrangements and the validation of our customers do not mean that required controls or validations cannot be performed on the materials or products. Our organization assumes sole responsibility.

Reference Documents

Control of Unconformities Procedure
Purchase and Supplier Assessment Instruction
Input Control Instruction
Confirmed Supplier List
Input Quality Plan

7.5. Production and Service Provision

7.5.1. Control of Production and Service Provision

Baran Çelik ve Galvaniz Sanayi Limited Şirketi has defined the controls to be implemented on the products and services. The method of offering products and services are explained in detail in the product plan prepared, production, machinery-device operation and maintenance instructions and facility operation instructions. The inputs, activities to be performed, controls, responsibilities, resources and records to be organized have been specified in the documents prepared in accordance with the process.

Baran Çelik ve Galvaniz Sanayi Limited Şirketi has organized the maintenance plans of machinery and equipments used in order to meet the requirements of the quality of products and services, environment, occupational health and safety. The periodical maintenances and operations in case of malfunctions are kept in records.

The products and services are controlled at predefined periods and the processes are kept under controlled. In case of an unconformity to the Fabrication and Final Control Instruction, the Control of Unconformities Procedure applies to the operation.

Reference Documents

Control of Unconformities Procedure

Fabrication and Final Control Instruction

Other Production and Assembly instructions

Machinery-device operation and maintenance instructions

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	31 / 42

7.5.1.1 Control of Occupational Health and Safety Activities

Existing and possible accident probabilities and risks have been defined by means of risk analyses as per the Risk Assessment Instruction in consideration of all activities realized in Baran Çelik ve Galvaniz Sanayi Limited Şirketi. The methods required for eliminating and minimizing the defined risks of accidents and minimizing the results of the effects of accidents in consequence of possible accidents. Accordingly, Emergency Instruction and OHS Performance Measurement and Monitoring Instruction have been prepared and are implemented.

All personnel have been given training on occupational health and safety in order to prevent accidents, warning signs, pictures and writings have been posted at the required locations and personal protective equipments have been made available for use when necessary. Some personnel have been put through first aid training.

In addition to the safety of our own company personnel, the safety of our customers and visitors are also ensured with the implementations related to occupational health and safety. Precautions have been taken and drills have been conducted in connection with accidents and emergencies.

Reference Documents

Emergency Instruction

OHS Performance Measurement and Monitoring Instruction

Risk Assessment Instruction

7.5.1.2 Provision of Environmental Management Requirements and Control of Activities

In Baran Çelik ve Galvaniz Sanayi Limited Şirketi, the environmental aspects and environmental effects of the activities performed in relation to products and services and the materials used in such activities are defined. The methods regarding how the operations which have important environmental effects should be performed considering the policy, objective and goals of our organization within the frame of the integrated management system have been defined and such methods are documented in Environmental Planning Instruction and Environmental Protection Instruction and executed. Legal and other requirements have been taken into consideration.

While defining the methods for the realization of operations, we have intended to minimize the harm to the environment. According to the Risk Assessment Instruction and the results obtained by carrying out risk analyses and preparing the Environmental Aspects and Effects Plan; Environmental Program and Performance Monitoring Plan is prepared.

We have defined and executed methods regarding waste management in order to control, eliminate or minimize the effects of waste materials to the environment as a result of the activities performed. The organizations supplying us with inputs which have important environmental effects are requested to be sensitive to the environment; otherwise, the necessary sanctions are executed upon the decision of the Integrated System Board. Environmental Aspects and Effects Plan is reviewed by the Integrated System Board in case of changes in the inputs, processes, products and services which alter the environmental aspects and effects. Risk assessment is repeated and Environmental Program and Performance Monitoring Plan is updated having prepared Environmental Aspects and Effects Plan.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	32 / 42

Reference Documents

Emergency Instruction

Risk Assessment Instruction

Environmental Planning Instruction

Environmental Protection Instruction

7.5.2 Validation of Processes for Production and Service Provision

Baran Çelik ve Galvaniz Sanayi Limited Şirketi delivers its products to customers after the final controls of the products have been performed by the Quality Control Personnel documented in Galvanizing Process Quality Plan, Production Process Quality Plan and Pylon Assembly Quality Plan which are specified in standards and regulations. If any nonconformity is detected after the product is used as the product and the tests require, the customer is notified. The Parameters of the processes that need validated are monitored and kept under controlled conditions. The qualifications of the personnel working at particular processes are taken into consideration.

Reference Documents

Quality Plans and Production Instructions

Machinery - Equipment Operating and Maintenance Instructions

7.5.3 Definition and Traceability

The materials to be purchased within the scope of purchasing activities are purchased by item definition on project basis. The manufactured products are determined on the basis of Traceability Form, contract nr, location, date, employees and assemblers and then shipped to the customer following its definition. Misuse of the nonconforming product is prevented. The conforming products are accepted after obtaining the results of the controls performed. The activities related to definition and traceability of products and materials are discussed in Product Definition and Traceability Instruction.

Reference Documents

Product Definition and Traceability Instruction

7.5.4 Customer Property

Methods have been developed in accordance with the Customer Property Instruction and are being implemented in order to confirm, preserve and provide safety of the manufactured, semi-manufactured products or materials given to our organization by our customers to be used on their own products. If such property is lost, damaged or unfit for use, our customer is assured by being informed and such loss or damage is preserved in accordance with the Control of Records Procedure.

7.5.5 Preservation of the Product

The preservation required for our products and production is provided through the instructions which have been formed up to include shipping, storage and stock control. Shipping, Packing and Delivery Instructions as well as the Storage and Stock Control Instructions have been formed up and put into effect. All precautions including occupational health and safety that are required to prevent the product from being negatively affected

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	33 / 42

and prevent any damage on the environment during storage activities of the purchased product have been taken and put into effect.

Reference Documents

Storage and Stock Control Instruction

Shipping, Packing and Delivery Instruction

7.6 Control of Monitoring and Measurement Equipment

Calibration activities to ensure the audit and test equipment used for audits and tests measure accurately are conducted within the scope of the Calibration Instruction.

The numbers and availability of all measurement devices used at our organization have been indicated and listed. Calibration periods are determined and monitored considering information such as the environment where audit and test equipments are used, their sensitivity, frequency of use, international standards and the data from the external companies where they are calibrated. The most important basis is the accreditation and traceability of the company and/or companies where the equipment is calibrated. The validity of the results provided by the Calibration Company is reviewed by the Integrated Management System Manager. If the deviation values indicated turn out to be higher than the measurement tolerance values, measuring with such devices may only performed with one protocol. Devices with normal accuracy and deviation values can be used. Previous measurement regarding the devices which had calibration deviation results that were outside the scope, deviation of the device and measurement results are assessed.

Reference Documents

Calibration Instruction

8. MEASUREMENT, ANALYSIS and IMPROVEMENT

8.1. General

Baran Çelik ve Galvaniz Sanayi Limited Şirketi plans and implements the monitoring, measurement, analysis and development processes that are require to display conformity of the Integrated Management System and to ensure its efficiency and continuity. All activities are performed in accordance with the Measurement, Analysis and Improvement Instruction. Environment Control Procedure and Emergency Procedure have been formed up and put into effect with regard to the environment.

Reference Documents

Environment Control Procedure

Emergency Procedure

Measurement, Analysis and Improvement Instruction

8.2. Monitoring and Measurement

Baran Çelik ve Galvaniz Sanayi Limited Şirketi has determined its Environment and OHS programs, conducted risk analysis on work sites and projects, taken the necessary precautions for all current and potential threats including those for the environment, accidents, diseases and events and continues to monitor. OHS Performance Monitoring Plan is formed up following the risk assessment conducted in relation with accidents and emergencies. Activities are measured and monitored in accordance with OHS Performance Measurement and

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	34 / 42

Monitoring Instruction. Environmental Program and Performance Monitoring Plan are formed up and followed up with by the personnel in charge in order to properly monitor and accurately measure the main characteristics of process and activities which have certain impacts on the environment.

Reference Documents

Environmental Program and Performance Monitoring Plan
OHS Performance Monitoring Plan

8.2.1. Customer Satisfaction

Customer complaints, suggestions and feedback are considered as the most effective indicator for measuring the satisfaction level of our customers about our products and services and activities are being performed in accordance with the Customer Relations Instruction. Customer satisfaction is monitored by survey activities and analysis of the feedback information. This data is analyzed periodically by using statistics techniques and presented to the management. Following their review, the management makes decisions on the activities to be performed to increase customer satisfaction. Customer requests, suggestions and complaints are reviewed in management meetings.

Reference Documents

Customer Relations Instruction

Measurement Analysis and Improvement Instruction

8.2.2.Internal Audit

Internal audits are conducted on a regular basis to determine whether the Integrated Management System that is being implemented at Baran Çelik ve Galvaniz Sanayi Limited Şirketi complies with the planned regulations, to ensure the sufficiency, efficiency and the continuity of the Integrated Management System, to detect and resolve any deficiencies and discrepancies and to determine whether it is sufficient to reach the organization's objectives. Internal audits are carried out in accordance with the Annual Internal Audit Plan. The internal audit activities and processes to be performed are indicated in the Internal Audit Procedure. All components and aspects of the Integrated Management System which have been established to meet all requirements specified in TS-EN-ISO 9001 Quality Management System, TS-EN-ISO 14001 Environmental Management System and TS- 18001 Occupational Health and Safety System standards.

Audits are performed by trained auditors who possesses knowledge about the activities of the department being audited and does not work within that department. Auditors do not audit their own activities. Audit results are recorded by the auditors. Corrective and preventive actions required for the indicated discrepancies are carried out. Audit details are discussed in the Internal Audit Procedure.

Reference Documents

Internal Audit Procedure

8.2.3 Monitoring and Measurement of the Processes:

Monitoring and measuring the product and service processes at Baran Çelik ve Galvaniz Sanayi Limited Şirketi, the activities to confirm their conformity with the requirements are planned and implemented considering their impacts on the environment as well as occupational health and safety. Statistical techniques are effectively

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	35 / 42

implemented and utilized at our organization for the verification of the product-service characteristics and assessment of the obtained data. Such techniques are also utilized for the following implementations:

- Risk levels have been determined at facilities, work sites, projects and processes with established OHS programs. Precautions have been taken for current or potential threats and are being monitored regularly within the scope of OHS Performance Measurement and Monitoring Instruction.
- Environmental Program and Performance Monitoring Plan are formed up and followed up with by the personnel in charge in order to properly monitor and accurately measure the main characteristics of process and activities which have certain impacts on the environment.
- It is helpful for determining the relevant objectives, periodically assessing and monitoring these objectives.
- It is utilized for assessing and analyzing the nonconforming product and service records, discrepancies and customer complaints, putting them into report form and in the decision making process for corrective and preventive actions to be carried out.

Departments that perform statistics work carry out their activities for measuring product, service and process performance considering their impacts on environment, occupational health and safety. Such activities are performed in accordance with the Measurement, Analysis and Improvement Instruction by using statistical techniques.

Reference Documents

Measurement, Analysis and Improvement Instruction

OHS Performance Measurement and Monitoring Instruction

8.2.4. Monitoring and Measurement Product and Services

Know how information of the controls for purchased materials, each phase of the process and manufactured products have been documented at Baran Çelik ve Galvaniz Sanayi Limited Şirketi. The records of these activities performed are kept regularly. Controls during input and processes are conducted as indicated in the test and control instructions taking their impacts on environment, occupational health and safety into consideration. Criteria for the controls performed have been determined. The controls to ensure that the activities performed are complete and done right the first time and that they do not cause any harm on the environment, people and carried out in accordance with occupational health and safety regulations are performed in conformity with audit, control and acceptance instructions.

8.2.5 Environmental and OHS Monitoring and Measurement

The criteria regarding measurement, measurement frequencies and the results of measurement considering the legal requirements and environmental and OHS objectives of our organization are defined and documented. Environmental measurement according to the Environmental Planning Instruction and OHS measurement according to OHS Performance Measurement and Monitoring Instruction are performed and recorded and their results are evaluated. In case of deviation from the objectives or legal requirements detected in the result of measurement performed, the required corrective and preventive actions are planned and implemented. We ensure that the measurement devices used for defining the environmental and OHS effects are calibrated and the organizations selected as Suppliers are accredited.

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	36 / 42

8.2.6 Evaluation of Conformity

The conformity of our products, processes and our activities in terms of environmental and occupational health and safety to the requirements of legal provisions are evaluated during the management review meetings.

Reference Documents

Environmental Control Procedure

Environmental Planning Instruction

Environmental Protection Instruction

8.3 Control of Nonconforming Product and Service

First, the stage when nonconformity has occurred or the nonconforming product or service is detected. The nonconforming product or service or nonconformities detected during the realization and controls of input, product and service are recorded in a Nonconformity Form and defined. Definition, recording, evaluation of detected nonconformities, making and executing relevant decisions required and all activities to be performed for the elimination of nonconformities are discussed in Definition and Elimination of Nonconformities Instruction.

The nonconformities detected as a result of the measurement performed regarding the environment and the activities to be carried out in order to eliminate such nonconformities and the responsibilities of the personnel responsible for the elimination of such nonconformities are specified in the Control of Nonconformities Procedure.

8.3.1 Emergency Preparation and Activities to be Performed in Case of Emergencies

Baran Çelik ve Galvaniz Sanayi Limited Şirketi has defined methods, legal regulations and other specifications in order to prevent or minimize the effect of accidents and other events to people and environment in extraordinary cases like fire, accident, flood or earthquake. The methods defined are documented in Emergency Procedure and implemented. All personnel are informed on the emergency.

For the planning of Integrated Management System and definition of methods regarding the implementation of activities in Baran Çelik ve Galvaniz Sanayi Limited Şirketi, particulars as to preventing or eliminating environmental pollution and prevention of possible accidents or emergencies in relation to occupational safety have been taken into consideration along with the particulars regarding the achievement of desired quality. In case of an emergency or an accident despite the planning performed; the activities to be carried out in order to minimize the effects of such accident and prevent loss of lives and property are planned and documented in the Emergency Instruction. The activities defined in relation to emergencies and the efficiency of such activities are confirmed through periodical demonstrations. Our organization have formed a personnel required in case of emergencies and defined the responsibilities and authorities of such personnel. Effective methods for communication with internal and external authorities in case of emergencies are defined.

All emergencies in Baran Çelik ve Galvaniz Sanayi Limited Şirketi are recorded; their results are analyzed and all plans and programs formed by means of reviewing the implemented activities and documents implemented are revised when necessary. All emergencies and their results are discussed during the

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	37 / 42

management review meetings. Planned or unplanned demonstrations are performed annually within the frame of the procedures and instructions prepared and executed.

Reference Documents

Control of Nonconformities Procedure

Environmental Control Procedure

Emergencies Procedure

Emergency Instruction

Definition and Elimination of Nonconformities Instruction

8.4. Analysis of Data

In our Organization, we collect and analyze data regarding the activities specified below in terms of quality, environment and OHS:

- Activities conducted in relation to customer satisfaction (surveys, complaints, recommendations, etc.)
- Measurement, analysis and improvement applications regarding work characteristics an processes,
- Activities regarding the objectives within the frame of quality, environment and OHS,
- Information on the nonconforming products and nonconformities,
- > Data on the products and services offered,
- Nonconformities regarding environment, quality and OHS,
- > Reports on emergencies, accidents, events, near misses,
- > Results of internal and external audits,
- Records of corrective an preventive actions,
- Activities carried out in relation to the needs and expectations of customers.

The ability to implement the approach of making decision according to data in all stages depends on the accurate and true collection of such data and appropriate statistical methods.

Reference Documents

Customer Relations Instruction

Measurement, Analysis and Improvement Instruction

8.5 Improvement

8.5.1. Continual Improvement

An activity repeated in order to improve the ability to meet requirements is defined as continual improvement. In Baran Çelik ve Galvaniz Sanayi Limited Şirketi, we analyze data through statistical techniques to achieve an improvement trend by means of measurement, monitoring and analyzing data in terms of quality, environment and OHS regarding continual improvement. Our organization perpetuates its commitment to its policy on the permanence of and dependency on continual improvement. Quality, environment and OHS objectives which are measured and monitored periodically according to plans and documents are used for the continual improvement activities. The improvement activities are continued according to the management review

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	38 / 42

outputs. The follow-up of objectives and results of internal audits are taken into consideration and improvement activities are carried out.

The particulars as to the improvement are:

- a) The structure of the Integrated Management System,
- b) Our policy,
- c) Periodical objectives defined regarding quality, environment and OHS,
- d) Results of internal and external audits,
- e) Analyses of the data related to quality, environment and OHS,
- f) Corrective actions,
- g) Preventive actions,
- h) Customer satisfaction,
- i) Conformity of products and services, characteristics and trends regarding quality, environment and OHS.
- j) Performance of our suppliers.

8.5.2. Corrective Action

Corrective actions are carried out in a systematic and planned manner in order to eliminate the nonconformities detected in Baran Çelik ve Galvaniz Sanayi Limited Şirketi and projects and to prevent the nonconformities from repeating.

Predefined corrective actions are performed by relevant authorities for the detected deviations from control points defined as a result of audits, tests and controls performed along with the detected nonconformities to quality, environment and occupational health and safety.

Corrective actions are implemented in case of following situations:

- a) Nonconformities detected following the control of employees and their responsibilities,
- b) Nonconformities detected following the internal and external audits,
- c) Emergencies, accidents, events, etc.
- d) Customer complaints,
- e) Personnel recommendations.

The records of the activities carried out in relation to corrective actions are kept and protected and submitted during management review meetings.

Customer complaints are evaluated and answered to within the frame of Customer Relations Instruction. In addition, in case adequate data is collected, statistical techniques are used for the analysis of such data and these are submitted as a report during the management review meeting.

For the nonconformities revealed by the customer audits and accreditation institutions, we implement corrective actions. All corrective actions are implemented according to the Corrective Action Procedure.

Reference Documents

Corrective Action Procedure

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	39 / 42

Customer Relations Instruction

Measurement, Analysis and Improvement Instruction

Preventive Action

In Baran Çelik ve Galvaniz Sanayi Limited Şirketi, preventive action activities are implemented as predefined in order to eliminate the possibility of potential malfunctions or to minimize the risk of potential malfunctions and to eliminate or minimize the environmental effects, occupational health and safety threats occurring as a result of risk analyses performed

The following activities are taken into consideration as data resource in relation to preventive action activities:

- a) Requests and recommendations of our employees, customers, business partners and suppliers,
- b) Making and implementing technological innovation decisions regarding the infrastructure of our organization,
 - c) Training activities performed in order to increase the awareness of the personnel employed,
 - d) Statistical activities carried out for risky processes or processes which may potentially cause errors,
 - e) Activities carried out in order to minimize the effects of threats In error and risk areas,
 - f) Changes which may be made in regulations and legal requirements,
 - g) Analysis the results of controls performed in control points and as a result of increase in the error risk.

During the decision-making process regarding preventive actions, the personnel responsible for the relevant activity is consulted. All preventive action activities are implemented according to the Preventive Action Procedure. The planned preventive actions are recorded, the efficiency of their results is monitored and all activities regarding preventive actions are discussed in management review meetings.

Reference Documents

Preventive Action Procedure

Customer Relations Instruction

Measurement, Analysis and Improvement Instruction

LIST OF PROCEDURES

PR-01 Document Control Procedure

PR-02 Control of Records Procedure

PR-03 Internal Audit Procedure

PR-04 Control of Nonconformities Procedure

PR-05 Corrective Action Procedure

PR-06 Preventive Action Procedure

PR-07 Environmental Control Procedure

PR-08 Occupational Health and Safety Procedure

PR-09 Emergency Procedure

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



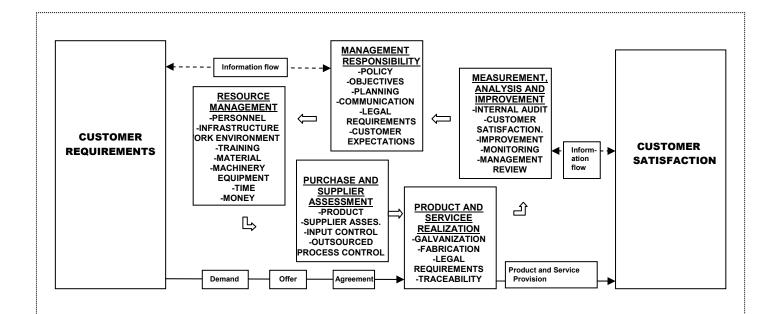
$\label{eq:Baran Steel} \textbf{Baran Steel and Galvanization Industry Ltd. Co.}$

INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	
Page Nr	40 / 42

PROCESS INTERACTION CHART FOR OUR PRODUCTS AND SERVICES



PROCESS INTERACTION CHART OF BARAN STEEL AND GALVANİZATION INDUSTRY LTD. CO. (BARAN ÇELİK VE GALVANİZ SAN. LTD. ŞTİ.)

Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



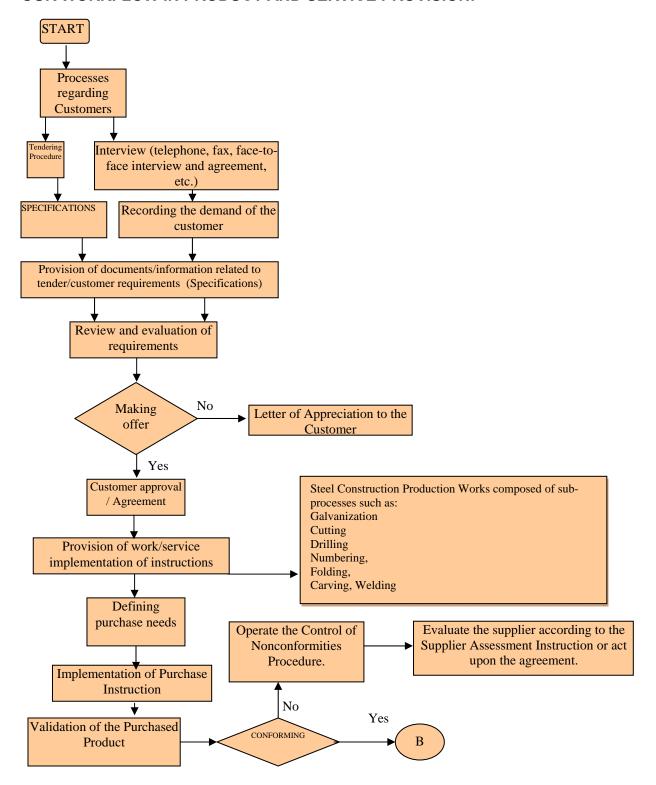
$\label{eq:Baran Steel} \textbf{Baran Steel and Galvanization Industry Ltd. Co.}$

INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	41 / 42

OUR WORKFLOW IN PRODUCT AND SERVICE PROVISION:



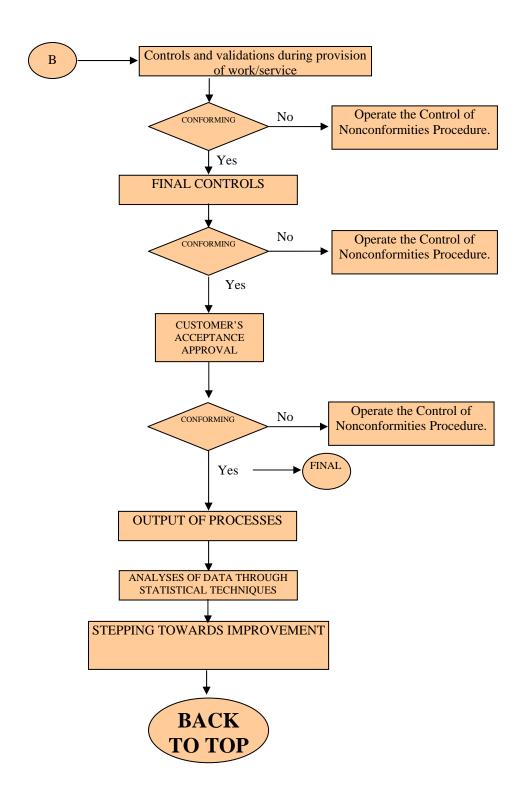
Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN



INTEGRATED MANUAL

Baran Çelik ve Galvaniz Sanayi ve Ticaret Ltd. Şti.

Document Code	EEK-01
Date of Issue	05.12.2014
Date of Revision	00
Page Nr	42 / 42



Organized by	Approved by
Management Representative	General Manager
Hakan SERDAR	Veli BARAN