



**STEEL MELTSHP EQUIPMENT**

## COMPANY PROFILE

**AyTekno** was founded to provide supply and services to Iron and Steel Industry Worldwide supplying complete plant, equipment and spare parts

- Electric Steelmaking Plant
- Bar Mills
- Medium & Light Section Mills
- Reheating Furnaces
- Meltshop Equipment
- Rolling Mills Equipment
- Water Treatment and Distribution Plants
- DCS Dust Collecting Systems
- Ancillary Equipment and Services
- Spare Equipment and Parts

**AyTekno** also provides engineering, consulting and contracting services and supplies to Steelmaking Industry ; from Feasibility Study , detailed specifications up to supply and Installation of the equipment and of process units, covering ; design , engineering, erection, commissioning, training and technical assistance in operation.

- Consulting
- Engineering & Studies
- Project Management
- General Contracting

**AyTekno** is specialized in selling used meltshop and rolling mill equipments .In addition to selling ,we provide services such as consulting ,dismantling and erection of the used equipment..Upon your request we can fulfill replacement ,revamping and overhauling for the equipment you bought as used.

- Consulting
- Dismantling
- Replacement Revamping & Overhauling
- Erection

# **MELTSHOP EQUIPMENTS**

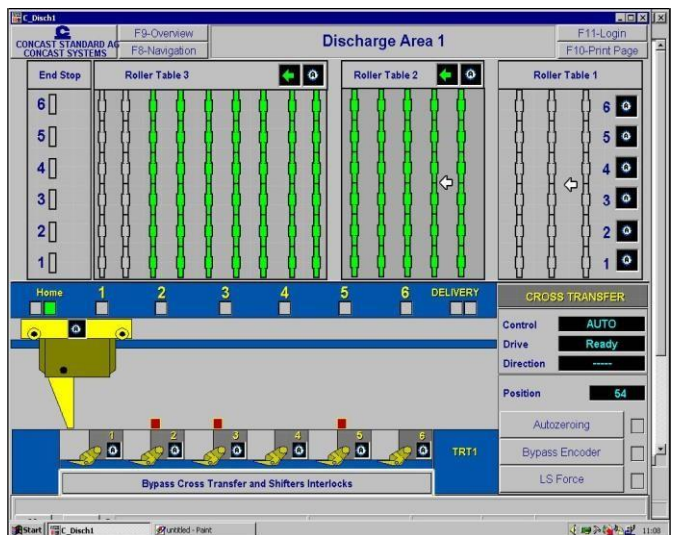
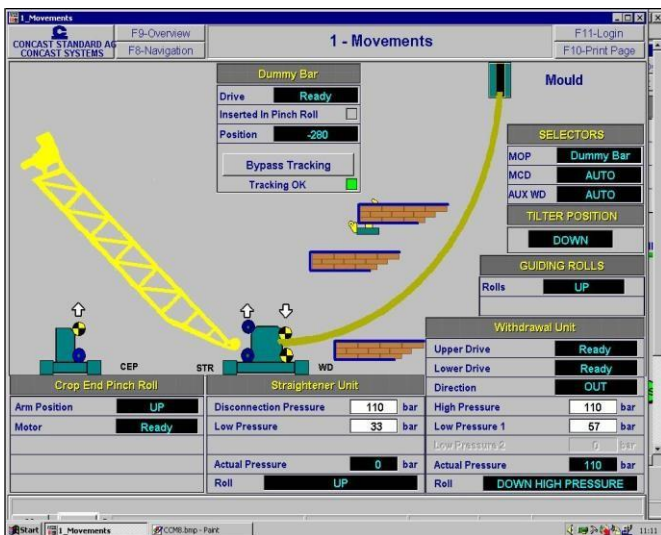
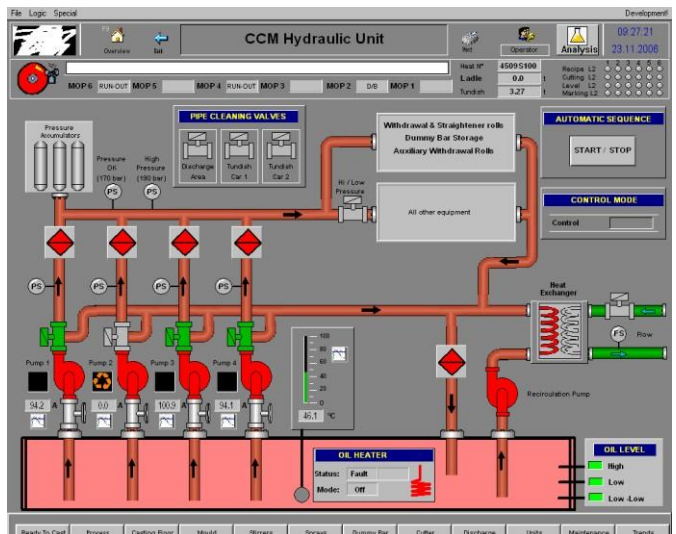


**CCM**





**CCM**



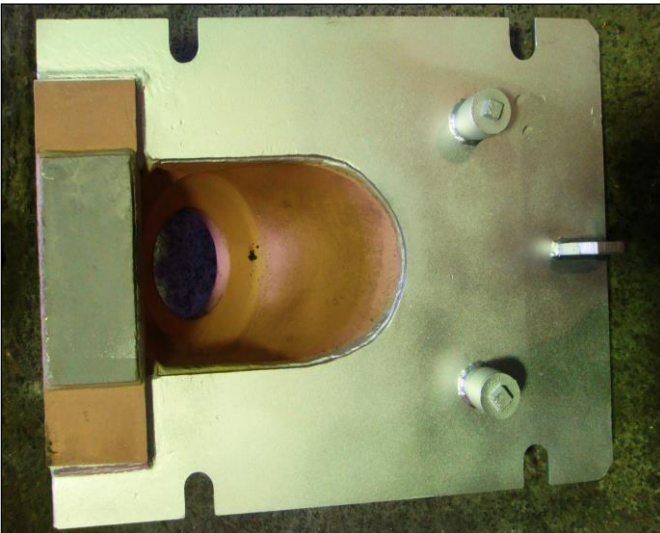
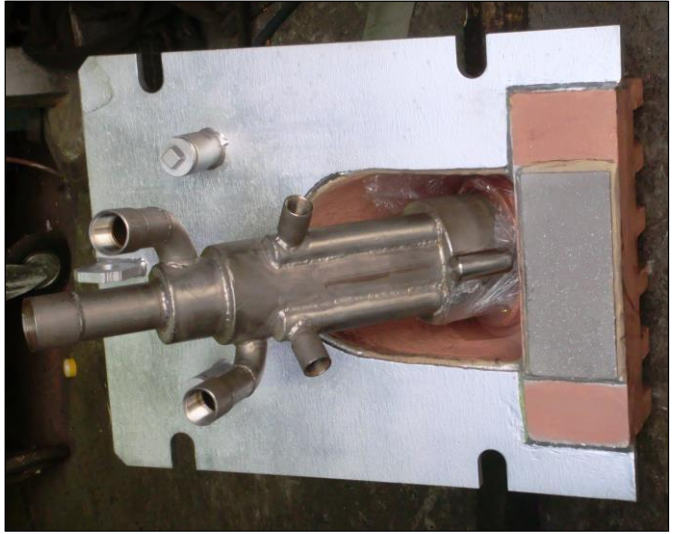


## SCRAP BUCKETS



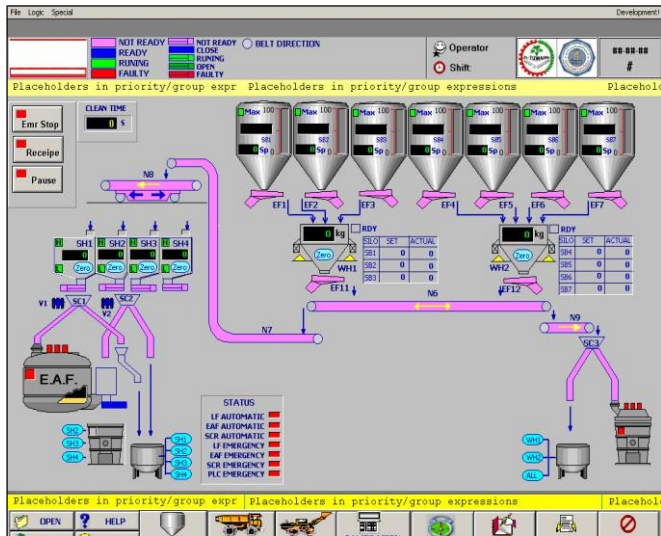


## BURNERS & COOLING BLOCKS





# ALLOY ADDITION SYSTEMS



The screenshot displays a detailed data table for the alloy addition system. The table lists various parameters for different materials and hoppers. The bottom status bar shows 'OPEN', 'HELP', and other system controls.

Silo No	Material Name	Slow (kg)	Stop (kg)	Slow (%)	Fast (%)	Max (kg)	Weight (mc)	Enable
51		0	0	0	0	0	0	ENABLE
52		0	0	0	0	0	0	ENABLE
53		0	0	0	0	0	0	ENABLE
54		0	0	0	0	0	0	ENABLE
55		0	0	0	0	0	0	ENABLE
56		0	0	0	0	0	0	ENABLE
57		0	0	0	0	0	0	ENABLE
58		0	0	0	0	0	0	ENABLE
59		0	0	0	0	0	0	ENABLE
510		0	0	0	0	0	0	ENABLE

Wieg Hoper No	Dead Wieg (kg)	Bins No	Dead Wieg (kg)	Zone	Stop Time	Zone	Stop Time
WH1	0	SH1	0	Clean C	0	Char.LDL	0
WH2	0	SH2	0	Charge	0	Char.LHR	0
WH3	0	SH3	0	SH X	0	Char.SCR	0
WH4	0	SH4	0	Char.EAF	0		0



26.11.2004



## ALLOY ADDITION SYSTEMS





## **WATER TREATMENT PLANT**





## PREHEATERS



**CONTRACTING**

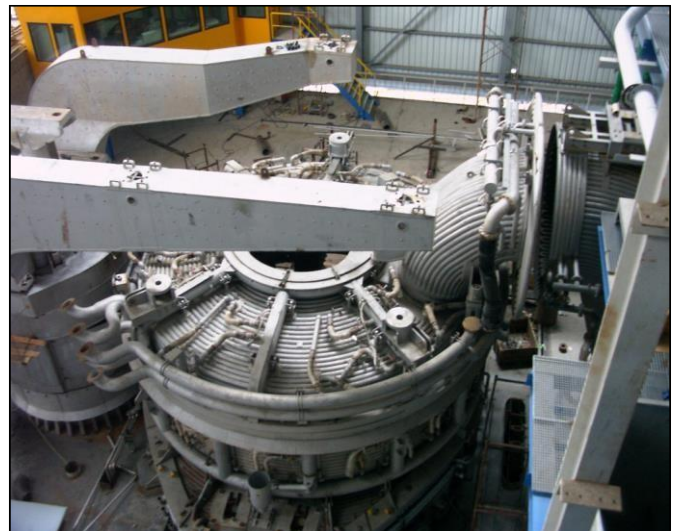
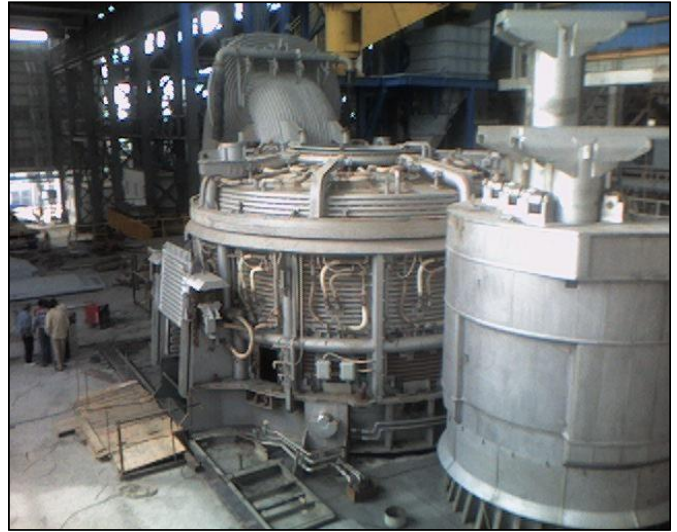


## **50 TON ARC FURNACE/ NURSAN STEEL- TURKEY**





## 140 TON ARC FURNACE/BESHAY STEEL-EGYPT



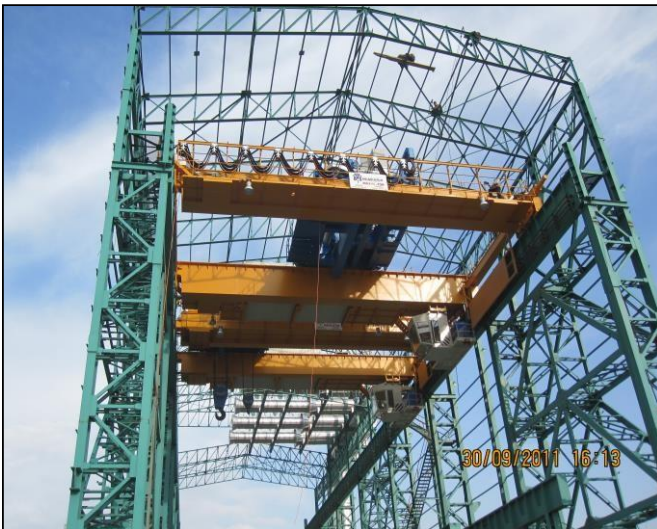


## 100 TON LADLE FURNACE/NURSAN STEEL-TURKEY





## 70 TON MELTSHOP/CANSAN STEEL - TURKEY





## 70 TON MELTSHOP/CANSAN STEEL - TURKEY





## 70 TON MELTSHOP / CANSAN STEEL - TURKEY





## 70 TON MELTSHOP/CANSAN STEEL - TURKEY





## 150 TON MELTSHOP/PASARGAD STEEL-IRAN





## 150 TON MELTSHOP/PASARGAD STEEL-IRAN





## **SINGLE STRAND CCM MANUFACTURING - IRAQ**





## SINGLE STRAND CCM MANUFACTURING - IRAQ





## **SINGLE STRAND CCM COMMISSIONING / SULIMANY - IRAQ**





## CCM COMMISSIONING / SULIMANY - IRAQ





# 100 MVAR SVC/ TOSYALI STEEL - MONTENEGRO





## 100 MVAR SVC/TOSYALI STEEL - MONTENEGRO





## 100 MVAR SVC/TOSYALI STEEL - MONTENEGRO





## 60 TON MELTSHOP / POLTEKS DOGA - IRAQ





## 60 TON MELTSHOP / POLTEKS DOGA - IRAQ





## 60 TON MELTSHOP / POLTEKS DOGA - IRAQ





## 45 TON MELTSHOP KIRDEMİR /TURKEY





## 45 TON MELTSHOP KIRDEMİR /TURKEY



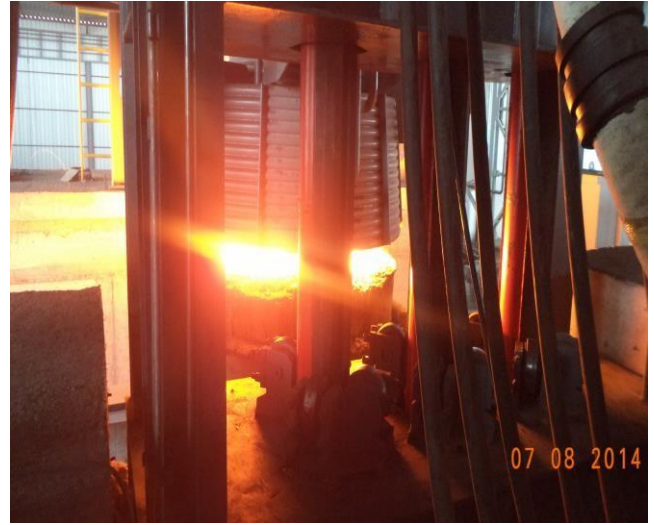


## 15 TON MELTSHOP(LF) EGEDEMİR /TURKEY





## 15 TON MELTSHOP(LF) EGEDEMİR /TURKEY



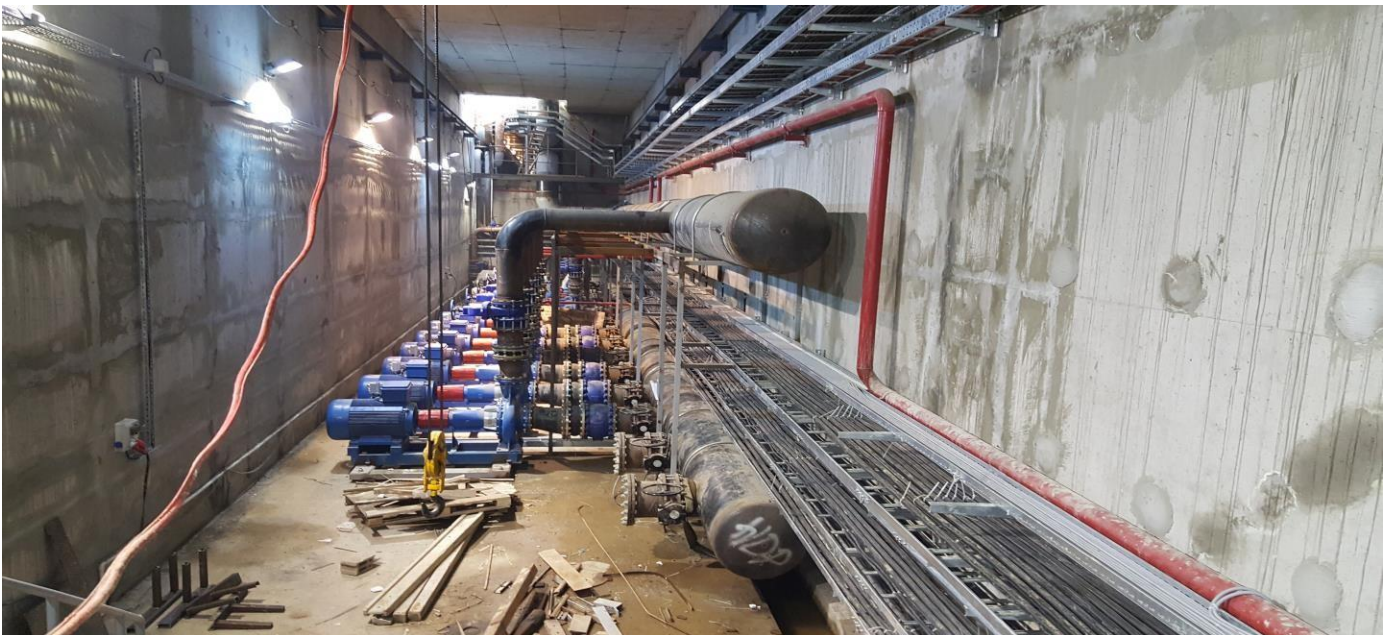


**70 TON MELTSHOP(MV/LV DISTRIBUTION) SIDDIK  
KARDESLER /TURKEY**





**70 TON MELTSHOP(MV/LV DISTRIBUTION) SIDDIK  
KARDESLER /TURKEY**





## 70 TON MELTSHOPSİDDİK KARDESLER /TURKEY





## CUT TO LENGHT LINE/ALSHAHIN-SAUDI ARABIA





## **CUT TO LENGHT LINE/ALSHAHIN-SAUDI ARABIA**





**DISMANTLING WORKS**

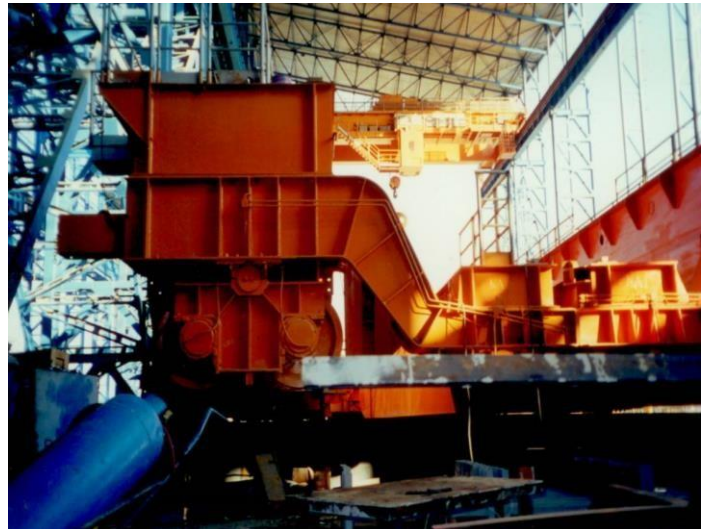


## **DISMANTLING OF MELTSHOP CRANES IN MILAN/ KAPTAN STEEL - TURKEY**





## **DISMANTLING OF MELTSHOP CRANES IN MILAN/ KAPTAN STEEL - TURKEY**





## **DISMANTLING OF MELTSHOP CRANES IN MILAN/ KAPTAN STEEL - TURKEY**





## **DISMANTLING OF 45 TON COMPLETE MELTSHOP / TUBER STEEL - TURKEY**



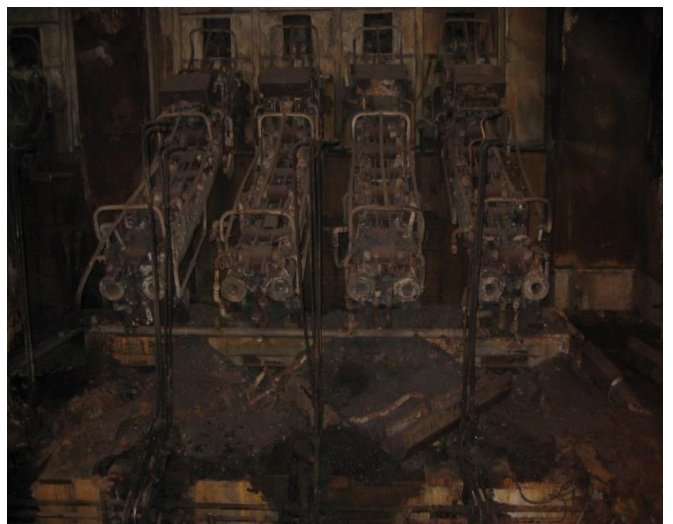
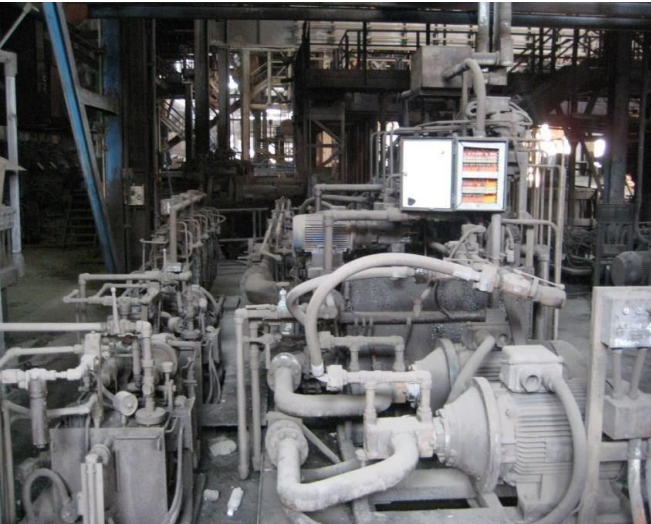


## 8 STRAND CCM /CASPIAN STEEL - IRAN



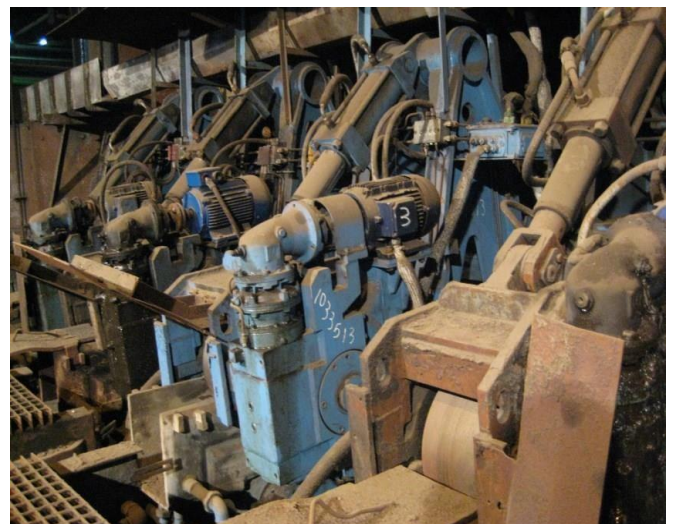
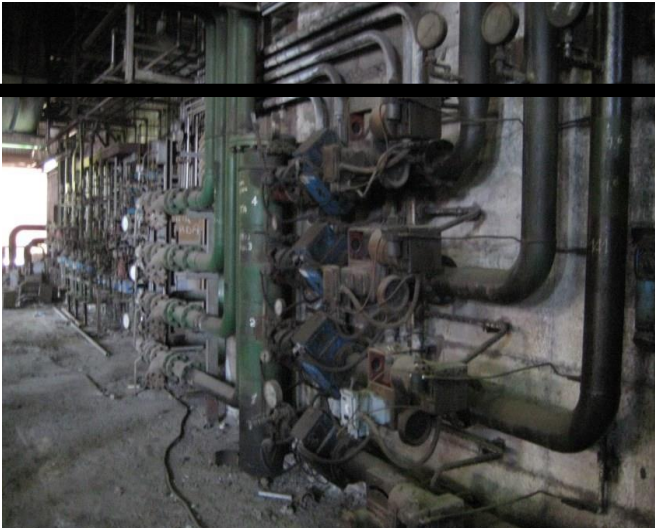


## 8 STRAND CCM/CASPIAN STEEL - IRAN





## 8 STRAND CCM/CASPIAN STEEL - IRAN





## **AUXILIARIES**

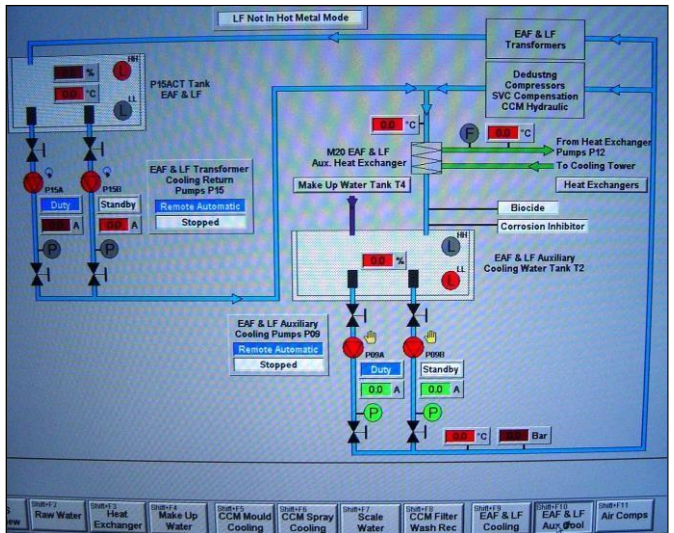


## WATER SYSTEMS



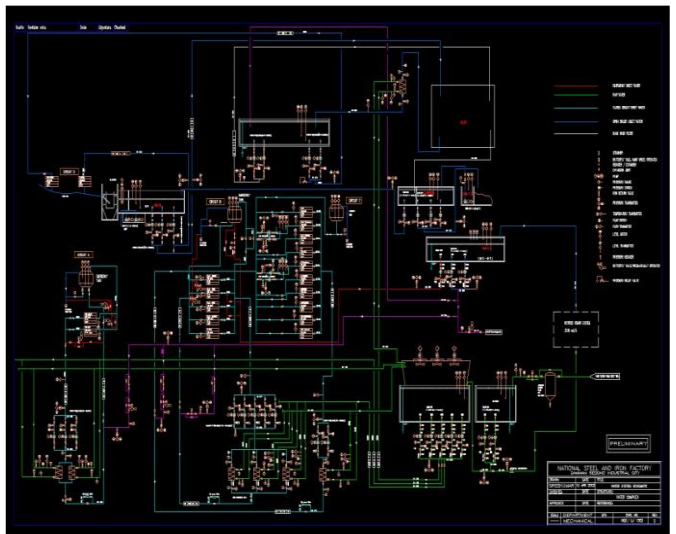
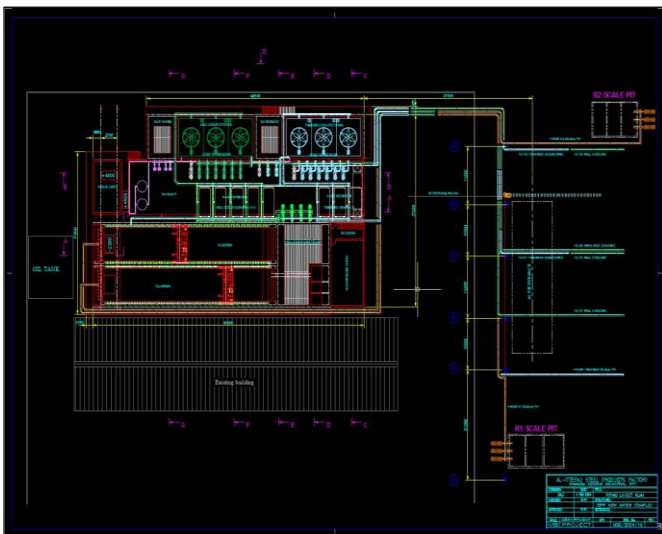


## WATER SYSTEMS



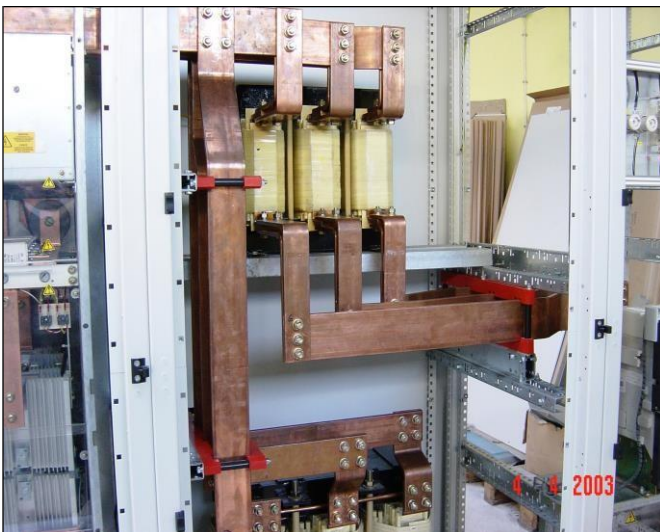


## WATER SYSTEMS



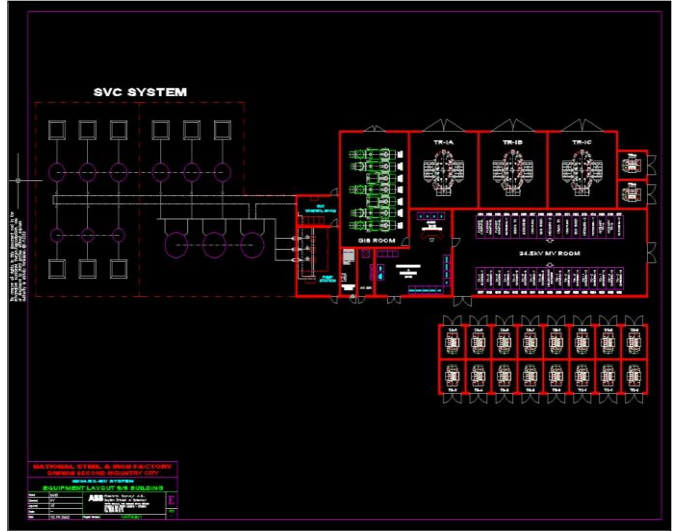


## ELECTRIC SYSTEMS





## ELECTRIC SYSTEMS





## HYDRAULICS





# **ENGINEERING & STUDIES**

## **STUDIES**

- Feasibility Studies
- Market Survey
- Capital Cost Estimates
- Production Cost Estimates
- Financial Planning
- Restructuring & Rehabilitation

## **ENGINEERING**

- Plant & Process Layout Covering All Infrastructure & Details
- Arc and Ladle Furnace
- Continuous Casting Machine
- Dust Collection Plant
- Water Treatment Plants
- Reheating Furnace
- Utility Design
- Electrical System Design
- Process Automation & Design
- Slit Rolling
- Thermoprocessing



## **PROJECT MANAGEMENT**

- Cost Estimating & Control
- Planning & Scheduling
- Tender Documents & Bidding
- Procurement & Contracts
- Supervision During Erection & Construction
- Assistance in Commissioning
- Recruitment & Training
- Assistance During Operation

## **CONSULTING SERVICES**

- Organization Plan & Manning Schedule
- Process & Products Optimisation
- Cost Analysis & Optimisation
- Assistance in Equipment Procurement
- Assistance for Decision on Technology, Process & Layouts
- New Business Developments



## **DISTRIBUTORSHIP**

### 1 – YILDIZ KAZAN SANAYI A.S. / TURKEY

- ❖ Scotch type boilers
- ❖ Fludized bed boilers
- ❖ Water tube boilers
- ❖ Hot oil generator
- ❖ Hot water boilers
- ❖ Heat recovery boilers

### 2- POLY METAL A.S. / TURKEY

- ❖ Burners for EAF
- ❖ Blast furnaces spare parts
- ❖ Arc furnaces spare parts
- ❖ Valve and pumps spare parts
- ❖ Artistic casting

### 3 – KARDESLER ELEKTRİK LTD. STİ / TURKEY

- ❖ Dc electric motor production for rolling mills

### 4 – ERDEM PANO SAN. TİC. LTD. STİ / TURKEY

- ❖ MV/LV electrical panels
- ❖ Lighting panels
- ❖ Compensation panels
- ❖ MCC panels
- ❖ PLC panels
- ❖ Automation panels
- ❖ Measuring panels
- ❖ Piano type electrical panels



## REFERENCES

### ENGINEERING & AUTOMATION

#### 1 – TUBER IRON & STEEL PLANT 45 TON / TURKEY

- ✓ Converting 15 ton EAF to LF
- ✓ Renovation of 10 ton, 45 ton & 80 ton overhead cranes
- ✓ Renovation of MV & LV substation

#### 2 – YESILYURT IRON & STEEL PLANT 50 TON / TURKEY

- ✓ Project management
- ✓ MV/LV substation
- ✓ Medium and low voltage distribution system
- ✓ Electrical & automation system of water treatment plant
- ✓ Emergency supply system
- ✓ Renovation of arc and ladle furnace electrical system
- ✓ Meltshop halls & buildings lighting system

#### 3 – KAPTAN IRON & STEEL PLANT 100 TON / TURKEY

- ✓ Layout of complete meltshop
- ✓ 380 kV switchyard & 155 MVA stepdown transformer
- ✓ Switchyard for 80 MVA power plant
- ✓ Medium and low voltage distribution system
- ✓ Emergency supply system
- ✓ Capacity increasing of EAF from 100 ton to 120 ton

#### 4 – KAPTAN ROLLING MILL 60 TON/H

- ✓ MV/LV Distribution system
- ✓ Reheating furnace electrical & automation system
- ✓ MCC & control panels
- ✓ Engineering for renovation and capacity increasing of complete rolling mill

#### 5 – AL ITTIFAQ IRON & STEEL PLANT 60 TON / SAUDI ARABIA

- ✓ Electrical & automation design of ferro alloy plant

#### 6 – NURSAN METALURJİ 100 TON/ TURKEY

- ✓ Electrical and mechanical engineering of 100 ton ladle furnace

#### 7 – BESHAY IRON & STEEL PLANT 140 TON / EGYPT

- ✓ Carbon injection system and carbon line
- ✓ Carbon plant
- ✓ Automation system of arc and ladle furnace
- ✓ Emergency supply system

#### 8 – CANSAN METALURGY IRON & STEEL PLANT 70 TON / TURKEY

- ✓ Project Management
- ✓ MV/LV electrical panels
- ✓ Automation system of complete meltshop

#### 9 – CASPIAN ABHAR MELTING AND ROLLING MILL 70 TON / IRAN

- ✓ Project management



## REFERENCES

- ✓ Basic and detailed civil, electrical and mechanical engineering of all units in meltshop
  - ✓ Basic and detailed civil, electrical and mechanical engineering of 6 strand CCM
  - ✓ Basic and detailed civil, electrical and mechanical engineering of water treatment plant of CCM
  - ✓ Layout of complete meltshop
  - ✓ Engineering for renovation of existing 70 ton/h capacity rolling mill
- 10 – POLTEKS DOGA STEEL 60 TON MELTSHP ERBİL/IRAK
- ✓ Basic and detailed engineering of Water Treatment Plant
- 11 – KIRIKKALE IRON & STEEL PLANT KIRIKKALE/TURKEY
- ✓ Project coordinating of whole steel plant
  - ✓ Basic and detailed engineering MV/LV Distribution System
  - ✓ Electrical Workshop engineering of 30 t/h capacity rolling mill
- 12 – SİDDİK KARDESLER IRON & STEEL PLANT KOCAELİ/TURKEY
- ✓ Basic and detailed engineering of MV & LV Distribution System and Water Treatment Plant
  - ✓ Project coordinating of whole steel making plant
  - ✓ Design of 3 copper clad electrode arms and delta closure busbars for 120/144 MVA transformers
- 13 – BEKAP METAL SANAYİ KOCAELİ/TURKEY
- ✓ Basic and detailed engineering of MV & LV Distribution System
  - ✓ Workshop engineering of 4HI cold rolling mill
- 14 – MMG 2 SET 30 TON INDUCTION FURNACES POTİ/GEORGIA
- ✓ Basic and detailed engineering of 12 kV MV Distribution System
  - ✓ 2 strand CCM electrical and automation design
- 15 – YUZHSTAL STEEL PLANT 2x50 TON ROSTOV/RUSSIA
- ✓ Basic and detailed engineering of MV & LV Distribution System and Water Treatment Plant
  - ✓ Mechanical and electrical design of Fume Treatment Plant
  - ✓ Project coordinating of whole steel making plant
- (This Project is continuing)**

## ERECTION AND COMMISSIONING

### 1 – TUBER IRON & STEEL PLANT 45 TON / TURKEY

- ✓ 2X250000 m<sup>3</sup>/h dedusting plant
- ✓ 10 MVar 3. harmonic filter
- ✓ Overhead cranes
- ✓ Water treatment plant

### 2 – YESİLYURT IRON & STEEL PLANT 50 TON / TURKEY

- ✓ Dismantling of complete meltshop(Tuber Iron and Steel) including steel building and reassembling it as Yeşilyurt in Samsun/Turkey
- ✓ Medium and low voltage distribution system
- ✓ Arc & Ladle furnace
- ✓ Continuous casting machine
- ✓ Overhead cranes
- ✓ Dust collection plant
- ✓ PSA oxygen plant 2100 m<sup>3</sup>/h



## REFERENCES

### 3 – KAPTAN IRON & STEEL PLANT 100 TON / TURKEY

- ✓ Dismantling of 210 ton teeming, 100 ton charging, 50 ton tundish and 20 ton billet cranes in Milan/Italy and reassembling them in Kaptan plant area
- ✓ 380 kV switchyard & 155 MVA stepdown transformer
- ✓ MV/LV distribution center
- ✓ Arc & Ladle furnace
- ✓ Continuous casting machine
- ✓ Overhead cranes
- ✓ Dust collection plant
- ✓ Cryogenic oxygen plant 5000 m<sup>3</sup>/h
- ✓ Ferro alloy plant
- ✓ Static Var Compensation 100 MVar

### 4 – KAPTAN ROLLING MILL 60 TON/H

Renovation and capacity increasing for the following unit

- ✓ MV/LV Distribution system
- ✓ Reheating furnace
- ✓ Rolling mill groups
- ✓ TMT
- ✓ Cooling bed
- ✓ Bar handling
- ✓ Piping

### 5 – AL ITTIFAQ IRON & STEEL PLANT 60 TON / SAUDI ARABIA

- ✓ Ferro alloy plant

### 6 – NURSAN METALURJİ 100 TON/ TURKEY

- ✓ Electrical and mechanical erection of 100 ton ladle furnace

### 7 – BESHAY IRON & STEEL PLANT 140 TON / EGYPT

- ✓ Medium and low voltage distribution system
- ✓ Arc & Ladle furnace
- ✓ Continuous casting machine
- ✓ Overhead cranes
- ✓ Dust collection plant
- ✓ Cryogenic oxygen plant 6000 m<sup>3</sup>/h
- ✓ Lime plant
- ✓ Carbon plant and carbon line

### 8 – ALSHAHIN COMPANY FOR METAL INDUSTRY

- ✓ Cut to length line
- ✓ MV / LV Distribution system
- ✓ Compressor system



## REFERENCES

### 9 – CANSAN METALURGY IRON & STEEL PLANT 70 TON / TURKEY

- ✓ MV/LV electrical panels, transformers
- ✓ Automation system of complete meltshop including EAF, LF , dedusting, water treatment plant, CCM, ,scrap and ladle cars, ladle preheating sytems
- ✓ Mechanical erection works of EAF, LF, CCM, dedusting and water treatment system

### 10 – PASARGAD IRON & STEEL PLANT(DEDUSTING AND OXYGEN PLANT) 140 TON / IRAN

- ✓ MV/LV electrical panels and transformers
- ✓ Earthing and cable tray installation

### 11- TWANA STEEL IRON & STEEL PLANT 5 TON/IRAK

- ✓ Single strand CCM
- ✓ Water treatment plant of one strand CCM

### 12 - CASPIAN ABHAR MELTING AND ROLLING MILL 70 TON / IRAN

- ✓ Dismantling of 8 strand CCM in Genova/Italy and reassembling them as 6 strand in Abhar/Iran

### 13 – POLTEKS DOGA STEEL 60 TON MELTSHP /IRAK

- ✓ Electrical erection works of complete meltshop(arc and ladle furnaces,dedusting,RMH,CCM,MV building,cranes,oxygen plant,wtp of meltshop and rolling mill
- ✓ Electrical erection of rolling mill water treatment plant

### 14 – TOSYALI CELİK NIKSIC 60TON /MONTENEGRO

- ✓ Erection of 100 MVar SVC(Static VAR Compensation)

### 15 – KIRIKKALE IRON & STEEL PLANT 45 TON/TURKEY

- ✓ Complete rolling mill electrical works installation
- ✓ 20 MVar SVC erection
- ✓ Electrical installation of meltshop cranes

### 16 – EGEDEMİR IRON & STEEL PLANT 15 TON/TURKEY

- ✓ 15 ton/h capacity ladle furnace complete electrical installation, mechanical & piping works erection

### 17 – SİDDİK KARDESLER IRON & STEEL PLANT 70 TON/TURKEY

- ✓ 70 ton/h capacity steel making plant MV/LV distribution systems(MV panels, transformers and low voltage panels , interconnection cables and cable trays) and electrical installation of water treatment plant
- ✓ 3500 m3/h capacity oxygen plant complete(MV/LV) electrical installation works

### 18 – TOSYALI TOYO ÇELİK A.Ş. OSMANİYE/TURKEY

Cable laying, termination and test of termination



## REFERENCES

### 19 – TOSYALI TOYO ÇELİK A.Ş. OSMANİYE/TURKEY

- ✓ 27000 KVAR Static VAR Compensation complete erection

### 20 – BEKAP METAL SANAYİ KOCAELİ/TURKEY

- ✓ Installation of MV & LV Distribution System
- ✓ Installation of 4HI cold rolling mill electrical system
- ✓ Installation of mechanical equipment of 4HI cold rolling mill

### 21 – SİDDİK KARDESLER IRON & STEEL PLANT 70 TON/TURKEY

- ✓ Installation of 2x 4000 KVA water treatment plant transformers
- ✓ Installation of medium voltage cubicles of water treatment plant
- ✓ Installation of LV & MCC panels of water treatment plant

### 22 – MMG 2SET 30 TON INDUCTION FURNACES POTİ/GEORGIA

- ✓ Installation of 2 set 12 kV MV Distribution System
- ✓ Installation of 2 strand CCM electrical and automation panels and cabling and commissioning
- ✓ Installation of LF electrical and automation panels and commissioning
- ✓ Installation of 30 ton induction furnace electrical and automation panels and commissioning with Inductotherm

### 23 – SIVAS IRON & STEEL PLANT SIVAS/TURKEY

- ✓ Installation of ladle furnace electrical and automation panels and cabling and commissioning of electrode regulation system and other utilities

### 24 – EL METAL IRON & STEEL PLANT BAKU/AZERBAIJAN

- ✓ Providing of PLC and SCADA software and commissioning of 2 strand CCM electrical and automation panels

### 25 – KILIÇLAR DEMİR ÇELİK İZMİR/TURKEY

- ✓ Providing of PLC and SCADA software and commissioning of 3 strand CCM electrical and automation panels

### 26 – MESCIER STEEL PLANT 100 TON BARTIN /TURKEY

- ✓ Installation of cable trays , cables and all connection and test of EAF, LF, Dust collection system and CCM

### 27 - YUZHSTAL STEEL PLANT 2X50 TON ROSTOV/RUSSIA

- ✓ Installation of MV & LV Distribution System
- ✓ Erection of electrical and mechanical systems of EAF and LF
- ✓ Erection of Fume Treatment Plant
- ✓ Installation of electrical and mechanical systems of Water treatment Plant  
**(This project is continuing)**

## MANUFACTURING

### 1 – NURSAN METALURJİ 100 TON/ TURKEY

- ✓ LF 100 ton (complete mechanic equipment and electrical and automation panels)

### 2 – ALSHAHIN COMPANY FOR METAL INDUSTRY

- ✓ Electrical and automation panels



## REFERENCES

### MANUFACTURING

1 – NURSAN METALURJİ 100 TON/ TURKEY

- ✓ LF 100 ton (complete mechanic equipment and electrical and automation panels)

2 – ALSHAHIN COMPANY FOR METAL INDUSTRY

- ✓ Electrical and automation panels

3 – AL ITTIFAQ IRON & STEEL PLANT 60 TON / SAUDI ARABIA

- ✓ Electrical and automation panels of ferro alloy plant
- ✓ Electrical and automation panels of horizontal and vertical ladle preheaters

4 – CANSAN METALURGY IRON & STEEL PLANT 70 TON / TURKEY

- ✓ MV/LV and automation panels of all meltshop units

5 – TWANA STEEL IRON & STEEL PLANT / IRAK

- ✓ Complete single strand CCM with electrical and mechanical equipment
- ✓ Water treatment plant of one strand CCM

6 – POLTEKS DOGA STEEL 60 TON MELTSHOP /IRAK

- ✓ IDB,MCC and automation panels of Water Treatment Plant

7 – S.C. LABORATOR SIDEX S.R.L. / ROMANIA

- ✓ Complete single strand CCM with electrical and mechanical equipment

8 – ILHAN DEMİR ÇELİK ROLLING MILL / TURKEY

- ✓ Complete low voltage compensation system

9 – BEKAP METAL SANAYİ KOCAELİ/TURKEY

- ✓ Supplying of MV & LV Distribution System panels and 2500 KVA 34.5/0.63 kV transformer

10 – SİDDİK KARDESLER IRON & STEEL PLANT 70 TON/TURKEY

- ✓ Supplying of 2x4000 KVA water treatment plant
- ✓ Supplying of MV panels of water treatment system
- ✓ Supplying of 3 pcs. current carrying copper-cladded electrode arms
- ✓ Supplying of delta closure busbars of EAF for a 120/144 MVA transformer

11 – MMG 2SET 30 TON INDUCTION FURNACES POTI/GEORGIA

- ✓ Supplying of 2 set 12 kV MV Distribution System
- ✓ Supplying of 2 strand CCM electrical and automation panels and cables
- ✓ Supplying of ladle furnace electrical and automation panels



## REFERENCES

12 - YUZHSTAL STEEL PLANT 2x50 TON ROSTOV/RUSSIA

- ✓ Supplying of 6 pcs. high current cables of LF
- ✓ Supplying of EAF burner copper panels  
**(This project is continuing)**



# AYTEKNO

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