

Automated Nickel-Chrome Electroplating Line

Equipment overview for prospective buyers | Located in Türkiye

Technical specifications

Location	Türkiye
Refurbishment	Completely refurbished in 2025
Coating surface area	400–450 dm²; physical part dimensions not specified
Maximum rack load	1,000 kg per rack
Production capacity	8,000 dm²/hour
Electricity consumption	80 kWh; measurement period not specified
Installed footprint	40,000 × 6,000 mm (40 × 6 m; 240 m²)
Current condition	Dismantled and ready for loading; operational before dismantling, according to the seller
Number of process baths	45, as confirmed by the seller
Nickel rectifiers	6 × 1,300 A, 15 V
Chrome rectifiers	2 × 4,500 A, 15 V
Additional rectifier	1 × 3,000 A, 15 V for electrolytic degreasing
Nominal tank length in schedule	4,200 mm; usable part dimensions not specified
Automation	Screens shown for heat, robot steps and motion, dosing, pumps, rectifiers and reports

Equipment included in the sale

- Process baths
- Filters
- Rectifiers
- Hot-water boiler
- Purified-water system
- Dosing pumps

All equipment is dismantled and ready for loading. The buyer is responsible for transport and commissioning. The equipment schedule also names three MEFIAG nickel pumps with a stated maximum flow of 30 m³/h each.

Grouped equipment schedule

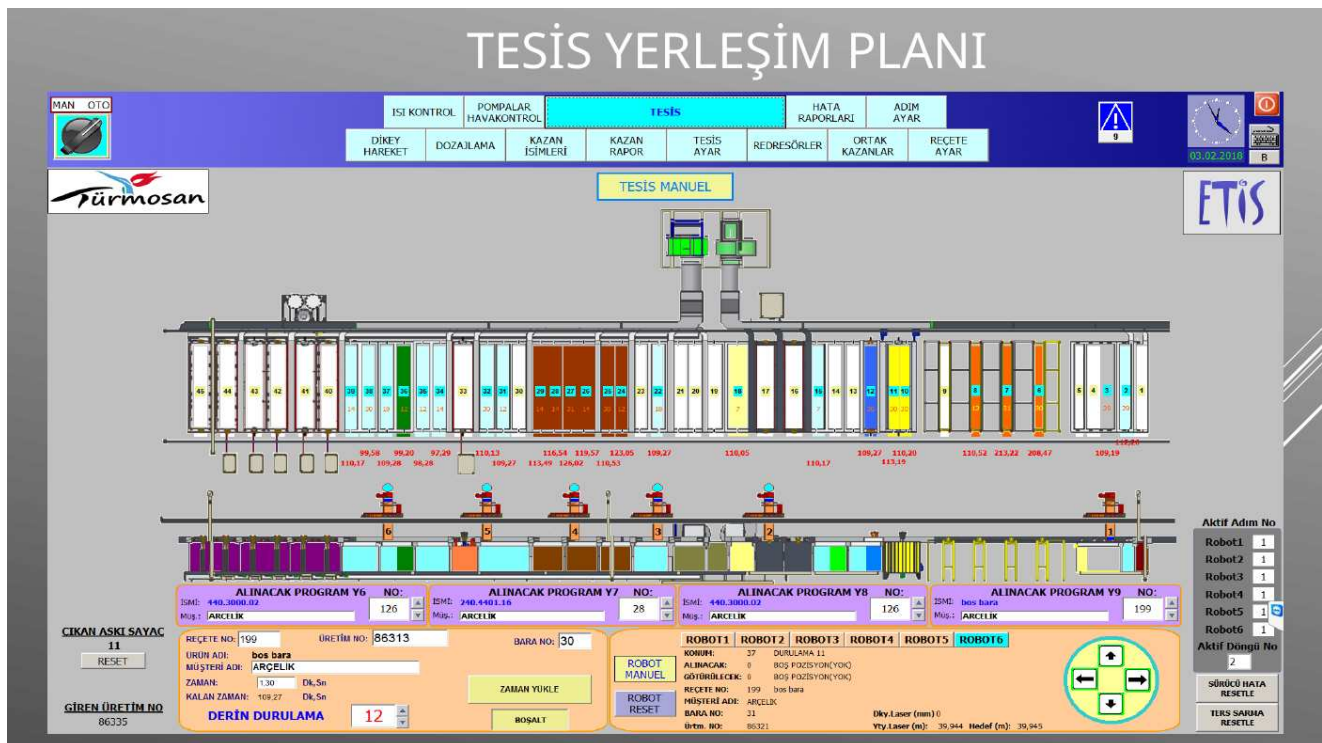
The seller confirms 45 process baths. The original schedule below groups equipment under 33 MAK codes and is not an individual listing of all 45 baths. Names and volumes follow slides 22-23 of the presentation.

No.	Equipment	Volume as listed
01	Loading/unloading	—
02	Ultrasonic degreasing	3,658 L
03	Hot degreasing, baths 1-2	7,098 L
04-05	Rinse baths	3,276 L each
06-08	Acid degreasing, baths 1-6	6,989 L per listed pair
09-11	Rinse baths	3,276 L each
12	Electrolytic degreasing	5,460 L
13-14	Rinse baths	3,276 L each
15	Pickling	3,276 L
16-18	Rinse baths	3,276 L each
19-21	Nickel baths 1-6	11,193 L per listed pair
22	Activation	5,187 L
23	Chrome baths 1-2	11,193 L per listed pair
24	Bisulfite bath	3,276 L
25-26	Rinse baths	3,276 L each
27	Deep rinse	3,906 L
28	Drying bath / chamber	volume not stated
29-30	Stripping baths 1-2	3,385 L each
31	Stripping bath 3	2,566 L
32-33	Stripping rinse baths	2,184 L each

Schedule note

Several MAK codes group two or more baths. The automation screen displays positions numbered through 45. MAK.32 and MAK.33 both carry the same “stripping rinse bath 1” description in the source list.

Extracts from the supplied presentation. Screenshots show a control interface, but do not independently verify operation before dismantling.



Automation overview and station layout (source slide 2)



FILTRE



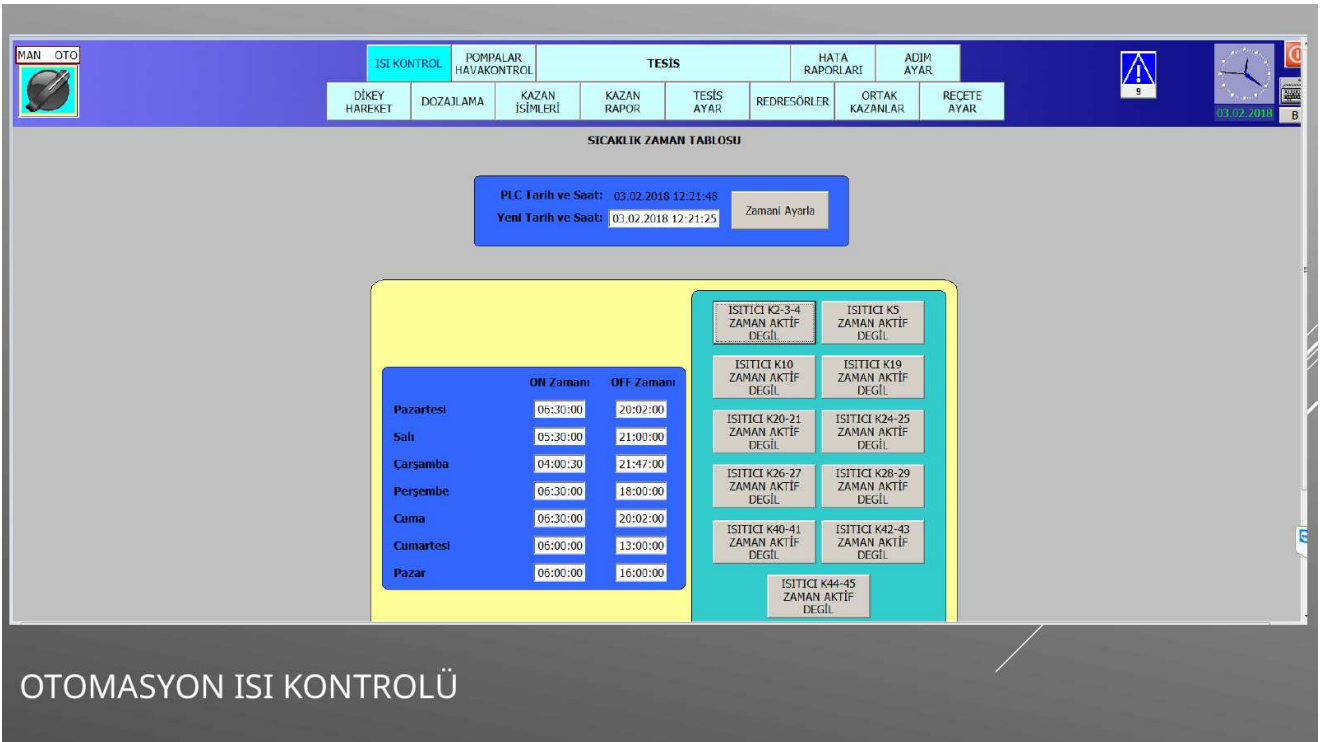
REDRESÖRLER

Filter and rectifier photographs (source slide 24)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Temperature control



Original interface capture (source slide 10)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Line settings, screen 1

MAN OTG

İSİ KONTROL POMPALAR HAVAKONTROL TESİS HATA RAPORLARI ADIM AYAR

DIKEY HAREKET DOZAJLAMA KAZAN İSİMLERİ KAZAN RAPOR TESİS AYAR REDRESÖRLER ORTAK KAZANLAR RECETE AYAR

TESİS AYARLARI

IP için internet Adresleri:
<http://www.ipadresimmedir.com>
<http://www.ipadresim.com>
<http://www.ip-numaram.com>
<http://ip.elookat.com>
<http://www.whatismyip.com>

YATAY HAREKET İVME BİLGİLERİ

	AĞIR	NORMAL	HAFİF
ALTTA KALKIŞ İVMESİ (mm/s ²) :	750	750	750
ÜSTTE KALKIŞ İVMESİ (mm/s ²) :	400	400	400
ALTTA DURUŞ İVMESİ (mm/s ²) :	560	560	560
ÜSTTE DURUŞ İVMESİ (mm/s ²) :	270	270	270

YATAY HAREKET HIZ BİLGİLERİ

	AĞIR	NORMAL	HAFİF
ALTTAKİ HIZ (mm/s) :	750	750	750
ÜSTTEKİ HIZ (mm/s) :	750	750	750

YATAY HAREKET AYAR HIZI ORANI (%): 25

GİREN ÜRETİM NO
86335

TESİS SAĞMA
RESETLE

SÜRÜCÜ HATA
RESETLE

YATAY HAREKET MİNİMUM VOLTAJ

	AĞIR	NORMAL	HAFİF
R1 İLERİ	0,15	0,15	0,15
R1 GERİ	0,15	0,15	0,15
R2 İLERİ	0,15	0,15	0,15
R2 GERİ	0,15	0,15	0,15
R3 İLERİ	0,15	0,15	0,15
R3 GERİ	0,15	0,15	0,15
R4 İLERİ	0,15	0,15	0,15
R4 GERİ	0,15	0,15	0,15
R5 İLERİ	0,15	0,15	0,15
R5 GERİ	0,15	0,15	0,15
R6 İLERİ	0,15	0,15	0,15
R6 GERİ	0,15	0,15	0,15

ŞİFRE DEĞİŞİKUÇÜ

IP Göster

ALARM MESAJLARI
GEÇMİŞİNİ SİL

KAZAN
POZİSYONLARI

POZİSYONLAMA
KATSAYILARI

DIKEY MESAFE
HIZ AYARLARI

PLC deki
REJETLER

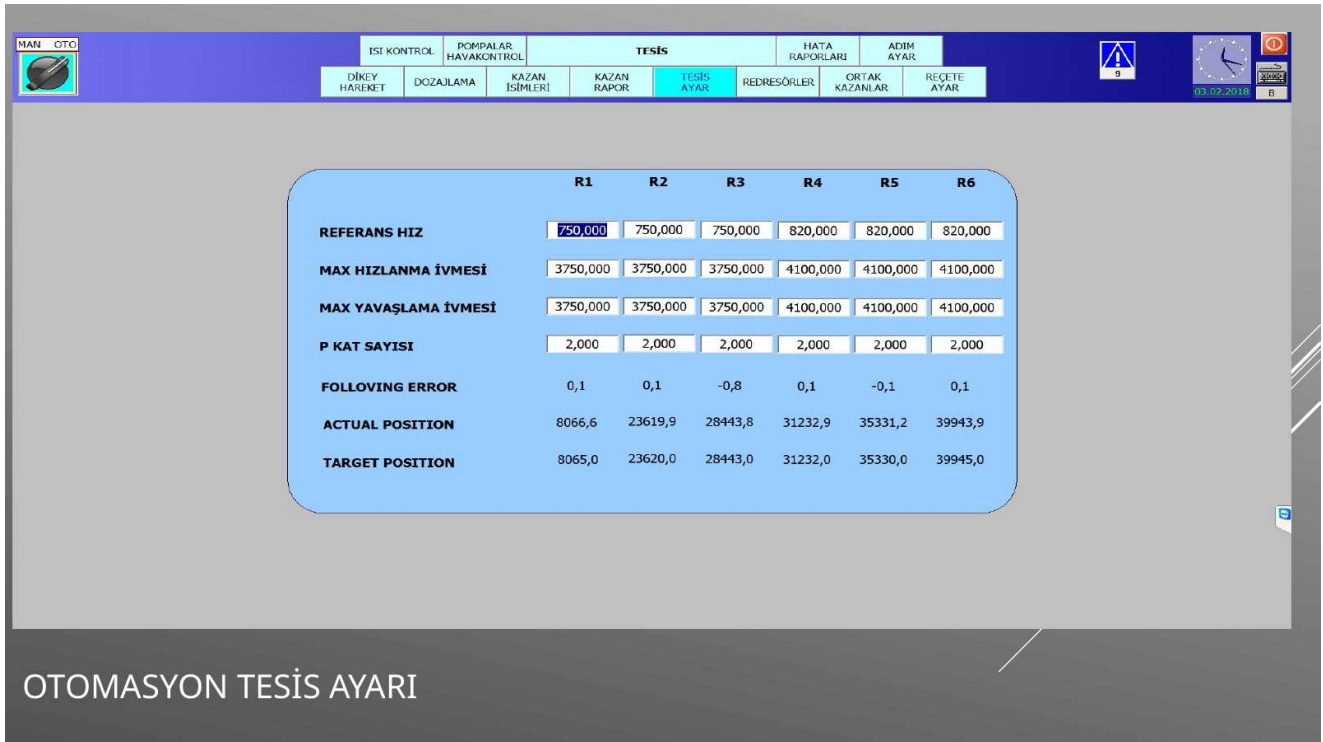
OTOMASYON TESİS AYARI

Original interface capture (source slide 11)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Line settings, screen 2



Original interface capture (source slide 12)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Robot step settings

OTOMASYON ROBOT ADIM AYARLARI

ROBOT1

Adım	İşlem	Zaman (s)
1	Git	6
2	Kaldır	Süzül(s) 0
3	Götür	20
4	Git	10
5	Kaldır	Süzül(s) 2
6	Götür	6
7	Git	12
8	Kaldır	Süzül(s) 0
9	Götür	10
10	Git	6
11	Kaldır	Süzül(s) 0
12	Götür	3

ROBOT2

Adım	İşlem	Zaman (s)
1	Git	22
2	Kaldır	Süzül(s) 1
3	Götür	23
4	Git	15
5	Kaldır	Süzül(s) 0
6	Götür	14
7	Git	14
8	Kaldır	Süzül(s) 0
9	Götür	13
10	Git	13
11	Kaldır	Süzül(s) 0
12	Götür	12

ROBOT3

Adım	İşlem	Zaman (s)
1	Git	24
2	Kaldır	Süzül(s) 2
3	Götür	30
4	Git	18
5	Kaldır	Süzül(s) 0
6	Götür	16
7	Git	16
8	Kaldır	Süzül(s) 3
9	Götür	15
10	Git	20
11	Kaldır	Süzül(s) 0
12	Götür	22

ROBOT4

Adım	İşlem	Zaman (s)
1	Git	33
2	Kaldır	Süzül(s) 0
3	Götür	34
4	Git	23
5	Kaldır	Süzül(s) 1
6	Götür	24
7	Git	32
8	Kaldır	Süzül(s) 1
9	Götür	18
10	Git	30
11	Kaldır	Süzül(s) 1
12	Götür	31

ROBOT5

Adım	İşlem	Zaman (s)
1	Git	33
2	Kaldır	Süzül(s) 0
3	Götür	36
4	Git	31
5	Kaldır	Süzül(s) 0
6	Götür	33
7	Git	38
8	Kaldır	Süzül(s) 0
9	Götür	32
10	Git	34
11	Kaldır	Süzül(s) 0
12	Götür	35

ROBOT6

Adım	İşlem	Zaman (s)
1	Git	37
2	Kaldır	Süzül(s) 0
3	Götür	40
4	Git	39
5	Kaldır	Süzül(s) 0
6	Götür	38
7	Git	40
8	Kaldır	Süzül(s) 0
9	Götür	39
10	Git	36
11	Kaldır	Süzül(s) 0
12	Götür	37

Adım Zamanları

Adım	Zaman (s)
1	0,0
2	0,0
3	0,0
4	0,0
5	0,0
6	0,0
7	0,0
8	0,0
9	0,0
10	0,0
11	0,0
12	0,0

Özet Bilgiler

Robot	Robot1	Robot2	Robot3	Robot4	Robot5	Robot6
Aktif Adım No	1	1	1	1	1	1
Aktif Döngü No	2					
Toplam Önceki Çevrim Anlık Zamanı(s)	185					
Toplam Geçen Zaman(s)	0					
Toplam Çevrim Anlık Zamanı(s)	6880					
Toplam Çevrim Set Zamanı(s)	180					

Modlar

Mod	Seçim
BOŞALTIMA MODU	SEÇ
DOLDURMA MODU	SEÇ
KAPLAMA MODU	SEÇİLDİ
BOŞALTIMA ADIMLARI	
DOLDURMA ADIMLARI	

Original interface capture (source slide 13)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Robot travel distances and speeds

The screenshot displays the 'ROBOT DIKEY MESAFE VE HIZ AYARLARI' (Robot Travel Distance and Speed Settings) interface. The top menu bar includes options like 'MAN OTO', 'ISI KONTROL', 'POMPALAR HAVAKONTROL', 'TESIS', 'HATA RAPORLARI', 'ADIM AYAR', 'DIKEY HAREKET', 'DOZAJLAMA', 'KAZAN ISIMLERI', 'KAZAN RAPOR', 'TESIS AYAR', 'REDRESÖRLER', 'ORTAK KAZANLAR', and 'RECETE AYAR'. The central panel shows settings for six robots, with Robot 1 selected. The table below provides travel parameters for all robots.

	ROBOT 1	ROBOT 2	ROBOT 3	ROBOT 4	ROBOT 5	ROBOT 6
Yukarı Hızlı Hız Yüzdesi (%)	50	100	80	80	100	70
Yukarı Yavaş Hız Alt Yüzdesi (%)	40	40	40	40	40	40
Aşağı Hızlı Hız Yüzdesi (%)	100	100	100	100	100	100
Aşağı Yavaş Hız Yüzdesi (%)	40	40	40	40	40	40
Anlık Dikey Mesafe (mm)	1580,0	0,0	0,0	0,0	0,0	0,0
Üstten Aşağı Hızlı Zaman (sn)	3,7	5,0	3,7	5,0	5,0	3,7
Alttan Üste Yavaş Zaman (Sn)	0,9	0,7	0,9	0,7	0,7	0,9

Original interface capture (source slide 14)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Travel distance settings

OTOMASYON MESAFE AYARLARI

ROBOT MESAFELERİ (m)

ROBOT1 ROBOT2 ROBOT3 ROBOT4 ROBOT5 ROBOT6

ROBOT MANUEL
ROBOT RESET

ROBOT1
KODU: 37
ALINACAK: 0
GÖTÜRÜLCÜ: 0
REÇETE NO: 199
HÜSTERİ ADI: ARÇELİK
SARFI NO: 31
Diy.Laser (mm): 33,944
Vity.Laser (m): 33,944
Model (m): 39,945

ROBOT2
DURULAMA 11

ROBOT3
BOŞ POZİSYON(YOK)

ROBOT4
BOŞ POZİSYON(YOK)

ROBOT5
BOŞ POZİSYON(YOK)

ROBOT6
BOŞ POZİSYON(YOK)

ROBOT1
R1
KODU: 3
Vity.Laser (m): 0,067
Offset (mm): 0,005

ROBOT2
R2
KODU: 17
Vity.Laser (m): 23,630
Offset (mm): 0,013

ROBOT3
R3
KODU: 22
Vity.Laser (m): 26,444
Offset (mm): 0,013

ROBOT4
R4
KODU: 27
Vity.Laser (m): 31,233
Offset (mm): -1,018

ROBOT5
R5
KODU: 32
Vity.Laser (m): 35,331
Offset (mm): -0,995

ROBOT6
R6
KODU: 37
Vity.Laser (m): 39,944
Offset (mm): -0,968

KAYDET

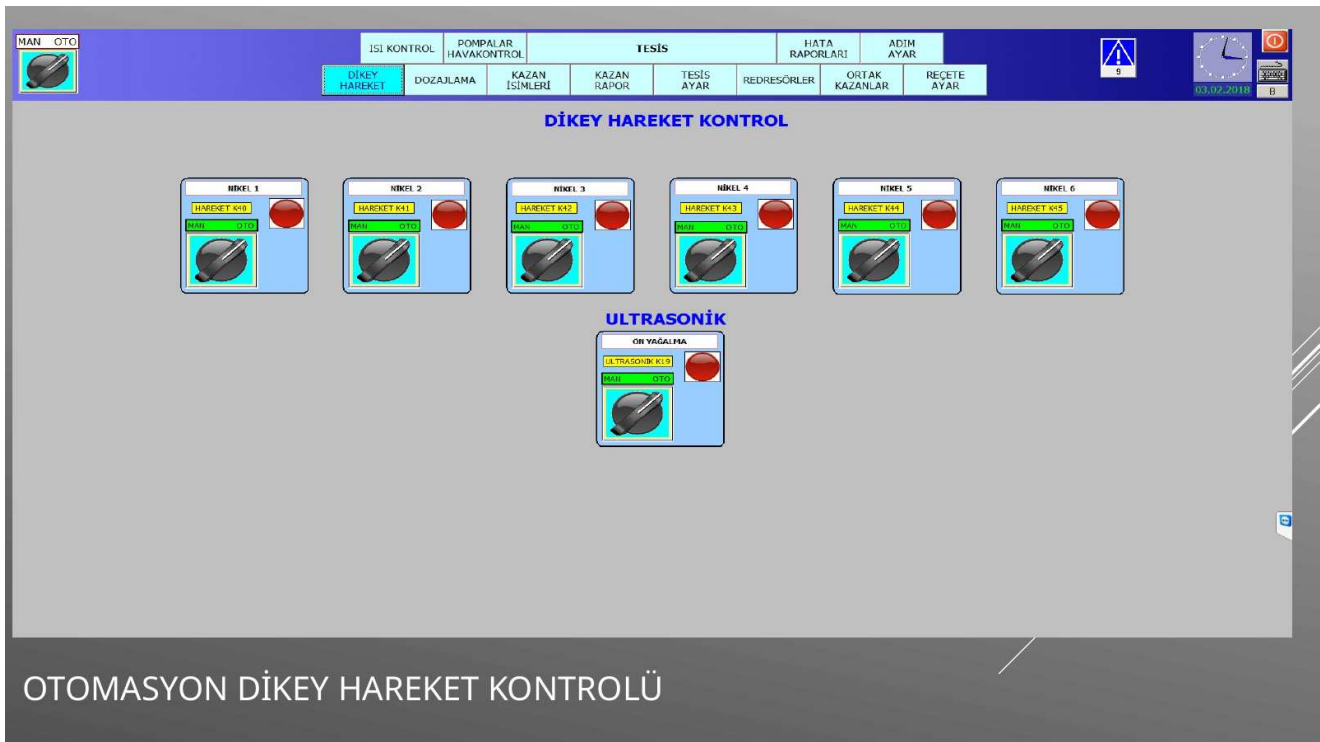
0: BOŞ POZİSYON(YOK)	6,119	17: KROM 2	23,615	34: DURULAMA 9	38,500
1: KROM SÖKME	6,669	18: AKTİVE	24,870	35: DURULAMA 10	39,280
2: SÖKME DURULAMA	7,322	19: ÖN YAĞALMA	25,940	36: DEKOPAJ	40,140
3: NİKEL SÖKME 1	8,065	20: SICAK YAĞ ALMA 1	26,884	37: DURULAMA 11	40,913
4: NİKEL SÖKME 2	8,738	21: SICAK YAĞ ALMA 2	27,509	38: DURULAMA 12	41,756
5: SICAK SU YIKAMA	9,352	22: DURULAMA 4	28,430	39: DURULAMA 13	42,521
6: YÜKLEME BOŞALTIMA 1	11,182	23: DURULAMA 5	29,190	40: NİKEL 1	43,558
7: YÜKLEME BOŞALTIMA 2	12,602	24: ASİT 1	30,066	41: NİKEL 2	44,620
8: YÜKLEME BOŞALTIMA 3	14,030	25: ASİT 2	30,708	42: NİKEL 3	45,859
9: YÜKLEME BOŞALTIMA 4	15,459	26: ASİT 3	31,610	43: NİKEL 4	46,922
10: KURUTMA 1	17,230	27: ASİT 4	32,250	44: NİKEL 5	48,156
11: KURUTMA 2	17,849	28: ASİT 5	33,153	45: NİKEL 6	49,233
12: DERİN DURULAMA	18,860	29: ASİT 6	33,790		
13: DURULAMA 1	19,635	30: DURULAMA 6	34,925		
14: DURULAMA 2	20,490	31: DURULAMA 7	35,633		
15: RİSÖLİTİ	21,240	32: DURULAMA 8	36,325		
16: KROM 1	22,330	33: ELEKTROLİT YAĞ ALMA	37,460		

Original interface capture (source slide 15)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Vertical motion control

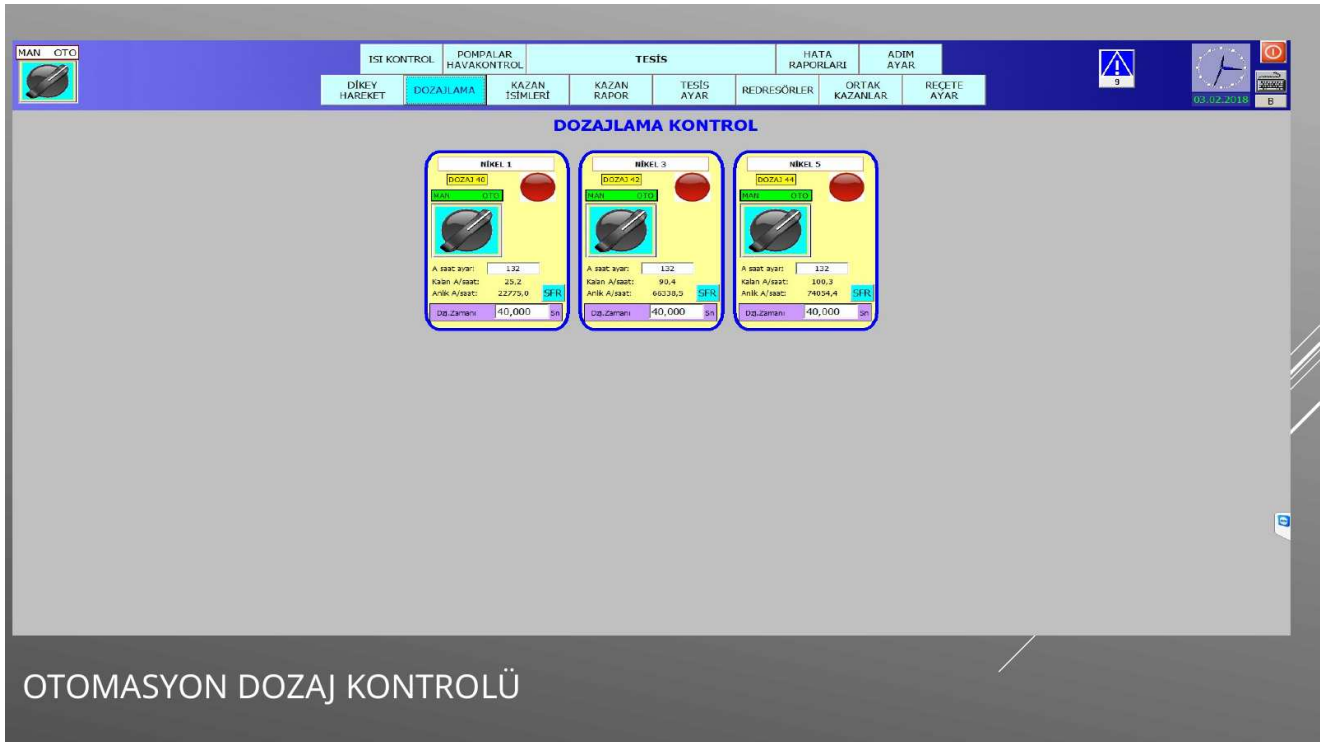


Original interface capture (source slide 16)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Dosing control

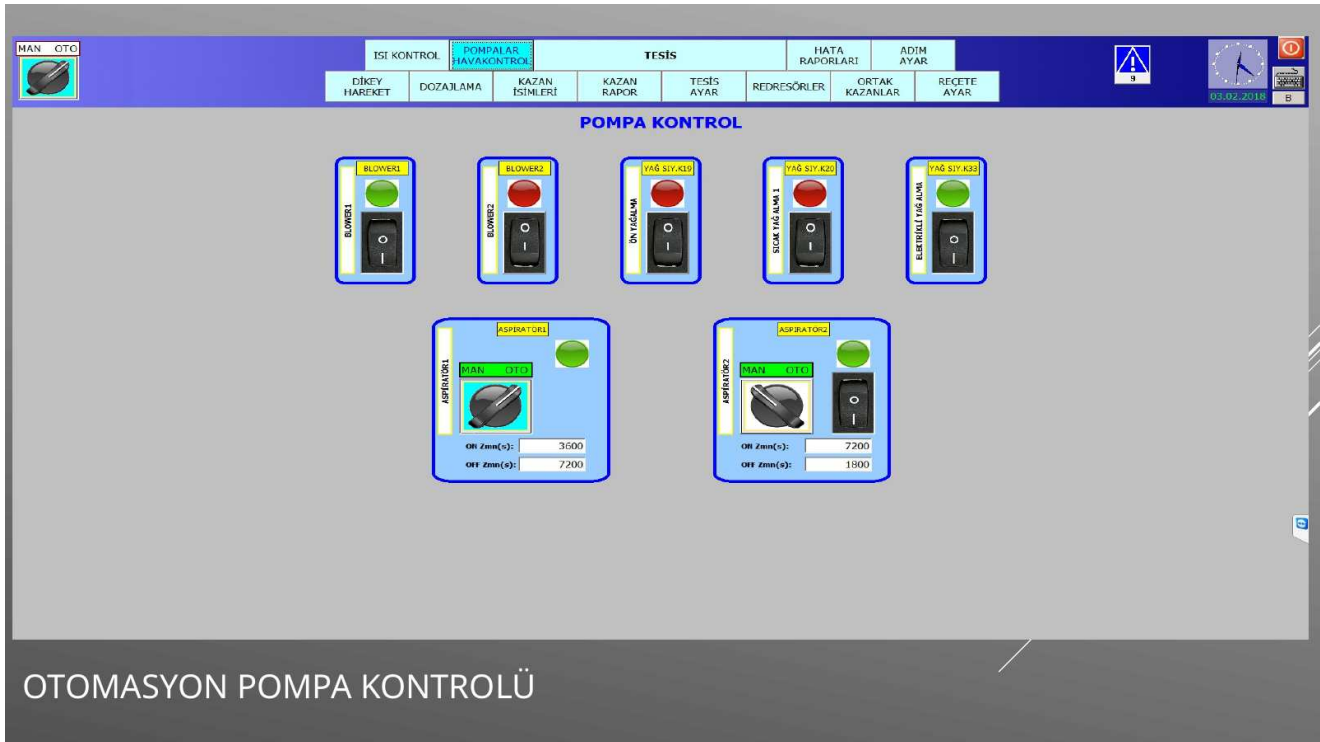


Original interface capture (source slide 17)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Pump control

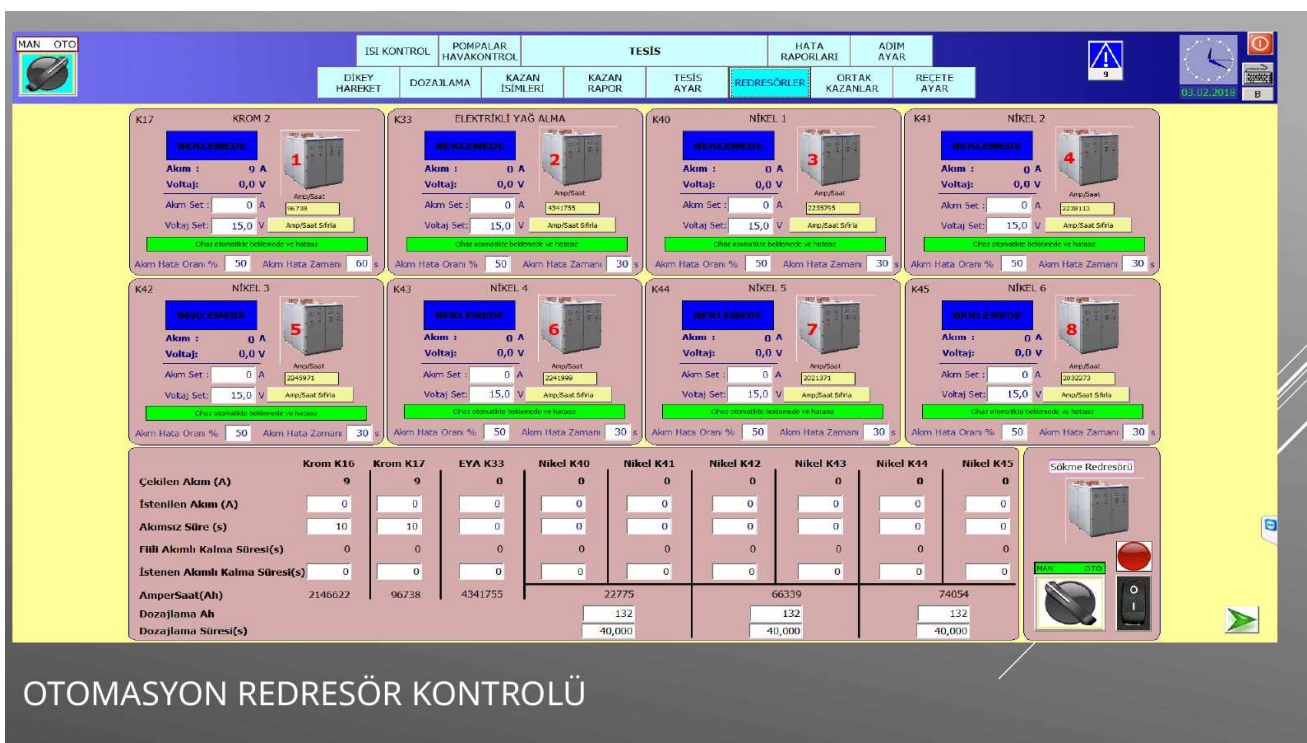


Original interface capture (source slide 18)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Rectifier control, screen 1

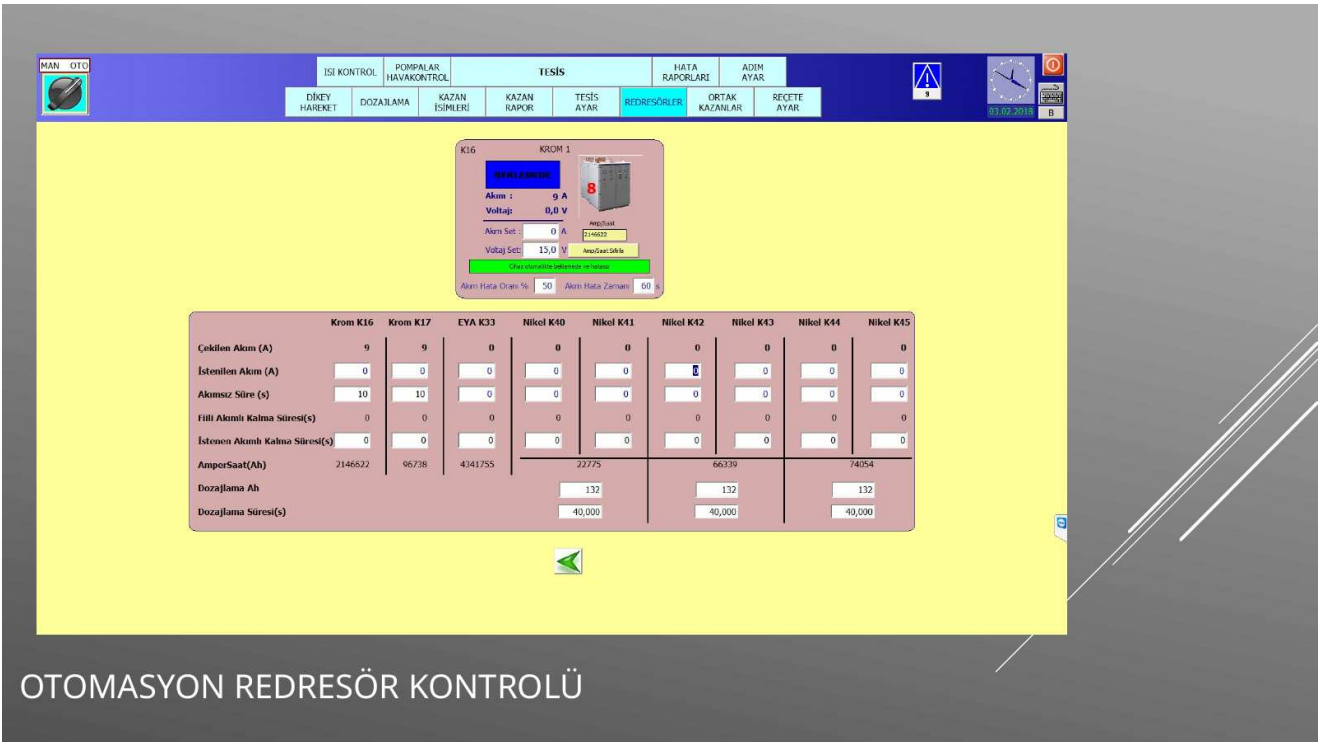


Original interface capture (source slide 19)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Rectifier control, screen 2



Original interface capture (source slide 20)

Automation control screens

Historical interface screenshots from the supplied presentations. The equipment is currently dismantled.

Automation report

The screenshot displays the 'MAN OTO' automation control interface. The top navigation bar includes buttons for 'TSE KONTROL', 'POMPALAR HAVAKONTROL', 'TESİS', 'HATA RAPORLARI', and 'ADIM AYAR'. Below this, a secondary bar contains 'DÜNEY HAREKET', 'DOZAJLAMA', 'KAZAN İŞİMLERİ', 'KAZAN RAPOR', 'TESİS AYAR', 'REDRESÖRLER', 'ORTAK KAZANLAR', and 'REÇETE AYAR'. The main area features several functional blocks: a date/time selection section with 'PLC Tarih ve Saati' (03.02.2018 12:17:28) and 'Yeni Tarih ve Saati' (03.02.2018 12:16:58); a report generation section with 'Rapor Başlangıç Tarih ve Saati' (03.02.2018 12:16:58) and 'Rapor Bitiş Tarih ve Saati' (03.02.2018 12:16:58); two large blue panels for 'KAZAN NO: 15' and 'BARA NO: 0', each with buttons for 'KAZAN RAPORU AÇ', 'SADCEEDOLU KAZAN RAPORU AÇ', 'BARA RAPORU AÇ', and '15. KAZAN REÇETE RAPORU AÇ'; an 'OTOMATİK MANJAL RAPORU AÇ' button; and a yellow 'SQL Yedeğin Kaydedilecek Yeri' section with a text input field (D:\KURULUM\Program Yedeği\SQL_Backup), frequency selectors (Her Saat: 10 Dk Geçer, Her Gün, Sadece Değişiklikler), and buttons for 'Yedekle', 'Yedekleri Sil', and 'Tüm SQL Raporları Sil'. The bottom of the screen displays the text 'OTOMASYON RAPORU'.

Original interface capture (source slide 21)

Historical photographs of the installed line

Images from “Eski Tesis Sunum.pptx”, supplied separately by the seller. They show the line before dismantling and do not represent its present assembled state.



Overall view of the installed production line (historical source slide 4)



Process tanks and overhead transport system (historical source slide 5)

Historical photographs of the transport system

The seller states that the equipment has since been dismantled and is ready for loading.



Overhead carriers and bath arrangement (historical source slide 7)



Transport system alongside the process tanks (historical source slide 9)

Refurbished equipment photographs

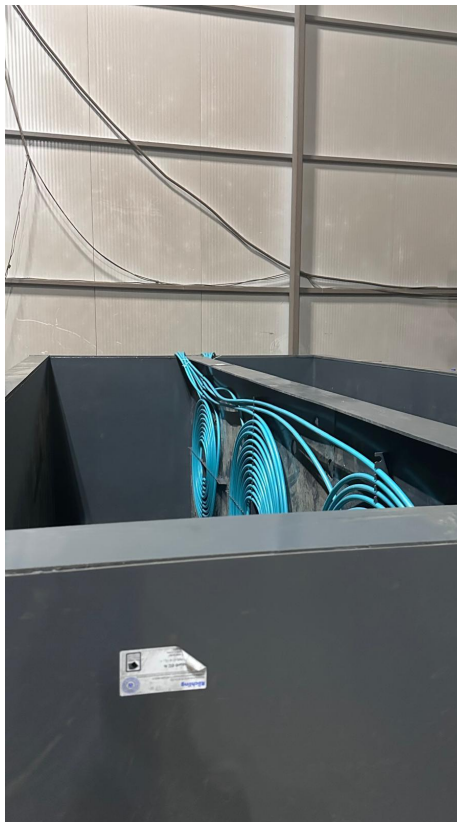
Current seller-supplied photographs of the dismantled equipment.



Refurbished line and tank assembly



Process bath



Cabling and connection points

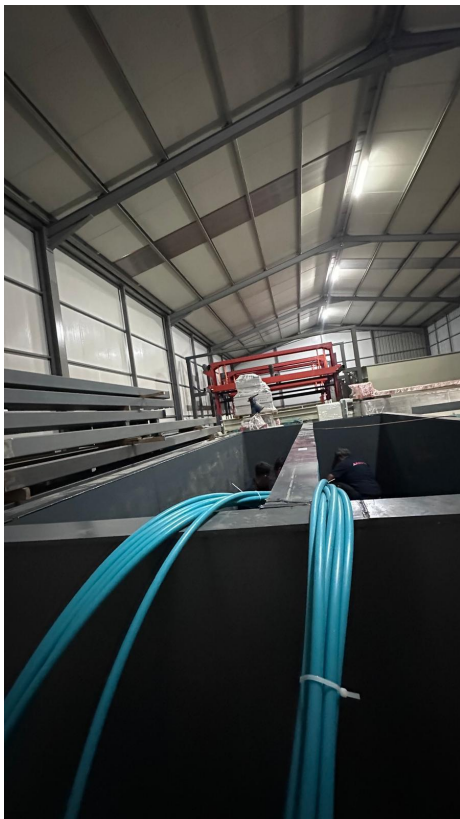
Refurbished equipment photographs



Rectifier cabinets and electrical components



Electrical components

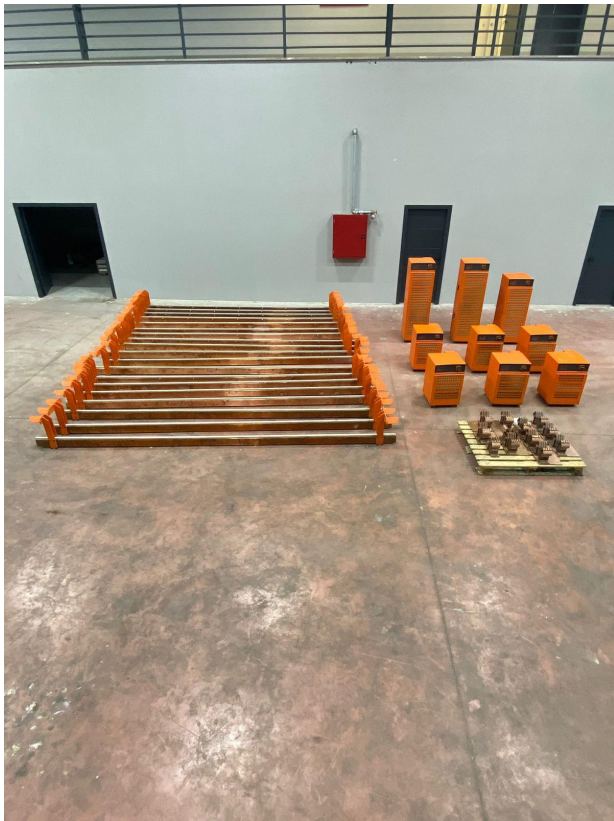


Process line components

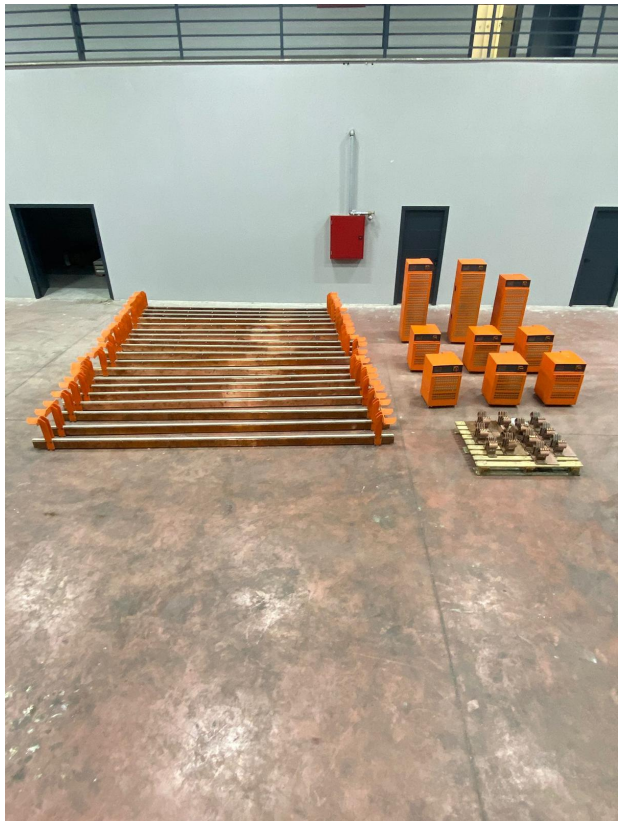


Rack components, closer view

Refurbished equipment photographs



Refurbished rack components



Refurbished rack components, second view



Shot on *GM 20 Pro*
Ventilation equipment, view 1



Shot on *GM 20 Pro*
Ventilation equipment, view 2