



COMPANY INTRODUCTION 2014

EGE Industrial Controls, Co., Ltd. is a manufacturer of pneumatic and electric control valves for the process control market. Wide experience gained in this sector since 1987 allows the company to provide field-proven solutions for control of temperature, pressure, flow, level, and other physical / chemical parameters in various process industries such as power plants, oil, gas, chemical plants, steel mills, water treatment and alike.

Our company is the proud founding member of ENOSAD (Association of Industrial Automation of Turkey, founded 2004)





Innovative products
based on engineering
and technical know-
how...

With 47 employees including 22 engineers
and technicians...



Technical support on-
site before- and after
sales...



IN-HOUSE DESIGN,
MANUFACTURING,
ASSEMBLY AND TEST IN TOTAL
OF 2250 M² COVERED FACTORY
AREA IN 2 LOCATIONS



3D cutaway diagram of a pressure-reducing valve. The valve features a blue top cap and a white body. An arrow labeled 'AKIŞ' (Flow) indicates the direction of fluid flow into the valve. The diagram is annotated with numbered callouts (1-30) identifying various components:

- 1: Outlet flange
- 2: Outlet passage
- 3: Inlet passage
- 4: Piston rod
- 5: Piston
- 9: Diaphragm
- 10: Spring
- 11: Spring housing
- 12: Spring housing cap
- 16: Spring housing cap
- 17: Spring housing cap
- 21: Spring housing cap

PARCA NO.	PARCA ADI	MALZEME
1	GOVDE	GS-C25 (A216 WCB)
2	SIT	AISI316
3	TAPA (PLUG)	AISI316
4	MIL	AISI316
5	GOVDE CONTASI	GRAFIT
9	SALMASTRA KUTUSU	ST52
10	SALMASTRA BASKI YAYI	AISI316
11	SALMASTRA ELEMANLARI	PTFE V-RINGS
12	SALMASTRA BASKI SOMUNU	AISI304
15	BAGLANTI SOMUNU	A15
17	AKTUATOR AYAGI	K.ÇELİK
21	AKTUATOR MILİ	AISI316
30	CIVATA	A2



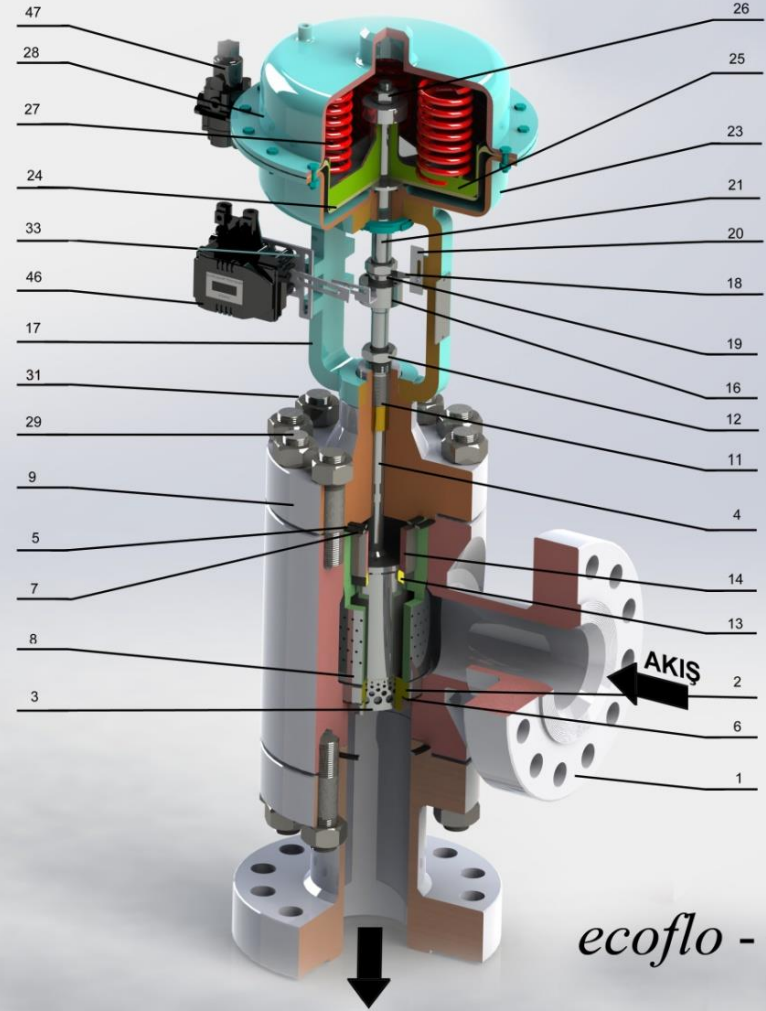
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SOLID MODELLING
(SOLIDWORKS)

PARÇA NO.	PARÇA ADI	MALZEME
1	GOVDE	A182 F22/10CrMo 9-10
2	SIT	AISI420+STL.
3	TAPA (PLUG)	AISI420+STL.
4	MİL	AISI420
5	GOVDE CONTASI	METAL TAKV. GRAFIT
6	SIT CONTASI	METAL TAKV. GRAFIT
7	KAFES CONTASI	METAL TAKV. GRAFIT
8	KAFES	AISI420
9	SALMASTRA KUTUSU (KAPAK)	A182 F22/10CrMo 9-10
11	SALMASTRA ELEMANLARI	GRAFIT
12	SALMASTRA BASKI SOMUNU	S.S.
13	RING	METAL TAKV. GRAFIT
14	RING BASKI BURCU	AISI4140
16	BAGLANTI PARÇALARI	S.S.
17	AKTUATOR AYAGI	GGG-40
18	SKALA GOSTERGE PLAKASI	S.S.
19	KONTRA SOMUN	8.8
20	SKALA	S.S.
21	AKTUATOR MILI	S.S.
23	AKTUATOR ALT GOVDESİ	K.CELİK
24	DIYAfram	TAKVİYELİ NBR
25	PISTON	K.CELİK
26	PISTON SOMUNU	8.8
27	AKTUATOR YAYI	Y.CELİĞİ
28	AKTUATOR UST GOVDESİ	K.CELİĞİ
29	SAPLAMA	10.9
31	SOMUN	8.8
33	POZİSYONER BRAKETİ	S.S.
46	POZİSYONER	-
47	FİLTRE REGULATOR	-

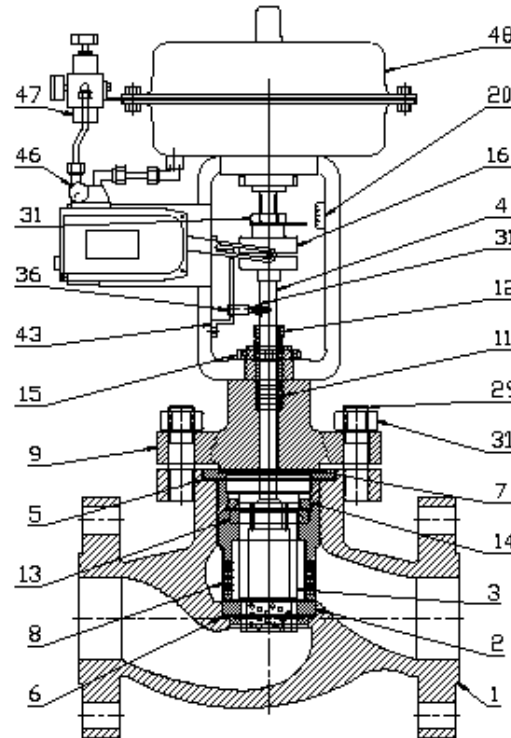
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COMPUTER AIDED
DESIGN (AUTOCAD)

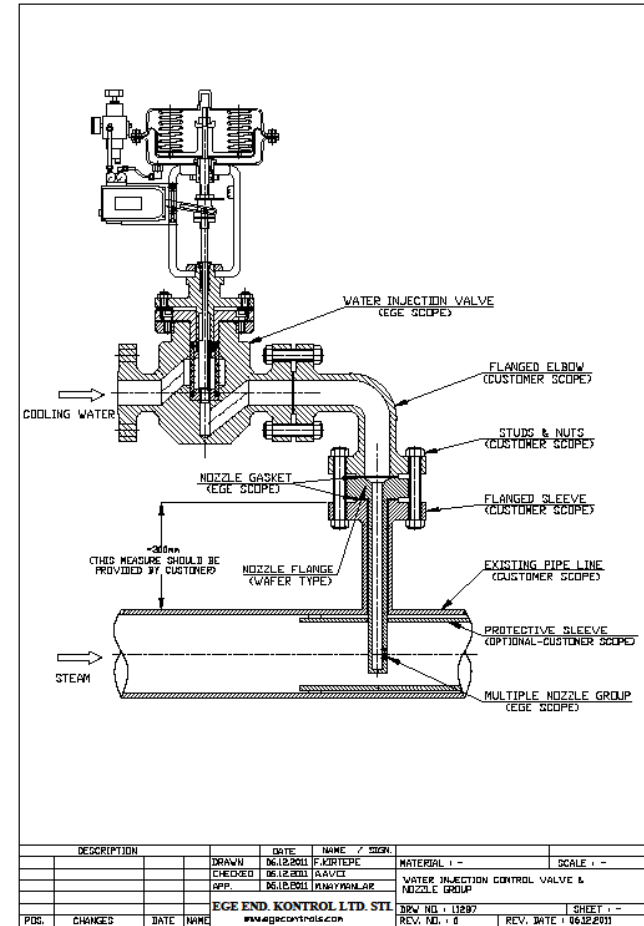
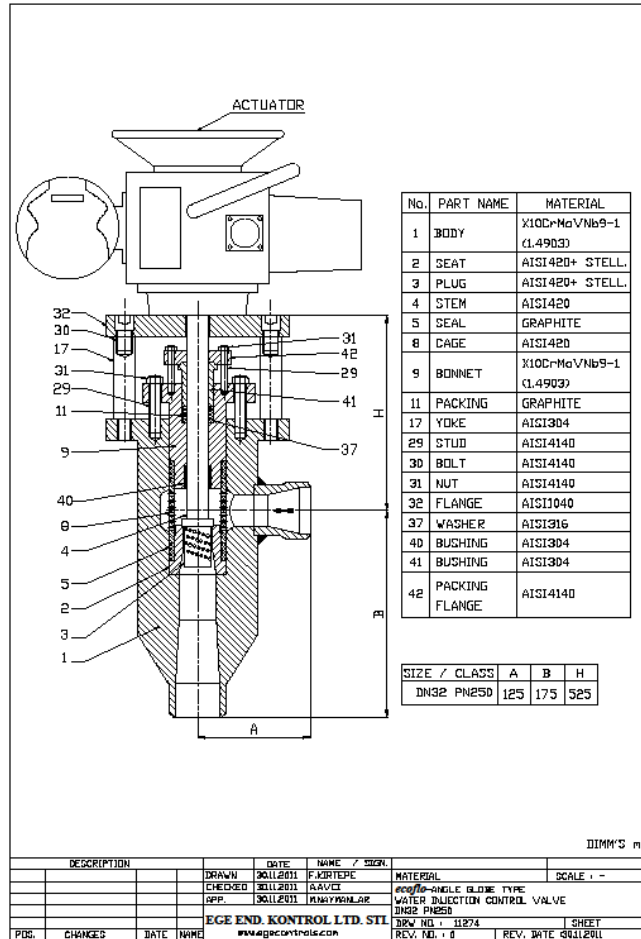


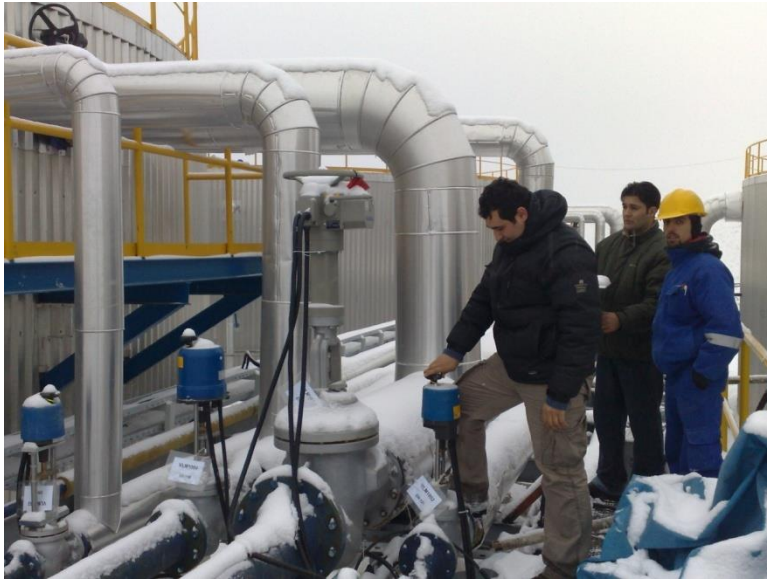
NO.	PART NAME	MATERIAL
1	BODY	WC9
2	SEAT	S.S.420
3	PLUG	S.S.420
4	STEM	S.S.420
5	BODY SEAL	GRAPHITE
6	SEAT SEAL	GRAPHITE
7	CAGE SEAL	GRAPHITE
8	CAGE	S.S.420
9	BONNET	WC9/4140
11	PACKING	GRAPHITE
12	PACKING NUT	S.S.
13	RING	GRAPHITE
14	RING NUT	4140
15	CONNECTION NUT	S.S.
16	COUPLING	S.S.
20	SCALE	S.S.
29	STUD	4140
31	NUT	B.B
36	PIN	S.S.
43	FIXING BRACKET	S.S.
46	POSITIONER	-
47	AIR FILTER REG.	-
48	ACTUATOR	-

←
FLOW DIRECTION



COMPUTER AIDED
DESIGN (AUTOCAD)





Detailed site survey by expert staff
before and after sales



Determination of process conditions
in-place in order to precisely under-
stand customer needs and to avoid
future problems

Seminars and trainings in our offices or at customer site...



Technical trainings on-site...





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PRODUCT RANGE



- ▶ The existing range of valve types includes;

GLOBE VALVES

BALL VALVES

BUTTERFLY VALVES

ANGLE-SEAT VALVES



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GLOBE CONTROL VALVES



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**PNEUMATIC
CONTROL
VALVES**



**ELECTRIC
CONTROL
VALVES**

- ▶ Typical control applications include regulation of ;

TEMPERATURE

PRESSURE

FLOW RATE

LEVEL

ecoflo-GV PNEUMATIC CONTROL VALVES



- ▶ *ecoflo-GV* series pneumatic control valves are designed for the control of liquids, gases, and steam from size DN15 (1/2") up to DN500 (20").
- ▶ Globe valves are a traditional solution for most of the industrial applications thanks to its long-term seat tightness, robust construction, and a wide variety of construction materials. They are preferred mostly for regulation duty due to their proper flow characteristics for this purpose.



ecoflo-GV **ELECTRIC CONTROL VALVES**



- ▶ **Smartcon Actuators**
- ▶ Smart valve actuator with digital local control and full programmability for stroke and torque limit adjustments besides full operational configuration.
- ▶ Multi-line backlit LCD operator interface
- ▶ Easy programming via 2 contactless magnetic switches
- ▶ Internal high-resolution potentiometer for precise position sensing
- ▶ Self-adjustment of valve stroke
- ▶ Internal history memory for past operation data, open-close and alarms reporting
- ▶ Optional remote-mount kit for harsh (hot, dirty) environment or for excessive plant vibration as well as for easy access to actuator controls.





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Body Materials

Cast Steel

- ▶ A216 WCB / 1.0619
- ▶ A216 WC6 / 1.7389
- ▶ A217 WC9 / 1.7379
- ▶ CF8M / 1.4571





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Body Materials

Forged Steel

- ▶ A105 / 1.5415
- ▶ A182 F11 / 1.7335
- ▶ A182 F22 / 1.7380
- ▶ A182 F91 / 1.4903
- ▶ A182 F316 / 1.4401





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Working Conditions

- ▶ 292 bar max.
- ▶ 600°C max.
- ▶ From ANSI 150 to ANSI 4500
to ANSI B16.34
(PN16 ... PN630)



MAXIMUM WORKING PRESSURE (bar) vs WORKING TEMPERATURE (°C)
ANSI B16.34

PRESSURE CLASS	VALVE BODY MATERIAL				WORKING TEMPERATURE (°C)											
	Forged Steel		Cast Steel		38	100	200	300	400	425	500	525	550	575	600	
	EN	ANSI	EN	ANSI												
ANSI 600 PN 100'	1.5415	A105	1.0619	WC6	100	92	87	77	69	57						
	1.7335	A182 F11	1.7389	WC6	100	100	95	85	73	70	50	36	25	17		
	1.7380	A182 F22	1.7379	WC9	100	100	97	85	73	70	55	43	30	21		
	1.4903	A182 F91	-	C12A	100	100	97	85	73	70	56	51	49	46	39	
	1.4401	A182 F316	-	-	99	84	71	63	58	58	54	50				
ANSI 900 PN 160'	1.5415	A105	1.0619	WC6	153	139	131	116	103	86						
	1.7335	A182 F11	1.7389	WC6	155	154	143	128	109	105	75	54	38	26		
	1.7380	A182 F22	1.7379	WC9	155	154	146	128	109	105	83	64	46	31		
	1.4903	A182 F91	-	C12A	155	154	146	128	109	105	84	77	74	70	58	
	1.4401	A182 F316	-	-	148	126	106	94	88	87	82	75				
ANSI 1500 PN 250'	1.5415	A105	1.0619	WC6	250	231	219	193	172	143						
	1.7335	A182 F11	1.7389	WC6	250	250	239	214	183	175	126	90	63	44		
	1.7380	A182 F22	1.7379	WC9	250	250	243	214	183	175	138	108	76	52		
	1.4903	A182 F91	-	C12A	250	250	243	214	183	175	140	128	124	117	97	
	-	A182 F316	-	-	248	210	178	158	147	145	136	126				
ANSI 2500 PN 400'	1.5415	A105	1.0619	WC6	400	386	365	322	287	239						
	1.7335	A182 F11	1.7389	WC6	400	400	399	357	304	292	210	151	105	73		
	1.7380	A182 F22	1.7379	WC9	400	400	400	357	304	292	231	180	127	87		
	1.4903	A182 F91	-	C12A	400	400	400	357	304	292	234	214	207	195	110	
	1.4401	A182 F316	-	-	400	351	297	263	245	242	227	210				
ANSI 3100 PN 500'	1.5415	A105	1.0619	WC6	500	478	452	399	355	296						
	1.7335	A182 F11	1.7389	WC6	500	500	494	442	376	362	260	187	130	90		
	1.7380	A182 F22	1.7379	WC9	500	500	500	442	376	362	286	223	157	107		
	1.4903	A182 F91	-	C12A	500	500	500	442	376	362	290	265	256	248	136	
	1.4401	A182 F316	-	-	500	435	368	326	303	300	281	260				
ANSI 4500 PN 630'	1.5415	A105	1.0619	WC6	630	630	630	580	517	431						
	1.7335	A182 F11	1.7389	WC6	630	630	630	630	548	526	378	272	190	132		
	1.7380	A182 F22	1.7379	WC9	630	630	630	630	548	526	417	325	230	157		
	1.4903	A182 F91	-	C12A	630	630	630	630	548	526	422	386	374	351	292	
	1.4401	A182 F316	-	-	630	630	534	474	441	436	410	378				

*Above table is based on ANSI B16.34. Given PN ratings are only approximate equivalents of given ANSI classes.

DIN 1.0619 → GS-C25
DIN 1.5415 → 15Mo3
DIN 1.4903 → X10CrMoVNb 9-1
DIN 1.7335 → 13CrMo4-4
DIN 1.7380 → 10CrMo9-10
DIN 1.7389 → GS-17CrMo5-5
DIN 1.7379 → GS-17CrMo9-10



DESIGN AND TEST
STANDARDS

- ANSI/ISA-75.01.01 (IEC 60534-2-1 Mod) - 2007
Flow Equations for Sizing Control Valves
- ANSI/ISA-75.08.01&06-2002 (R2007) - Face-to-Face Dimensions for
Integral Flanged Globe-Style Control Valve Bodies (Class 125, 150,
250, 300, 600, 900, 1500, and 2500) / EN 558-1
- ANSI/ISA-75.08.05-2002 (R2007) - Face-to-Face Dimensions for
Buttweld-End Globe-Style Control Valves (Class 150, 300, 600, 900,
1500, and 2500)
- ANSI/ISA-75.19.01-2001 (R2007) ; API598 ; ANSI/FCI 70-2
ISO EN 12266 ; IEC 60534-4 Hydrostatic Testing of Control Valves
- ANSI/ISA-75.11.01-1985 (R2002) - Inherent Flow Characteristic and
Rangeability of Control Valves
- ISA-75.07-1997 - Laboratory Measurement of Aerodynamic Noise
Generated by Control Valves



- Leakage Class IV ; Class V ; Class VI
to ANSI/FCI 70-2 2006 (IEC 60534-4)
- Factory Certificate to EN10204 3.1
(Chemical Composition and Mechanical
Tests for Body and Hydrostatic Tests)
- Third Party Test Certificate to EN10204 3.2
(Germanischer Lloyd, TÜV, or as per client
request)



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BALL VALVES



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PNEUMATIC BALL VALVES

ELECTRIC BALL VALVES

V-BALL VALVES

ecoflo-BV PNEUMATIC & ELECTRIC BALL VALVES

- ▶ *ecoflo-BV* series pneumatic and electric ball valves are designed for the control of liquids and gases from size DN15 (1/2") up to DN500 (20"). Larger sizes are also available for specific use.
- ▶ Designed either for 2-way or 3-way function, ball valves feature negligible pressure drop due to their construction allowing a full flow passage, use with fluids containing limited solid particles or use with viscous fluids.





ecoflo-VBV V-BALL VALVES

- ▶ Available from size DN25 (1") up to DN300 (12"), *ecoflo-VBV* series V-ball control valves provide a high control accuracy in a wide range of industrial applications where the process fluids contain slurries, solid particles or high fiber levels.
- ▶ These valves are very popular in paper & pulp mills and mining industries.
- ▶ Additionally these valves can be used with any other utility application like control of steam, condensate, water, air, etc., with a high flow capacity and a high turn-down ratio due to their straight-through design.





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BUTTERFLY VALVES



***ecoflo-BT* PNEUMATIC & ELECTRIC BUTTERFLY VALVES**

- ▶ *ecoflo-BT* series pneumatic and electric butterfly valves are designed for the control of liquids and gases from size DN50 (2") up to DN2000 (80").
- ▶ Butterfly valves find their major applications in most of the process industries as well as in water distribution networks, thanks to their compact design, light weight, and economy especially for larger sizes.
- ▶ Butterfly valves are used mainly for on-off control applications, whereas they are also preferred for regulation service with limited control precision.





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ANGLE-SEAT VALVES

ecoflo-AS PNEUMATIC & ELECTRIC VALVES

- ▶ *ecoflo-AS* series angle-seat (y-pattern) pneumatic and electric valves are designed as on-off or control valves for liquids, gases, and steam in 8 different sizes from DN15 (1/2") up to DN80 (3").
- ▶ With stainless steel or brass body as standard, these valves meet the needs of various industries with their multi-purpose use and compact dimensions.



RETROFIT JOBS

- ▶ **MODIFICATION ON EXISTING VALVES**
- ▶ **CHANGE THE VALVE BODY AND KEEP THE OLD ACTUATOR**
- ▶ **CHANGE THE ACTUATOR AND KEEP THE OLD VALVE BODY**
- ▶ **CONVERT THE MANUAL VALVE INTO ACTUATED VALVE**





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MAJOR REFERENCE LIST

POWER PLANTS

- ▶ AK ENERGY
- ▶ AKSA ENERGY
- ▶ BOSEN ENERGY
- ▶ EREN ENERGY
- ▶ EÜAS STATE POWER PLANTS
- ▶ GAMA POWER SYSTEMS
- ▶ OKA ENERGY
- ▶ PALMET ENERGY
- ▶ ALES ENERGY
- ▶ AGE ENERGY
- ▶ UGUR ENERGY
- ▶ ZORLU ENERGY
- ▶ LOSHAN POWER PLANT (IRAN)
- ▶ SHAZEND POWER PLANT (IRAN)



OIL & GAS

- ▶ AGIBA OIL REFINERY (EGYPT)
- ▶ ABADAN OIL REFINERY (IRAN)
- ▶ SOCAR (AZERBAIJAN)
- ▶ NIS GAZPROM NEFT (SERBIA)
- ▶ CETCO OILFIELD SERVICES /
AGIP KCO (SINGAPORE)
- ▶ TUPRAS (TURKISH OIL
REFINERIES, INC.)
- ▶ BOTAS (TURKISH OIL & GAS
TRANSPORTATION INC.)
- ▶ PETKIM PETROCHEMICAL INC.
(TURKEY)



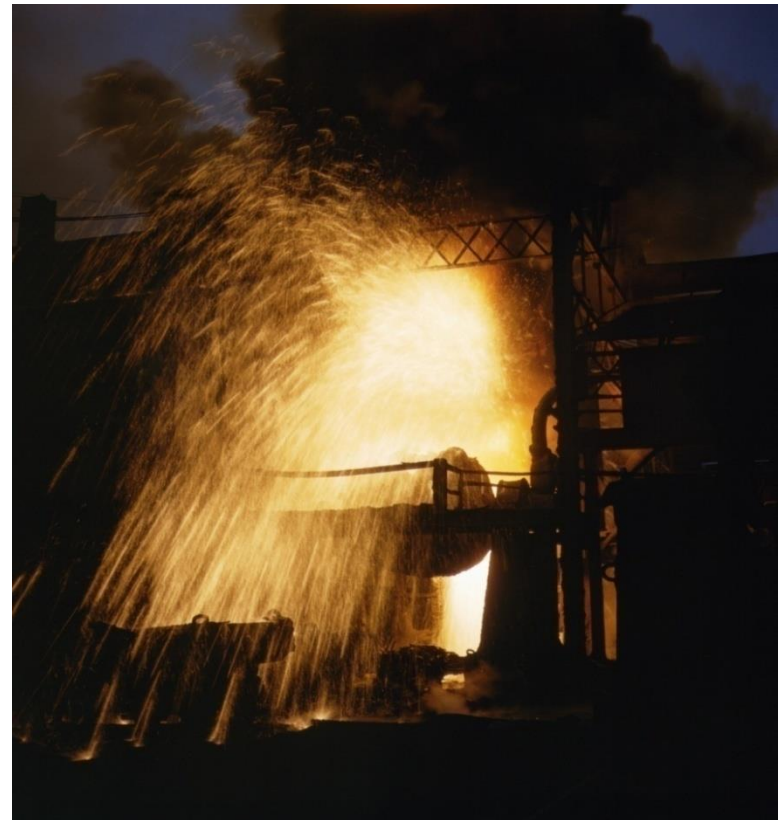
CHEMICAL PLANTS

- ▶ GEMLİK FERTILIZER
- ▶ GREEN CHEMICALS
- ▶ HENKEL (GERMANY)
- ▶ KORUMA KLOR
- ▶ MAURI MAYA - BURNS PHILP (AUS)
- ▶ RECKITT BENCKISER (UK)



IRON & STEEL

- ▶ BORCELIK
(ARCELOR GROUP)
- ▶ ERDEMIR
- ▶ ISDEMIR
- ▶ KARDEMIR
- ▶ KHUZESTAN STEEL (IRAN)





PAPER & PULP

- ▶ HALKALI PAPER
- ▶ HAYAT PAPER
- ▶ MOPAK PAPER
- ▶ GULF PAPER
(SAUDI ARABIA)
- ▶ YASHLIK PAPER
(TURKMENISTAN)



MINE PROCESSING

- ▶ ICI SODA ASH (PAKISTAN)
- ▶ ETI BORAX
- ▶ ETI COPPER
- ▶ ETI SODA ASH
- ▶ SODA SAN. KROMSAN





FOOD

- ▶ COCA COLA
- ▶ DANONE
- ▶ KENT GIDA
(CADBURY SCHWEPPES)
- ▶ NESTLE
- ▶ TURKISH SUGAR
- ▶ TURK TUBORG





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AUTOMOTIVE

- ▶ BOSCH ELECTRICAL SYSTEMS
- ▶ OTOYOL-IVECO
- ▶ RENAULT





OTHER SECTORS

PHARMACEUTICAL

- ▶ ECZACIBASI

WATER TREATMENT

- ▶ DENİZ SU (AQUAMATCH)
- ▶ MIKRON

CEMENT

- ▶ LAFARGE
- ▶ NUH
- ▶ SET GROUP

