

**AB ORLEN Lietuva**

**LIST OF MANUFACTURERS**

(manufacturers accepted by AB ORLEN Lietuva)

Approved by:

Director of Maintenance

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Agreed with:

Equipment Technical Supervision  
and Materials Analysis Group Manager

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Rotation Equipment Technical Supervision  
and Maintenance Manager

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Prepared by:

Technical Inspection and Analysis Manager  
Electrical and Automation Department

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## GENERAL

1. This LIST OF MANUFACTURERS contains manufacturers and producers approved by AB ORLEN Lietuva as acceptable to it which should be used by Contractors in procurement of equipment and/or materials (hereinafter, goods) for new construction or maintenance.
2. Countries indicated herein next to manufacturers are for information only. Actual country of origin of goods may differ from indicated in the LIST.
3. If manufacturer of proposed goods is not listed herein, the Contractor shall provide the description of such goods, data sheet, catalogue, certificates, operating and maintenance manual, general arrangement drawings, diagrams, and other relevant documentation for review and approval by AB ORLEN Lietuva.
4. All goods shall be selected according to requirements and technical specifications of AB ORLEN Lietuva.

## **LIST OF MANUFACTURERS**

### **A. STATIC EQUIPMENT**

<b>MANUFACTURER</b>	<b>COUNTRY</b>
<b>1. Pressure vessels, tanks, drums</b>	
Famet	Poland
Granziero S.R.L.	Italy
Engicon nv (Geldof)	Belgium
Mangiarotti S.p.A	Italy
ZVU	Czech Republic
Borsig	Germany
Felguera CP	Spain
Kralovopolska A.S.	Czech Republic
OT INDUSTRIES-DKG Machine Manufacturing Co. Ltd.	Hungary
MASHZAVOD LTD	Ukraine
BENVIG HEAT TRANSFER	Czech Republic
IZOTECHNIK Sp. z o.o.	Poland
CARPENTERIA CORSI srl	Italy
UAB Cosmica	Lithuania
POLIMER KRAKÓW	Poland
Union Sp. z o.o.	Poland
MAN Energy Solutions SE	Germany
ROCHNER Impera s.r.o.	Slovakia
COMES	Rumania
Mezap Spolka z o.o.	Poland
FERROFAB GROUP	UAE
Ondřejovická strojírna, a.s.	Czech Republic
<b>2. Internals of columns, towers</b>	
Sulzer/ Chemtec	international
Koch/ Glitch / St.Gobain Norpro	international
<b>3. Reactors</b>	
ATB Riva Calzoni	Italy
Belleli Energy	Italy
Mangiarotti	Italy
Japan Steel Works	Japan, Europe
Brembana	Italy
Felguera CP	Spain
Engicon nv (Geldof)	Belgium
VACO	Germany
Emtrol-Buell Technologies	USA
Van Tongeren International Ltd.	England
MAN Energy Solutions SE	Germany
FERROFAB GROUP	UAE
<b>4. Filters, coalesters, demisters</b>	
BEA Filtri	Italy

Pall	Germany
Facett	Netherlands
Koch-Glitsch	international
FERROFAB GROUP	UAE
<b>5. Backwash filters</b>	
BEA Filtri	Italy
Pall	Germany
FACET	Netherlands
<b>6. Ejectors</b>	
GEA Wiegand	EU
Fluidel	EU
Edwards Vacuum	USA
Balcke Durr	Germany
Kraus Maffei	Germany
Prematécnica (Wellman-Graham)	Spain
Inmateinsa	Spain
Eipsa	Spain
Equirepsa	Spain
Korting Hannover AG	Germany
Hijet Engineering Ltd	international
<b>7. Air coolers</b>	
Nuovo Pignone	Italy
Boldrocchi	Italy
Famet	Poland
Nicola & Albia	Italy
KPS Metal	Czech Republic
OSAUHING TMT	Estonia
ZVU	Czech Republic
TMT (Tallinna Masinatehas OU)	Estonia
<b>8. Heat exchangers</b>	
Brembana	Italy
Nicola & Albia	Italy
Olmi	Italy
Azomet	Poland
OT INDUSTRIES-DKG Machine Manufacturing Co. Ltd.	Hungary
Borsig	Germany
ZVU Engineering	Czech Republic
Kralovopolska A.S.	Czech Republic
EXCON Steel	Czech Republic
MASHZAVOD LTD	Ukraine
BENVIG HEAT TRANSFER	Czech Republic
IZOTECHNIK Sp. z o.o.	Poland
CARPENTERIA CORSI srl	Italy
UAB „Cosmica“	Lietuva
POLIMER KRAKÓW	Poland
Kelvion Central Europe Sp. z o.o.	Poland / international
Funke	Germany / international
HRS Heat Exchangers	international
MAN Energy Solutions SE	Germany
COMES	Romania

ROCHNER Impera s.r.o	Slovakia
Mezap Spolka z o.o.	Poland
FERROFAB GROUP	JAE
Ondřejovická strojírna, a.s	Czech Republic
FHU POLIMER Grzegorz Grzesik	Poland
NEXSON GROUP SAS	international
Benvig Heat Transfer spol. s r.o.	Slovakia
BETA S.A.	Romania
OFMECO HEAT TRANSFER TECHNOLOGY	Italy
Allia Europe	Italy
Tallinna Masinatehas OÜ	Estonia

## 9. Plate exchangers

Alfa Laval	EU
Kelvion Central Europe Sp. z o.o.	Poland / international
GEA	international
Funke	Germany / international
HRS Heat Exchangers	international
NEXSON GROUP SAS	international
AIRMAC Sp. z o.o.	Poland
ANKOR-TEPLOENERGO	Ukraine
C+C SERVIS, S.R.O.	Czech Republic

## 10. Fired heater burners

John Zink	international
Zeeco	international
I.C.E Srl	Italy

## 11. Burners for boilers, incinerators, other special burners

Country of origin – EU, Great Britain

## 12. Knockout drums, condensate traps, steam and condensate headers, steam separators/dryers

Gestra	Germany
Spirax sarco	UK
Miyawaki	Japan

## 13. Deaerators, steam desuperheaters

Country of origin – EU, Great Britain

## 14. Steam and water boilers

Country of origin – EU, UK

## 15. Process heaters

ITT	Italy
KT- kinetics technology	Italy
Heurtey Petrochem	France
Vergaengineering	Italy
Foster Wheeler	international
Chempex-HTE	Czech Republic

## **B. ROTATING MACHINERY**

### **MANUFACTURER**

### **COUNTRY**

#### **1. Centrifugal compressors**

AG (former DEMAG)	Italy / France
Dresser Rand	UK
Elliott	UK
MAN Turbo	Germany
Nuovo Pignone	Italy
Sulzer	Germany
Howden Turbo	Germany / international

#### **2. Reciprocating compressors**

Neumann & Esser	Germany
Dresser	Germany
Thomassen	Netherlands
Nuovo Pignone	Italy
BURCKHARDT COMPRESSION	Switzerland
Howden	international

#### **3. Centrifugal process pumps**

Flowserve Corporation	international
KSB	Germany / Spain
SULZER	international
SyndyneSundstrand	JAV / France
Grupa Powen- Wafapomp	Poland
ALLWEILER AG	Germany
VOGEL-Pumpen	Austria
Nuovo Pignone	Italy
SAER ELETTROPOMPE	Italy
RUHRPUMPEN	Germany
Bornemann pumpen GmbH	Germany
Seepex GmbH	Germany
NETZCCH	Germany
SEPEX	Germany
Düchting Pumpen	Germany
Grundfos	international
ITT Goulds Pumps	international
Finder Pompe SRL	Italy
Dickow Pumpen GmbH & Co. KG	Germany
Sarmat LT s.r.o.	Slovakia

#### **4. Spares of centrifugal, reciprocating compressors**

COOK Compression	USA / UK
STASSKOL	Germany
HOERBIGER	Austria
Flowserve Corporation	international

#### **5. High speed pumps**

Syndyne/Sundstrand	USA / France
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#### **6. Reciprocating pumps**

Ingersoll Rand	UK
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Milton Roy  
Bran+Lubbe international  
Ruhrpumpen  
OBL SRL  
Flowserve  
Prominent  
Seko SPA

EU  
  
Germany / international  
Italy  
international  
international  
Italy

## 7. Positive displacement metering (dosing) pumps

Bran+Luebbe  
Dosapro Milton Roy  
ProMinent  
Hermetic Pumpen  
OBL s.r.l  
WILLIAMS MILTON ROY  
Ruhrpumpen  
Flowserve Corporation  
Prominent  
Seko SPA  
Busch vacuum solutions  
Pompetravaini SPA  
Doseuro s.r.l

international  
France  
Germany  
Germany  
Italy  
USA  
Germany/international  
international  
international  
Italy  
international  
Italy  
Italy

## 8. Mechanical shaft seals

John Crane  
Burgmann  
Flowserve Corporation  
KSB  
CHETRA Dichtungstechnik AG

international  
Germany  
international  
Germany / Spain  
Germany

## 9. Couplings

Flender  
RegalRexnord  
Thomas (Sundstrand)  
John Crane

international  
JAV / international  
JAV / France  
international

## 10. Seal / dry gas compressors

Burgmann  
Flowserve Corporation  
John Crane

Germany  
international  
international

## 11. Fans

Stranic  
Sulzer Chemtech

Italy  
Germany

## 12. Steam turbines

Siemens  
Dresser Rand  
Nuovo Pignone  
MAN Turbo  
Howden Turbo

Germany  
international  
Italy  
Germany  
Germany / international

## 13. Air cooler fans (radial)

Cofimco

Italy



Nuovo Pignone  
Hudzone  
Ilmed

Italy  
JAV / international  
Italy

#### 14. Blowers (radial)

Aeromeccanica Stranich  
Boldrocchi  
Sulzer Chemtech

Italy  
Italy  
Germany

#### 15. Liquid ring compressors - API681

Garco Compressors

Italy

#### 16. Sealless pumps - API685

HMD Kontro Seal/less Pumps (Sundyne)  
Hermetic Pumpen GMBH  
Netzsch Pumpen & Systeme GMBH  
Nuovo Pignone International SRL  
Grupa Powen-Wafapomp SA  
KSB  
Allweiler AG Germany  
Flowserve Corporation  
Finder Pompe SRL  
Lewa GmbH  
Ruhrpumpen  
Sulzer Pumps  
Hayward Tyler

UK  
Germany  
Germany  
Italy  
Poland  
Germany/international  
  
international  
Italy  
Germany  
Germany/international  
international  
JK

#### 17. Rotary pumps - API 676

Netzsch Pumpen & Systeme GmbH  
Seepex GmbH  
Bornemann GmbH  
Allweiler GmbH  
Flowserve Corporation  
KRAL screw pumps

Germany  
Germany  
Germany  
Germany  
international  
Austria

#### 18. Mixers (agitators, stirrers)

Invent Umwelt-Und Verfahrenstechnik AG  
Milton Roy Europe  
Mixel SAS  
NOV Process & Flow  
Technologies UK Ltd (Chemineer)  
Philadelphia Mixing Solutions, Ltd  
Zeppelin Systems GMBH  
RVT Process Equipment GmbH  
Joshua Greaves & Sons Ltd.  
Jensen Mixers  
Lotus Mixers Inc.

Germany  
UK  
France  
  
UK  
USA  
Germany  
Germany  
UK  
USA  
USA

#### 19. Centrifuges

Andritz Separation GmbH  
Thomas Broadbent & Son Ltd

Germany  
UK

## **C. PIPING MATERIALS**

### **MANUFACTURER**

### **COUNTRY**

#### **1. Safety valves**

Tyco	France
Niezgodka GmbH	Germany
Leser	Germany
Armak	Poland
FARRIS	Kanada
Pentair Valves & Controls Sales	Netherlands
Nacional Safety Valves	Spain
BH Consolidated	international

#### **2. Butterfly valves**

Keystone	USA
Neles-Jamesburg	USA
Velan	international
Ebro	Germany
SIRCA	Spain
Crane Flowseal	international
ABO VALVE	Czech Republic
TTV valves	Spain

#### **3. Forged steel gate/globe/check valves**

TCH	Italy
ARAKO	Czech Republic
Tyco	Germany
Goodwin International	JK
MSA	Czech Republic
OMB	Italy
WAKMET	Poland
Velan	international
Calobri	Italy
LVF	Italy
B.F.E. (Bonney Forge Europe)	Italy
Armatury Group	Czech Republic
ZAMKON	Czech Republic
DPV-UK Limited	JK
TT Valves UK Ltd	JK
KARA TECHNOLOGY NEWS S.L.	Spain
ANDREX	Poland
Comeval	Spain
Brunnbauer-Armaturen	Germany
Valvosider	Italy

#### **4. Ball valves**

Klinger	Germany
Burgmann	Germany
MOGAS	JAV
GEFA Processtechnik	Germany
ABD-valves	Germany/Czech Republic
KITZ CORPORATION	Japan
Pekos Valves	Spain

OSMI  
KLAD ARMATURY  
KTM-MECAFRANC  
ORBIT VALVE  
AMPO - POYAM VALVES  
JC valves

international  
Czech Republic  
France  
USA  
international  
Spain

#### 5. Special valves

Tapko MPRD, JAV  
MOGAS  
ValvTechnologies  
Valvtechnologies / VTi  
Union tech / UT

USA  
USA  
USA  
USA

#### 6. Supports

PHS Industries  
LISEGA

international  
international

#### 7. Bolts

Country of origin – EU, USA, UK, JAPAN, CANADA

#### 8. Gaskets

Klinger  
Chesterton  
IDT  
SGL Group

JK  
international  
Germany  
international (for graphite)

#### 9. Pipes, tubes, flanges, fittings

Country of origin - EU, USA, UK, UA, JAPAN, CANADA

## **D. ELECTRICAL**

<b>MANUFACTURER (type, series)</b>	<b>COUNTRY</b>
<b>1. MV motors</b>	
ABB	Germany
INNOMOTICS / Siemens / Loher	Germany
ATB Schorch	Germany
WEG	Portugal / Brazil
<b>2. LV motors</b>	
ABB	Germany
INNOMOTICS / Siemens / Loher	Germany
ATB Schorch	Germany
WEG	Portugal / Brazil
OME MOTORS	Italy
<b>3. MOVs and other actuators</b>	
Rotork	UK
AUMA (for indoor applications without vibration and corrosion environment)	international
Limitorque	USA
Emerson	USA/Poland
<b>4. MV switchgears</b>	
Siemens NXPLUS	Germany
Schneider Electric	France
<b>5. LV switchgears, MCCs</b>	
Schneider Electric (OKKEN)	France
ABB	international
Logstrup (Omega System)	EU
<b>6. Power transformers</b>	
Schneider Electric	international
ABB	international
Siemens	Germany
<b>7. MV microprocessor-based relay protection</b>	
Siemens Siprotec 5	Germany
ABB Relion	international
<b>8. MV circuit breakers</b>	
Schneider Electric	France
Siemens	Germany
<b>9. LV circuit breakers (ACB, MCCB, MCM, MPCB), contactors, thermal relays, other power and control circuit elements</b>	
Schneider Electric	France

Siemens  
ABB

Germany  
international

**10. Miscellaneous LV power distribution and control panel equipment (buttons, indication lights, terminals)**

Schneider Electric  
Siemens  
ABB  
EATON

France  
Germany  
international  
ES

**11. Frequency converters/drives, soft starters**

Schneider Electric  
ABB  
Siemens  
WEG

France  
international  
Germany  
Portugal/Brazil

**12. Electrical heat tracing systems (with cables)**

nVent/Raychem  
Bartec  
Thermon

international  
Germany  
Netherlands

**13. MV and LV power cables, control cables**

AS DRAKA KEILA CABLES  
Eupen Cable  
Lappakabel  
LEONI Kerpen GmbH  
TELE-FONIKA Kable Sp. z o.o.  
Helucable  
Bitner  
NKT cables S.A.  
Nexans  
Prysmian  
Sudkabel  
TKD Kabel  
Technokabel

international  
international  
international  
international  
international  
international  
Poland  
Poland  
France  
Italy  
Germany  
Germany  
Poland

**14. Miscellaneous Ex-proof equipment (ATEX) (plugs, sockets, junction boxes, push-buttons, lighting, panels)**

CEAG/EATON  
R.Stahl AG  
MALUX  
Bartec  
Vyrtych  
Appleton  
Weidmüller

international  
Germany  
Finland  
Germany  
Czech Republic  
France  
Germany

**15. Cables ladders and trays**

Obo Betterman  
Wibe  
Stago  
MP Bolagen  
Meka

Germany  
Sweden  
Germany  
Sweden  
international

**16. MV and LV cable couplings and terminations**

Raychem	international
KABELDON	international
3M	USA
CMP Products Limited	UK
NKT Cables Group	Germany
Sudkabel GMBH	Germany

#### 17. Batteries for UPS and DC systems

Panasonic	international
Sonnenschein GmbH	international
Fiamm	international
Exide	international

#### 18. Grounding/earthing and lightning systems, surge arresters

Galmar	international
OBO BETTERMANN	Germany
Raychem (MV)	international
DEHN	international

#### 19. Capacitor controllers

Schneider Electric	France
Nokian Capacitors Ltd.	international

#### 20. UPS

APS ENERGIA (>10 kVA)	Poland
GUTOR (>10 kVA)	Switzerland
SOCOMEK (<15 kVA)	EU

#### 21. DC systems

ENEDO	Finland
ELTEK	Norway

#### 22. Air conditioners

Panasonic	international
Mitsubishi	international
Fuji	Japan
Electrolux	Sweden

#### 23. Auxiliary relays, time, voltage control, etc.

Phoenix Contact	international
GM International	Italy
Finder	Germany
Schneider Electric	France
Siemens	Germany
ABB	international

#### 24. Power/control panels for burners, pilot burners

John Zink	Luxembourg
Hamworthy Combustion	England
Samia	Italy
Zeeco	USA
I.C.E Srl	Italy

**Note.** Components of power/control panels of burners must be selected from the present LIST OF MANUFACTURERS.

## **25. LV panels, distribution boards**

Schneider Electric	EU
ABB	EU
Automatikos sistemos	Lithuania
RITTAL	EU
HENSEL	EU

## **26. Power readers**

ELGAMA-ELEKTRONIKA	Lithuania
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## **27. Power metering systems**

Sigma Telas	Lithuania
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## **28. Controllers of power metering systems**

Valsena	Lithuania
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## **29. Capacitors, capacitor units**

Nokian	EU
Schneider Electric	EU
ZEZ SILKO Ltd.	EU

## **30. BUS DUCTS**

ABB	international
Schneider Electric	France
Siemens	Germany

## **31. EXCITATION SYSTEMS OF SYNCHRONOUS MOTORS**

SPIE Energotest sp. z o.o.	Poland
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## **32. ESCADA (SCADA for power substations)**

Siemens (WinCC + SICAM SCC)	international
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## **33. RTU (for power substations)**

Siemens (SICAM A8000)	international
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## **E. INSTRUMENTATION**

### **MANUFACTURER**

### **COUNTRY**

#### **1. Chromatographs**

Siemens	Germany
Yokogawa (priority)	Japan
ABB	Switzerland
Emerson	USA

#### **2. Zirconium oxide oxygen analyzers**

Ametek	USA
Fuji	Japan
ABB	Switzerland
Emerson	USA
GE Panametrics	USA
Yokogawa	Japan

#### **3. Paramagnetic oxygen analyzers**

GE Panametrics	USA
Siemens	Germany
SICK	Germany
ABB	Switzerland
Emerson	USA

#### **4. Moisture analyzers**

Panametrics	Ireland
Ametek	USA
Michell Instruments	UK

#### **5. Hydrogen thermal conductivity analyzers**

ABB	Switzerland
Siemens	Germany
SICK	Germany
Emerson	USA
GE Panametrics	USA

#### **6. SO<sub>2</sub>/H<sub>2</sub>S air demand analyzers**

Ametek	USA
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#### **7. Hydrocarbon and toxic gas monitoring systems**

Det-tronics (priority)	USA
Drager	Germany
Honeywell	USA

#### **8. Fire detection systems (for process area)**

Det-tronics	USA
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#### **9. Emission monitoring (CEMS)**

Durag (software applications)	USA
Siemens (gas emissions)	Germany



## 10. pH meters and conductivity meters

Knick	Germany
Mettler Toledo	Germany
ABB	Switzerland

## 11. Water analyzers

Knick	Germany
Mettler Toledo	Germany
ABB	Switzerland
HACH	USA

## 12. Sulphur analyzers

Thermo Fisher Scientific	USA
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## 13. Density meters

Emerson	USA
Sarasota (Thermo Fisher Scientific)	UK
Yokogawa	Japan

## 14. Viscometers

Solartron (Ametek)	USA
Hydramotion	UK
Bartec-Benke	Germany

## 15. Distillation analyzers

Bartec-Benke	Germany
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## 16. FT-NIR analyzers

Yokogawa	Japan
ABB	Switzerland

## 17. Control valves

Emerson	USA
Valmet	Finland
Dresser/Masoneilan	France/Italy
Flowserve	USA

## 18. Shutoff valves

Pekos	Spain
Valmet	Finland
Dresser/Masoneilan	France/Italy
Flowserve	USA
Emerson	USA
KTM	USA
JC valves	Spain

## 19. Smart valve positioners

Dresser/Masoneilan (priority)	France/Italy
Emerson (priority)+ PST	USA
Valmet + PST	Finland
Flowserve	USA
ABB	international

## 20. Electromagnetic (solenoids) valves

ASCO	UK
Norgren-Herion	Germany

## 21. Manifolds and fittings

Parker	USA
Swagelok	USA
HACO Group	Germany

## 22. Relays

Phoenix Contact	USA
GM International	Italy
Finder	Germany

## 23. Vibration monitoring and protection systems

Bently Nevada	USA
SKF	Sweden
Prognost	Germany

## 24. Weighing equipment

Mettler-Toledo	USA
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## 25. Ex-proof light and sound alarms (ATEX) (sirens, horns)

Stahl	Germany
Draeger	Germany
Bartec	Germany
Malux	Finland
CEAG	Germany

## 26. Dosing/injection systems

Hyrolec	USA
Emerson (type: PetroCount)	USA
SMITH METER (type: Accuload)	Germany

## 27. Anti-surge systems

CCC	USA
Siemens	Germany

## 28. Smoke detection in control cabinets

Protectowire Co.	USA
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## 29. DCS (OWNER's approval required)

Emerson (DeltaV)	EU/USA
Invensys (Foxboro)	EU/USA

## 30. ESD programmable logic controllers

Triconex	EU/USA
Modicon (Schneider Electric)	France
Siemens	Germany
Emerson/SIS (deployed together with Emerson DCS, TBA with the OWNER)	EU/USA
HIMA	Germany

## 31. Control systems – programmable logic controllers

Siemens	Germany
Schneider Electric	France
<b>32. SCADA (for process control)</b>	
WinCC (Siemens)	Germany
Intouch for Wonderware System Platform	USA
<b>33. Computer systems (hardware) – PC</b>	
Dell	USA
HP	USA
<b>34. Intrinsic safety barriers (isolators, trip amplifiers and multiplexers)</b>	
Pepperl-Fuchs	Germany
GM International (priority)	Italy
<b>35. Ex-proof equipment (ATEX) (junction boxes, cable glands, switches, etc.)</b>	
Bartec	Germany
STAHL	Germany
Malux	Finland
CEAG	international
Weidmüller	Germany
<b>36. Electronic pressure and differential pressure transmitters</b>	
Emerson	USA
Yokogawa	Japan
<b>37. Pressure relays</b>	
Vega	Germany
Magnetrol	USA
United Electric Controls	USA
<b>38. Positive displacement electronic level transmitters</b>	
Emerson	USA
Dresser/Masoneilan	France/Italy
<b>39. Mass flow meters</b>	
Emerson	USA
Endress+Hauser	Germany
Krohne	Germany
Yokogawa	Japan
<b>40. Vortex flow meters</b>	
Emerson	USA
Yokogawa	Japan
Krohne	Germany
<b>41. Electromagnetic flow meters</b>	
Yokogawa	Japan
Emerson	USA
Krohne	Germany
<b>42. Ultrasonic flow meters</b>	
GE Sensing (Panametrics)	USA

Krohne (priority)	Germany
Flexim	USA
<b>43. Turbine flow meters</b>	
Smith Meter GmbH	Germany
<b>44. Rotameters</b>	
Emerson	USA
Yokogawa	Japan
Krohne	Germany
<b>45. Annubar flow meters</b>	
Emerson	USA
E+H	Germany
<b>46. Thermal mass flow meters</b>	
Magnetrol	USA
FCI	USA
E+H	Germany
<b>47. Metering systems for tanks</b>	
Enraf	Netherlands
Emerson/SAAB	Sweden
<b>48. Capacitive level transmitters</b>	
Vega	Germany
Magnetrol	USA
<b>49. Radar level transmitters</b>	
Emerson	USA
Vega	Germany
Krohne	Germany
Magnetrol	USA
<b>50. Magnetic level indicators</b>	
KRS Kubler	Switzerland
Magnetrol	USA
Krohne	Germany
<b>51. Positive displacement level switches</b>	
KRS Kubler	Switzerland
Magnetrol	USA
<b>52. Capacitive level switches</b>	
Vega	Germany
Magnetrol	USA
<b>53. Vibration level switches</b>	
Vega	Germany
Endress+Hauser	Germany
Magnetrol	USA
Emerson	USA

#### 54. Pressure gauges (manometers)

WIKA	Germany
Ashcroft	USA

#### 55. Temperature sensors

Emerson	USA
Yokogawa	Japan
ABB	Germany

#### 56. Temperature meters

WIKA	Germany
Rueger	Switzerland
Manotherm	Germany

#### 57. Resistance temperature sensors RTD PT100, thermocouples

WIKA	Germany
Electrotherm	Germany
Emerson	USA
Termoaparatura	Poland
Daily Therrmetics	USA

#### 58. UV, IR flame detectors

Fireye	USA
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#### 59. Signal cables, compensation cables

AS DRAKA KEILA CABLES	international
Eupen Cable	international
Lappakabel	international
LEONI Kerpen GmbH	international
TELE-FONIKA Kable Sp. z o.o.	international
Helucable	international
Bitner	Poland
NKT cables S.A.	Poland
Nexans	France
Prysmian	Italy
Sudkabel	Germany
TKD Kabel	Germany
HelUKabel	Germany
Technokabel	Poland
BELDEN	JAV

#### 60. Heating cables (heating systems)

eVent (Raychem)	Germany
Bartec	Germany
Thermon	Netherlands

#### 61. Impulse tubes and fittings without heating (instrumentation tubing)

Swagelok	USA
Parker	USA
Sandvik (only tubes)	Germany

#### 62. Impulse lines (tubes) with heating

O'Brien	USA
Parker	USA

Thermon

Netherlands

**63. Control system cabinets**

Rittal

Germany

**64. Protection boxes**

O'Brien

USA

Intertec

Germany

Thermon

Netherlands

**65. Cable trays**

Wibe

Sweden

Stago

Germany

Obo Betterman

Germany

MP Bolagen

Sweden

Meka

international

**66. LV power supply (SIL approved, for fire, smoke & gas detection systems)**GM International (use only acc.  
SIL requirements)

Germany

Phoenix contact

Germany