



Engineering Standard

SAES-J-002

20 February 2013

Technically Acceptable Instrument Manufacturers

Document Responsibility: Instrumentation Standards Committee

Saudi Aramco DeskTop Standards

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Primary contact: Al-Dosari, Ali Saad on +966-3-8801346

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1 Scope

This Standard identifies acceptable manufacturers for instrumentation products. The Standard does not apply to replacement-in-kind or purchasing procedures associated with instrument materials for replenishment of SAMS stock.

2 Conflicts and Deviations

- 2.1 Any conflicts between this standard and other applicable Saudi Aramco Engineering Standards (SAESs), Materials System Specifications (SAMSSs), Standard Drawings (SASDs), or industry standards, codes, and forms shall be resolved in writing by the Company or Buyer Representative through the Manager, Process & Control Systems Department, Saudi Aramco, Dhahran.
- 2.2 Direct all requests to deviate from this standard in writing to the company or buyer representative, who shall forward such requests to the Manager, Process and Control Systems Department of Saudi Aramco, Dhahran.

3 References

The following is a summary of the Saudi Aramco documents and industrial standards that have been mentioned within this standard:

* Saudi Aramco References

Saudi Aramco Engineering Standards

<u>SAES-J-200</u>	<i>Pressure</i>
<u>SAES-J-400</u>	<i>Temperature</i>
<u>SAES-J-502</u>	<i>Analyzer Shelters</i>
<u>SAES-J-904</u>	<i>FOUNDATION™ fieldbus (FF) Systems</i>

Saudi Aramco Materials System Specifications

<u>34-SAMSS-117</u>	<i>Turbine Flow Meters</i>
<u>34-SAMSS-118</u>	<i>Positive Displacement Meters</i>
<u>34-SAMSS-318</u>	<i>Automatic Tank Gauging Equipment</i>
<u>34-SAMSS-319</u>	<i>Radar Tank Gauging Equipment</i>
<u>34-SAMSS-511</u>	<i>Chromatographs</i>
<u>34-SAMSS-512</u>	<i>Oxygen Analyzers</i>

<u>34-SAMSS-514</u>	<i>Combustible Gas and Hydrogen Sulphide Monitors</i>
<u>34-SAMSS-515</u>	<i>Moisture Analyzers</i>
<u>34-SAMSS-517</u>	<i>Density Meters</i>
<u>34-SAMSS-611</u>	<i>Safety Relief Valves Conventional and Balanced Types</i>
<u>34-SAMSS-612</u>	<i>Safety Relief Valves Pilot Operated Types</i>
<u>34-SAMSS-619</u>	<i>Burner Management Systems for Watertube Boilers</i>
<u>34-SAMSS-623</u>	<i>Programmable Controller Based ESD Systems</i>
<u>34-SAMSS-624</u>	<i>Wellhead Control, Monitoring and Shutdown Systems</i>
<u>34-SAMSS-625</u>	<i>Vibration, Axial Position and Bearing Temperature Monitoring Systems</i>
<u>34-SAMSS-634</u>	<i>Local ZV Shutdown Cabinets and Smart ZV Systems</i>
<u>34-SAMSS-711</u>	<i>Control Valves - General Services</i>
<u>34-SAMSS-716</u>	<i>Pneumatic Actuators On-Off Service</i>
<u>34-SAMSS-717</u>	<i>Hydraulic Valve Actuators</i>
<u>34-SAMSS-718</u>	<i>Electric Motor Operated Valve Actuators</i>
<u>34-SAMSS-815</u>	<i>Annunciators</i>
<u>34-SAMSS-820</u>	<i>Instrument Control Cabinets - Indoor</i>
<u>34-SAMSS-821</u>	<i>Instrument Control Cabinets - Outdoor</i>
<u>34-SAMSS-830</u>	<i>Programmable Logic Controller</i>
<u>34-SAMSS-831</u>	<i>Instrumentation for Packaged Units</i>
<u>34-SAMSS-913</u>	<i>Instrumentation and Thermocouple Cable</i>

Saudi Aramco Standard Drawings

<u>AB-036019</u>	<i>Thermowell Assembly and Detail</i>
<u>AB-036094</u>	<i>Standard Orifice Plate</i>
<u>AC-036413</u>	<i>Orifice Flange Assembly, Raised Face</i>
<u>AB-036414</u>	<i>Orifice Flange Assembly, Ring Joint</i>

4 Definitions

Terms shown in **bold** font within this document are defined below:

Approval: Written authorization by the Manager, Process & Control Systems Department, Saudi Aramco, Dhahran.

Acceptable: Approval is not required to place a purchase order for the product. After the order has been placed, the **supplier** of this product must ensure that he complies with all aspects of the purchasing contract (e.g., must meet the Saudi Aramco Materials System Specification).

License agreement: A contract between a **supplier** and an owner of rights to an equipment design, allowing a **supplier** to either (1) assemble the equipment using all the pieces provided by the design owner or (2) assemble the equipment using a combination of pieces provided by the design owner and pieces manufactured by the licensee to the design owner's detailed drawings/specifications. The contract between the licensor and licensee would (1) require the licensee to follow the licensor manufacturing procedures and be routinely audited by the licensor for compliance and (2) require the equipment to be marketed and labeled using the licensor's brand name.

Made: Created from raw materials and/or assembled by the **manufacturer**.

Manufacturer: Can be either (1) the owner of the brand name of the equipment or (2) a licensee that has a **license agreement**.

SAMSS: "Saudi Aramco Materials System Specification."

Supplier: The person/company, etc., who is responsible to provide the equipment to Saudi Aramco.

5 General

5.1 Procurement of a product **made** by a **manufacturer** not listed in [Section 6](#) of this Standard is not allowed without **approval**. Requests for **approval by the Instrumentation Standards Committee Chairman** of an alternate **manufacturer** must be supported by documentation identifying how the alternate **manufacturer** would better serve Saudi Aramco over the **manufacturers** listed in this standard.

Commentary Note:

*If the request to procure from an alternate **manufacturer** is not approved, the **approval** authority is under no obligation to present the reasons for the refusal.*

5.2 The **manufacturer** listings within [Section 6](#) shall be interpreted in the following manner:

5.2.1 **Manufacturer** is listed with the word "None" as a "Limitation":
All products from the **manufacturer** in the given category are **acceptable** provided they meet the purchase specifications and the applicable **SAMSS**. This does not include material of construction which must be suitable for the specific application.

- 5.2.2 **Manufacturer** is listed with a “Limitation”: Only the product that meets the “Limitation” is **acceptable**. If noted as being manufactured “Under License”, only products **made** under the terms of the **license agreement** are **acceptable**.
- 5.2.3 **Manufacturer** is listed with a specific “Location”: Only products **made** in the specific location(s) or area(s) are **acceptable**.
- 5.3 For instrumentation purchases from manufacturers that are not listed in this standard, a request for technical evaluation, with justifications, shall be submitted in writing to the General Supervisor, Process Instrumentation Division, P&CSD. The Instrumentation Unit/PID/P&CSD will evaluate the subject instrument product for technical acceptability, and shall inform the requestor in writing of the result. Only after the instrument has been identified as technically acceptable, and the manufacturer's facility approved by Vendor Inspection, can the purchase order be placed. These instrument products may or may not be added to the technically acceptable manufacturer's list.

6 Technically Acceptable Instruments

100 Flow

111 Flow Transmitters

D/P Transmitters

See Category 211 - Pressure and Differential Pressure Transmitters

112 Flow Indicators

112.1 Equipment Description: Flowmeter, Variable Area, Rotameters
(9COM - 6000002916)

Refer to SAP System

112.2 Flow Sight Glasses
(9COM - 6000002744)

Refer to SAP System

112.3 D/P Gauges
See Category 217 - Differential Pressure Gauges

113 Flow Switches

113.1 D/P Switches – (9COM- 6000002830)

See Category 213 - Pressure and Differential Pressure Switches

113.2 Target Switches – (9COM- 6000002831)

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
ITT-McDonnell and Miller	10019365	Chicago, US	
SOR, Inc.	10021774	Kansas, US	
SOR Europe	10001487	SW, UK	
Magnetrol	30003796	Zelev, Belgium	

115 Orifice Assemblies

115.1 Orifice Plates and Flanges

(9COM- 6000002792) - Orifice; Assembly: Plate; Flange; Sealing Ring

(9COM- 6000002793) - Orifice; Plate; ASTM A182/A240;

Mandatory requirements:

For orifice plates - Std. Dwg. [AB-036094](#)

For RF orifice flanges - Std. Dwg. [AC-036413](#)

For RJ orifice flanges - Std. Dwg. [AB-036414](#)

Refer to SAP System

115.2 Equipment Description: Orifice Fittings – Retractable, Single and Dual Chamber

(9COM- 6000010784)

Refer to SAP System

116 Equipment Description: Flow Meter: Venturi Tube

(9COM- 6000007215)

Refer to SAP System

- 117 Equipment Description: Flowmeter; Turbine; In-Line for Process Metering
(9COM- 6000002775)
Specification: [34-SAMSS-117](#); [IR342900](#)

Refer to SAP System

- 118 Flowmeter; Positive Displacement for Process Metering; Bi-Rot
(9COM- 6000002722)
Specification: [34-SAMSS-118](#); [IR343000](#)

Refer to SAP System

- 120 Flowmeter; Annubar; Pitot Tube
(9COM- 6000002677)

Refer to SAP System

- 121 Flowmeter; Magnetic
(9COM- 6000002735)

Refer to SAP System

- 122 Ultrasonic Flowmeters*

- 122.1 Flow Meter: Ultrasonic; Liquid, Gas and Flare Line Service
(9COM- 6000002738)

** P&CSD pre-approval is required for clamp-on type*

Refer to SAP System

- 122.2 Flowmeter; Multipath Ultrasonic for Process Metering; Gas Service
(9COM- 6000002777)

Refer to SAP System

123 Flowmeter; Vortex; Vortex Shedding

(9COM- 6000002739)

Refer to SAP System

126 Thermal Flowmeters

(9COM- 6000002736) - Flow Meter/Switch: Thermal

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Fluid Components International	30002423	San Marcos, CA, US	
Brooks Instruments	30000079	Veenendaal, NL	
Kurz Instruments	30003794	Monterey, CA, US	

127 Flow Nozzles

(9COM- 6000002740) - Flow Nozzle

Refer to SAP System

128 Flowmeter; Coriolis Mass

(9COM- 6000002915)

Refer to SAP System

129 Specialty Flowmeters

129.1 Flowmeter; Specialty Flowmeter for Reduce Piping Requirements

(9COM- 6000002742)

Refer to SAP System

200 Pressure

211 Pressure and Differential Pressure Transmitters

(9COM- 6000002850) - Transmitter: Flow

(9COM- 6000002851) - Transmitter: Pressure

Refer to SAP System

212 Pressure Gauges

(9COM- 6000002754) - Indicator: Pressure

Specification: Mandatory requirements are specified in [SAES-J-200](#).

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Ametek, Inc. (U.S. Gauge PMT)	10016194	Feasterville, PA US	
WIKA Alexander Wiegand Gmbh	10032628	Klindgenberg, DE	
WIKA Instrument Corporation	10023327	Lawrenceville, USA	
Wika Middle East FZE	10029526	Dubai, AE	
Ashcroft AI Rushaid Instrument Company Ltd (AARICO)	30005539	Jubail	
Dresser Instrument Division, Ashcroft	10017721	Stratford, US	
Dwyer Instruments, Inc. (Magnehelic)	10017797	Michigan City, US	

213 Pressure and Differential Pressure Switches

(9COM- 6000002830) - Switch: Differential Pressure

(9COM- 6000002834) - Switch: Pressure

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
WIKA Alexander Wiegand Gmbh	10032628	Klindgenberg, DE	
Wika Middle East FZE	10029526	Dubai, AE	
Barton Instrument Systems	30001183	Bognor Regis, UK	
Custom Control Sensors, Inc.	10004389	Swindon, UK	
Mercoird Corp.	10017798	Michigan City, US	
SOR Europe	10001487	SW, UK	
SOR, Inc.	10021774	Lenexa, KS, US	
United Electric Controls	10022325	Watertown, MA, US	

214 Multivariable Transmitters

(9COM- 6000002926) - Transmitters Multivariable

Refer to SAP System

215 Remote Seals

(9COM- 6000002693) - Chemical Seal

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Ametek, Inc. (U.S. Gauge PMT)	10016194	Feasterville, US	
Barton Instrument Systems	30001183	Bognor Regis, UK	
Dresser AI-Rushaid Valve & Instrument/ Ashcroft	30000428	Jubail	
Dresser Instrument Division, Ashcroft	10017721	Stratford, US	
WIKA Alexander Wiegand Gmbh Wika Middle East FZE	10032628 10029526	Klindgenberg, DE Dubai, AE	
Emerson- Process Management	30004511	Wessling, DE	

217 Differential Pressure Gauges

(9COM- 6000002749) - Indicator: Differential Pressure

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
ABB instrumentation SPA	10004522	Lenno, IT	
ABB Automation Products Gmbh	10015036	Minden, DE	
ABB Kent-Taylor Inc.	10018670	Rochester, US	
ABB Automation Instrumentation	10018650	Warminster, US	
Barton Instrument Systems	30001183	Bognor Regis, UK	
Ashcroft AI Rushaid Instrument Company Ltd (AARICO)	30005539	Jubail	
Dresser Instrument Division, Ashcroft	10017721	Stratford, US	
Dwyer Instruments, Inc.	10017797	Michigan City, US	
Honeywell, Inc.	10019010	Phoenix, US	
Meriam Instruments Div.	10021406	Cleveland, OH, US	
WIKA Alexander Wiegand Gmbh	10032628	Klingenberg, DE	
WIKA Instrument Corporation	10023327	Lawrenceville, USA	

300 Level

311 D/P Level Transmitters

See Category 211 - Pressure and Differential Pressure Transmitters

- 312 Level Gauge Glasses
(9COM- 6000002886) - Glass: Level Gauge
Refer to SAP System
- 313 Level Switches - Float and Displacer Type
(9COM- 6000002832) - Switch: Liquid Level
Refer to SAP System
- 314 Transmitter; Liquid Level; Displacer
(9COM- 6000002763) – Level Instrument Displacer Type:
(Transmitters/Controllers; NA)
Refer to SAP System
- 315 Level Instruments - Ultrasonic
(9COM- 6000002762)
Refer to SAP System
- 316 Level Instruments – Capacitance or RF Admittance
(9COM- 6000002761) - Level Control: Capacitance Type
Refer to SAP System
- 317 Level Instruments - Nuclear Radiation
(9COM- 6000002764) - Level Instrument: Radiation Type
Refer to SAP System
- 318 Tank Gauging Equipment – Servo and Float
(9COM- 6000002838)
Specification: [34-SAMSS-318](#)
Refer to SAP System
-

319 Tank Gauging Equipment – Radar (for inventory tank use only)
 (9COM- 6000002822)

Specification: [34-SAMSS-319](#)

Refer to SAP System

320 Guided Wave Radar (GWR) Level Transmitters
 (9COM- 6000007390) - Transmitter: Level; GWR

Refer to SAP System

321 Level Gauge- Magnetic Type (MLI)
 (9COM- 6000002765) – Gauge; Level; Magnetic

Refer to SAP System

400 Temperature

411 Temperature Transmitters
 (9COM- 6000002852) - Transmitter: Temperature

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Emerson Process Management	10029032	Wessling, DE	
Emerson Process Management Ltd	10005275	Worcester, GB	
Emerson – Rosemount Inc	10018041	Eden Prairie, US	
Invensys Barcol-Air BV	10004767	Purmerend, NL	
Honeywell, Inc.	10019010	Phoenix, US	
ABB instrumentation SPA	10004522	Lenno, IT	
ABB Automation Products Gmbh	10024603	Alzenau, DE	
ABB Automation Products Gmbh	10015036	Minden, DE	
ABB Automation Instrumentation	10018650	Warminster, US	
Yokogawa Electric Corp.	10001950	Musashino City, JP	
WIKA Alexander Wiegand Gmbh	10032628	Klindgenberg, DE	
Endress+Hauser Wetzler Gmbh	10037950	Nesselwang, DE	
Saudi Fal Company, Ltd.	10007457	Al-Khobar, SA	
SMAR	10021582	Houston, US	

412 Temperature Indicators

(9COM- 6000002756) - Indicator: Temperature- Bimetallic and Expansion Types
 Specification: Mandatory requirements are specified in [SAES-J-400](#)

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Ametek, Inc. (U.S. Gauge PMT)	10016194	Feasterville, US	
ABB instrumentation SPA	10004522	Lenno, IT	
ABB Automation Products Gmbh	10024603	Alzenau, DE	
ABB Automation Products Gmbh	10015036	Minden, DE	
ABB Automation Instrumentation	10018650	Warminster, US	
Dresser Instrument - Ashcroft	10017721	Stratford, US	
WIKA Alexander Wiegand Gmbh	10032628	Klindgenberg, DE	
WIKA Instrument Corporation	10023327	Lawrenceville, USA	
Rueger SA	30001251	Crissier, CH	

413 Temperature Switches – Mechanical

(9COM- 6000002835) - Switch: Temperature

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Custom Control Sensors, Inc.	10004389	Swindon, UK	
Mercoid Corp.	10017798	Michigan City, IN, US	
Barton Instrument Systems	30001183	Bognor Regis, UK	
SOR, Inc.	10021774	Lenexa, KS, US	
United Electric Controls	10022325	Watertown, MA, US	
WIKA Middle East	10029526	Dubai, AE	
WIKA Gmbh	10032628	Klingenberg, DE	

415 Thermocouples

(9COM- 6000002888) – Thermocouple

Specification: Mandatory requirements are specified in [SAES-J-400](#)

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
ABB Automation Products GmbH ABB Instrumentation, Ltd.	30001111 30003760	Alzenau, DE Workington, GB	
Emerson Process Management	10029032	Wessling, DE	
Minco Products, Inc.	10020168	Minneapolis, US	
Thermo Electric Co, Inc.	30001963	Saddle Brook, US	
Doedijns Thermo Electric BV	30001296	Waddinxveen, NL	
Gay Engineering and Sales Co. (GAYESCO)	10031229	Pasadena, TX, US	
United Electric Controls	10022325	Watertown, MA, US	
Conax Buffalo Technologies	10021385	Buffalo, US	
Okazaki Manufacturing Co.	30001422	Chuo-Ku	
WIKA Alexander Wiegand GmbH	10032628	Klindgenberg, DE	
Rueger SA	30001251	Crissier, CH	

416 Resistance Temperature Detectors

(9COM- 6000002814)

Specification: Mandatory requirements are specified in [SAES-J-400](#)

Refer to SAP System

418 Thermowell

(9COM- 6000002845)

Specification: Mandatory requirements are specified in [SAES-J-400](#)

Refer to SAP System

500 Analytical Instruments

511 Analyzer; Gas Chromatograph; Sheltered

(9COM- 6000002914)

Specification: [34-SAMSS-511](#); [IR343200](#)

Refer to SAP System

512 Analyzer; Gas Chromatograph; Field Mounted

(9COM- 6000014780)

Specification: [34-SAMSS-511](#); [IR343200](#)

Refer to SAP System

513 Oxygen Analyzers

(9COM- 6000002666)

Specification: [34-SAMSS-512](#); [IR345400](#)

Refer to SAP System

514 pH Analyzers

(9COM- 6000002667) - Analyzer: pH

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
ABB Instrumentation, Ltd.	30001058	Stonehouse, GB	
Foxboro Co.	30002059	Foxboro, US	
GLI International	10018722	Milwaukee, US	
Yokogawa Electric Corp.	30001465	Musashino-Shi, JP	
Yokogawa Electric Kofu Plant	30003284	Kofu, JP	
Horiba Instruments	10019060	Irvine, CA, US	
Emerson - Rosemount Analytical Division	30001646	Irvine, US	
Endress + Hauser Conducta GmbH +Co KG	10039116	Gerlingen, DE	

515 Hydrogen Sulfide Monitors; Gas

(9COM- 6000002786)

Specification: [34-SAMSS-514](#); [IR344900](#)

Refer to SAP System

516 Moisture Analyzers

(9COM- 6000002664)

Specification: [34-SAMSS-515](#); [IR347400](#)

Refer to SAP System

517 Analyzer Shelters

(9COM- 6000002898)

Specification: [SAES-J-502](#)

Refer to SAP System

518 Density Meter; Gas and Liquid

(9COM- 6000002720)

Specification: [34-SAMSS-517](#); [IR345300](#)

Refer to SAP System

519 Gravimeters

(9COM- 6000002746) – Gravimeter

Refer to SAP System

520 BS&W Analyzers

(9COM- 6000002655) - Analyzer: Bottom Sediment and Water

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Thermo Electron Corp.	30001630	Round Rock, TX, US	
FMC Fluid Control/Invalco	30001670	Stephenville, US	
Halliburton Energy Services	30001727	US	
AGAR Corp.	30002049	Houston, US	
ROXAR Flow Measurement AS	30003347	Stavanger, NO	
Weatherford Production	30001629	Kingwood, US	
Phasedynamics, Inc.	30005690	Richardson, US	

521 Chlorine Analyzers and Chlorinators

(9COM- 6000002658) - Analyzer: Chlorine

Refer to SAP System

522 Combustible Gas Monitors

(9COM- 6000002782) - Monitor; Gas; Combustible

(9COM- 6000002787) - Monitor; Gas; Combustible; Open Path Type

Specification: [34-SAMSS-514](#); [IR344900](#)

Refer to SAP System

523 Conductivity Analyzers

(9COM- 6000002660) - Analyzer: Conductivity

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
ABB Instrumentation, Ltd.	30001058	Stonehouse, GB	
Emerson - Rosemount Analytical Division	30001646	Irvine, US	
Endress + Hauser Conducta GmbH +Co KG	10039116	Gerlingen, DE	
Horiba	10019060	Irvine, CA, US	
Yokogawa Electric Corp.	30001465	Musashino-Shi, JP	
Yokogawa Electric Kofu Plant	30003284	Kofu, JP	

524 Continuous Emission Monitoring Analyzers
(9COM- 6000002663) - Analyzer: Furnace/Flue Gas

Refer to SAP System

525 FTIR/NIR Analyzers
(9COM- 6000002925) - Analyzer; NIR Spectrometer

Refer to SAP System

530 Process Color Analyzers
(9COM- 6000002659) - Analyzer: Color

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
ABB Instrumentation, Ltd.	30001058	Stonehouse, GB	
Ametek	30001481	Pittsburgh, US	
Horiba	10019060	Irvine, CA, US	
Metrisa, Inc.	10020215	25 Wiggins Avenue Bedford, MA 01730	

531 Tunable Diode Analyzers
(9COM- 6000013921) - Analyzer: Tunable Diode (Extractive)

Refer to SAP System

532 Physical Property Analyzers
(9COM- 6000014021) - Analyzer: Physical Property

Refer to SAP System

533 Mercury Online Analyzers
(9COM- 6000014702) - Analyzer: Mercury

Refer to SAP System

600 Safety

605 Surge Relief Valves

Valve; Relief; Surge Relief Station

605.1 Gas Loaded Surge Relief Valves

9COM-6000002896 - Valve; Relief; Surge Gas Loaded

Refer to SAP System

605.2 Pilot Operated Surge Relief Valves

9COM-6000012803 - Valve; Relief; Surge Pilot Operated

Refer to SAP System

611 Safety Relief Valves; Flanged, Conventional and Balanced Bellows
(9COM- 6000002869)

Specification: [34-SAMSS-611](#); [IR341900](#)

Refer to SAP System

612 Safety Relief Valves; Pilot Operated

(9COM- 6000002868)

Specification: [34-SAMSS-612](#); [IR342000](#)

612.1 For Processing Plants

Refer to SAP System

612.2 For Storage Tanks and Spheroids

Refer to SAP System

613 Valve; Vent Pressure Vacuum (For Tanks)

(9COM- 6000002867)

Refer to SAP System

614 Rupture Discs

(9COM- 6000002549) - Rupture Disc Assembly

Refer to SAP System

615 Flame Arrestors

(9COM- 6000002679) - Arrestor: Flame

Refer to SAP System

616 Check Valve (for Gauge Glasses)

(9COM- 6000002854) - Valve: Check; Level Gauge Glass; Flow Shut-Off

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Clark-Reliance-Jerguson Gage & Valve Co.	10019404	Strongsville, US	
Tyco Flow Control-Penberthy, Incorporated	30002066	Prophetstown, US	
Simco Engineers	10001569	Jarrow, UK	
Cesare Bonetti	10003565	Garbagnate, IT	

617 Flame Monitoring Systems

(9COM- 6000002732); [IR 345600](#)

Specification: [34-SAMSS-619](#)

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Hamworthy Combustion Engineering	30001164	Poole, GB	
ABB Instrumentation	30001252	Pero, IT	
Fireye Electronics	30001599	Derry, US	
Forney International	30001671	Carrollton, US	
Honeywell, Inc.	30001743	Phoenix, AZ, US	

- 619 Burner Management Systems for Watertube Boilers
(9COM- 6000002723) - Emergency Shutdown System; Programmable Logic Controller

Refer to SAP System

- 624 Speed Sensors (RPM)
(9COM- 6000002820) - Sensor: Speed
Specification: [34-SAMSS-625](#)

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Woodward Governor	10001845	Rockford, IL, US	
Bently-Nevada Corporation	30001527	Minden, US	
SKF Condition Monitoring	30001915	San Diego, US	
Rockwell Automaiton-Entek (IRD)	30001908	Milwaukee, Wisconsin, US	

- 625 Vibration Monitors; Non-Contacting Type
(9COM- 6000002796)
Specification: [34-SAMSS-625](#); [IR345100](#)

Refer to SAP System

- 626 Monitor Systems; Temperature
(9COM- 6000002780)
Specification: [34-SAMSS-625](#)

Refer to SAP System

628 Shut Down Cabinets - Local, Electro-pneumatic

628.1 Cabinet: Shutdown, Local, Pneumatic and Electric without Partial Stroke Test Feature

(9COM- 6000002684)

Specification: [34-SAMSS-634](#)

Refer to SAP System

628.2 Cabinet: Shutdown, Local, Pneumatic and Electric with Partial Stroke Test Feature

(9COM- 6000002873)

Specification: [34-SAMSS-634](#)

Refer to SAP System

628.3 Smart ZV Controller - Smart Valve Controller and Software that provide the local control of Smart ZV with predefined Partial Stroke Test Feature and local test pushbutton

(9COM- 6000010782)

Specification: [34-SAMSS-634](#)

Refer to SAP System

628.4 Smart ZV Assembly

(9COM- 6000002889) – Assembly; Smart ZV Assembly per [34-SAMSS-634](#)

Assembly; Smart ZV Assembly; Valve/Actuator Assembly with Local Control Panel and Digital positioner; Does not include Valve.

Specification: [34-SAMSS-634](#)

Refer to SAP System

632 Vibration Monitors - Seismic Type

(9COM- 6000002875) - Vibration Monitoring System: Seismic

Specification: [34-SAMSS-625](#)

Refer to SAP System

635 Wellhead Shut Down Systems

635.1 (9COM- 6000003611) - Wellhead Emergency Shutdown System for Multi-well Offshore Applications

Specification: [34-SAMSS-624](#)

Refer to SAP System

635.2 CCC: 451545 (9COM- 6000003727) - Panel: Hydraulic; SSV/ SSSV; Single-Well Onshore Applications

Specification: [34-SAMSS-624](#)

Refer to SAP System

635.3 (9COM- 6000003729) - Actuator: Surface Safety Valve; Hyd; Self Contained Actuator

Specification: [34-SAMSS-624](#)

Refer to SAP System

700 Valves

711 Control Valves; Globe

(9COM- 6000002861) - Valve: Control; Globe; including Actuator, Positioner & Regulator

Specification: [34-SAMSS-711](#); [IR340100](#)

Refer to SAP System

712 Control Valves - Ball and Eccentric Plug (Characterized)

(9COM- 6000002858) - Valve: Control; Ball; including Actuator, Positioner & Regulator

Specification: [34-SAMSS-711](#); [IR340100](#)

Refer to SAP System

- 713 Control Valves - Butterfly and Rotary Plug
(9COM- 6000002859) - Valve: Control; Butterfly; including Actuator,
Positioner & Regulator
Specification: [34-SAMSS-711](#); [IR340100](#)
Refer to SAP System
- 714 Control Valves - Severe and Non-General Service
(9COM- 6000002891) - Valve: Control; Non-General Service including
actuator, positioner and accessories
Specification: [34-SAMSS-711](#)
Refer to SAP System
- 715 Control Valves; Angle
(9COM- 6000002855) - Valve: Control; Globe Angel; including Actuator,
Positioner & Regulator
Specification: [34-SAMSS-711](#); [IR340100](#)
Refer to SAP System
- 716 Valve Actuators; Pneumatic; On-Off
(9COM- 6000002903) - Actuator: Pneumatic; For On/Off Valves
Specification: [34-SAMSS-716](#); [IR341000](#)
Refer to SAP System
- 717 Valve Actuators; Hydraulic and Electro/Hydraulic
(9COM- 6000002902)
Specification: [34-SAMSS-717](#) to purely hydraulic only
Refer to SAP System
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718 Valve Actuators – Electric

718.1 Electrical Actuators for Control Applications (including Fail Steady electric operated ZV)

(9COM- 6000002901) - Actuator: For Operating Valve; Electric Motor

Specification: [34-SAMSS-718](#); [IR341000](#)

Refer to SAP System

718.2 Electrical Actuators for ESD/Wellhead Applications

9COM- 6000010821 - Actuator: For Operating Valve; Electric Motor, Fail Safe Design

Specification: [34-SAMSS-718](#)

Refer to SAP System

719 Regulators - Pressure and Flow

(9COM- 6000002810) - Regulator: Pressure; Flow

Refer to SAP System

722 Control Valves; Automatic Recirculation

(9COM- 6000002856)

Refer to SAP System

723 Control Valves; Desuperheating

(9COM- 6000002860) - Valve: Control; Desuperheating; including Actuator, Regulator, Positioner

Specification: [34-SAMSS-711](#)

Refer to SAP System

800 Panel Instrumentation

811 Controllers and Indicators – Analog

(9COM- 6000002700) - Controller/Indicator: For Panel Mounting

Refer to SAP System

812 Recorders

(9COM- 6000002805) - Recorder: Chart

Refer to SAP System

813 Indicators - Multi-point, Thermocouple

(9COM- 6000002753) - Indicator: Multi-point

Refer to SAP System

814 Recorders - Multi-point

(9COM- 6000002807) - Recorder: Multi-point

Refer to SAP System

815 Annunciator Panel: Solid State and Plug-In Module

(9COM- 6000002678)

Specification: [34-SAMSS-815](#); [IR343300](#)

Refer to SAP System

818 Controllers – Field

(9COM- 6000002703) - Controller: Field

Refer to SAP System

- 820 Control Panels; Indoor; Cabinet Structure only; Does Not include integrators
(9COM- 6000002697)
Specification: [34-SAMSS-820](#)

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Hoffman	10020718	2100 Hoffman Way, Anoka, MN, US	
Remal Factory	30000794	Alkhobar, SA	
Rittal	30003116	Herborn	

- 821 Control Panels; Outdoor; Cabinet Structure only; Does Not include integrators
(9COM- 6000002698)
Specification: [34-SAMSS-821](#)

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Hoffman	10020718	2100 Hoffman Way, Anoka, MN, US	
Remal Factory	30000794	Alkhobar, SA	
Rittal	30003116	Herborn	

- 822 Cabinets; for Vibration Monitoring Systems
(9COM- 6000013781)
Specification: [34-SAMSS-820](#); Form [175-343100](#)

Refer to SAP System

- 823 Cabinets; for PLC Systems
(9COM- 6000013922)
Specification: [34-SAMSS-820](#); Form [175-343100](#)

Refer to SAP System

825 Relays - Electro-magnetic

(9COM- 6000002812) - Relay: Electro Magnetic

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Tyco - Potter and Brumfield	10019820	Winston, US	
Cutler Hammer	10017874	Milwaukee, US	
Omron	10004446	Schaumburg, IL, US	
Allen Bradley/Rockwell Automation	10021204	Brussels, Belgium	
STPI Relais Electriques	10001463	Paris, FR	

826 Relays – Pneumatic

(9COM- 6000002813) - Relay: Pneumatic

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Emerson-Fisher Controls Co.	30001650	Marshalltown, US	
Fairchild Industrial Products Co.	10018199	3920 West Point Blvd. • Winston-Salem, NC 27103	
Siemens- Moore Products	10002425	Yeovil	
Marsh Bellofram	60007017	9 Castle Park Queens Drive, Nottingham NG2 1AH	

827 Solenoid Valves

(9COM- 6000002871)- Valve: Solenoid Operated

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Automatic Switch Co. (ASCO)	10000358	Scherpenzeel, NL	
	10018037	Florham, US	
	10004648	Japan	
Circle Seal Controls	10023208	Corona, CA, US	
Maxseal (Thompson Valves)	10003159	Dorset, UK	
Parker-Skinner Valve Division	10024829	New Britain, US	
Versa Valves	10022525	Paramus, US	

828 Transducers - Signal Conversion

(9COM- 6000002848) - Transducer: Signal Conversion

828.1 (I/P) Transducers

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Emerson-Fisher Controls Co. Emerson Process Management	10018059 10029032	Marshalltown, US Wessling, DE	
ABB - Kent Taylor, Inc. ABB Automation Instrumentation	10018670 10018650	Rochester ,US Warminster, US	
Foxboro Co. (Invensys)	10016490	Houston, US	
Dresser Flow Control	10004242	Uxbridge, GB	
Dresser Al-Rushaid Valve And	30000428	Jubail, SA	
Siemens Moore Process Automation	10002425	Yeovil, GB	

828.2 E/I Transducers

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Foxboro Co. (Invensys)	10016490	Houston, US	
Honeywell Sensing & Control	10019057	Freeport, US	
Ametek-Rochester Instrument Systems	10002603	Dunfermline, GB	
Moore Industries	10020228	North Hills, US	

829 Pilot Valves

(9COM- 6000002918) - Valve: Pilot

All suppliers listed for Solenoid Valves (9COM-6000002871) are acceptable for pilot air operated valves.

830 Controller; Programmable Logic

(9COM- 6000002708)

Specification: [34-SAMSS-830](#), [IR344000](#)

Refer to SAP System

900 Installation

904 Foundation Fieldbus (FF) Power Supplies

9COM- 6000010825

Specification: Mandatory requirements are per [SAES-J-904](#)

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
MTL/Relcom, Inc.	10005043	Luton, UK	
Pepperl & Fuchs	10015196	Mannheim-Schonau, DE	

905 Foundation Fieldbus (FF) Wiring Blocks

9COM- 6000010781

Specification: Mandatory requirements are per [SAES-J-904](#)

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
MTL/Relcom, Inc.	10005043	Luton, UK	
Pepperl & Fuchs	10015196	Mannheim-Schonau, DE	
Moore Industries/Moore Hawke	10020228	North Hills, US	

906 Foundation Fieldbus (FF) Terminators

9COM- 6000010826

All suppliers listed for Foundation Fieldbus (FF) wiring blocks
(9COM-6000010781) are acceptable for Foundation Fieldbus Terminators.

907 Foundation Fieldbus (FF) Multi-Input Temperature Multiplexer
(9COM- 6000013000)

Specification: Mandatory requirements per [SAES-J-904](#)

MANUFACTURER	VENDOR/ PLANT ID	LOCATION	NOTES
Emerson- Rosemount Division	30001655	Austin, TX, US	
MTL	10005043	Luton, UK	
Pepperl & Fuchs	10015196	Mannheim, DE	

913 Instrument Wire and Cable

(9COM- 6000000805) - Cable: Instrumentation & Thermocouple; per [34-SAMSS-913](#)

(9COM- 6000002686) - Cable: Instrumentation & Control; per [34-SAMSS-913](#)

Specification: [34-SAMSS-913](#); [IR347600](#)

Refer to SAP System

914 Foundation Fieldbus Cables

(9COM- 6000013923) - Cable: for Foundation Fieldbus loops; per [34-SAMSS-913](#)

Refer to SAP System

915 Tubing; Metallic

(9COM- 6000000028) - Tubing: Alloy

(9COM- 6000000068) - Tubing Metallic; Stainless Steel

Refer to SAP System

916 Tubing; Heat Traced and Pre-Insulated, for Analyzers

(9COM- 6000014560) - Heat Traced and Pre-Insulated

Refer to SAP System

- 918 Cable and Support Tray
(9COM- 6000000744) - Cable Tray: Aluminum
(9COM- 6000000775) - Cable Tray: Fiberglass

Refer to SAP System

- 919 Valve: Instrument
(9COM- 6000000304) - Valve: Instrument

Refer to SAP System

- 920 Valve Manifolds for Instrument-Process Interface
(9COM- 6000002768) - Manifold: Instrument or Pressure

Note: Manifolds supplied by the approved transmitter manufacturers are acceptable.

Refer to SAP System

- 921 Air Filter – Regulators
(9COM- 6000002809) - Regulator: Air-Filter

Refer to SAP System

- 922 Tubing Fittings
(9COM- 6000000208) - Fitting: Tubing; 316 SS Flareless / Compression

Refer to SAP System

Revision Summary

26 June 2010	Revised the "Next Planned Update." Reaffirmed the content of the document, and reissued with minor revision.
12 December 2010	Minor revision to reflect SAES-J-002/SAP synchronization activities.
14 May 2011	Minor revision to limit suppliers of positioners to approved control valve manufacturers.
8 January 2012	Minor revision to reflect SAES-J-002/SAP synchronization activities; to add two 9COMs for (Mercury Analyzers and Pre-insulated tubing for analyzer) and to delete the 9COM for flared tube fittings.
22 July 2012	Minor revision to update the document with SAES-J-002/SAP synchronization activities; to add a new 9COM for field mounted GCs and to delete 9COMs for temperature regulators, single loop controllers and diaphragm actuators for on/off valves.
20 February 2013	Editorial revisions to change the primary contact person and other changes as marked.
