

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I100
<b>DEVICE:</b>	Magnetic Flow Meter
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Refer to Instrument Index and P&ID Diagrams
<b>SIZE AND MATERIAL:</b>	Refer to Process Drawings for flow meter size and piping materials
<b>END CONNECTIONS:</b>	Flanged
<b>LINER MATERIAL:</b>	PFA unless otherwise stated in the Instrument List
<b>ELECTRODES:</b>	316 SS Bullet Nose; Hastelloy C-276 in acid lines.
<b>GROUNDING:</b>	316 SS Grounding Rings
<b>RANGE:</b>	Refer to Process Drawings and/or Instrument Lists
<b>INACCURACY:</b>	±1% of span
<b>OUTPUT:</b>	4 to 20 mA DC into 500 ohm load Scaled pulse output
<b>POWER SUPPLY:</b>	120 VAC, 60 Hz
<b>INDICATION:</b>	Local indication of flow rate and totalized flow
<b>ELECTRONIC ENCLOSURE:</b>	NEMA 4X. Remote wall-mount.
<b>MANUFACTURER AND MODEL:</b>	Rosemount 8700 Series ABB Magmaster Krohne Endress and Hauser.

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I101
<b>DEVICE:</b>	Thermal Mass Air Flow Element and Transmitter
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Refer to Instrument Index and P&ID Diagrams
<b>PROCESS PRESSURE:</b>	Refer to Instrument Index, Section 17700
<b>OUTPUT:</b>	4 to 20 mA DC
<b>DISPLAY:</b>	8 Digit flow rate and totalized flow
<b>POWER SUPPLY:</b>	120 VAC, 60 Hz, 1 Ph
<b>CONSTRUCTION:</b>	Stainless steel
<b>ELECTRONICS ENCLOSURE:</b>	NEMA 4
<b>MOUNTING:</b>	Flanged sensor body with remote surface mounted transmitter
<b>ACCESSORIES:</b>	30 m Signal Cable
<b>MANUFACTURER AND MODEL:</b>	ABB Brooks

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I102
<b>DEVICE:</b>	Compact Inline Flowmeter
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Refer to Instrument Index and P&ID Diagrams
<b>PROCESS FLOW:</b>	Refer to Instrument Index, Section 17700
<b>OUTPUT:</b>	4 to 20 mA DC
<b>ACCURACY</b>	<3%
<b>REPEATABILITY</b>	<1%
<b>POWER SUPPLY:</b>	24V DC max 100 mA
<b>FLOWTUBE MATERIAL:</b>	To suit liquid being measured, size as shown on drawings
<b>ELECTRONICS ENCLOSURE:</b>	IP65
<b>MOUNTING:</b>	Inline sensor pipe
<b>ACCESSORIES:</b>	2 m moulded oilflex cable
<b>MANUFACTURER AND MODEL:</b>	Weber flow captor

**INSTRUMENT SPECIFICATION SHEETS**

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**INSTRUMENT SPECIFICATION NUMBER:** I105

**DEVICE:** Flow Switch

**TAG:** Refer to Instrument Index, Section 17700

**TYPE:** Thermal Dispersion

**SERVICE:** Refer to Instrument Index and P&ID Diagrams

**RANGE:** Refer to Instrument Index, Section 17700

**REPEATABILITY:** <1%

**OUTPUT:** SPDT contacts rated 10 Amps @ 120 VAC

**POWER SUPPLY:** 120 VAC, 60 Hz, 1 Ø

**ENCLOSURE:** Polymer-coated aluminum, NEMA 4X rating

**MOUNTING:** ¾" NPT with 1" insertion length

**MANUFACTURER AND MODEL:** IFM  
Weber

**INSTRUMENT SPECIFICATION SHEETS**

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**INSTRUMENT SPECIFICATION NUMBER:** I110

**DEVICE:** Differential Pressure Transmitter

**TAG:** Refer to Instrument Index, Section 17700

**SERVICE:** Refer to Instrument Index and P&ID Diagrams

**PROCESS CONNECTIONS:** ½" NPTF

**RANGE:** Refer to Instrument Index, Section 17700

**INACCURACY:** ±1% of span

**OUTPUT:** 4 to 20 mADC into 500 ohm

**POWER SUPPLY:** Loop powered 24 VDC

**CONSTRUCTION:** Stainless steel wetted parts

**ELECTRONIC ENCLOSURE:** NEMA 4X

**ACCESSORIES:** Anderson Greenwood Stainless steel 3 valve manifold

**MANUFACTURER AND MODEL:** Rosemount Model 3051  
ABB  
Foxboro

**INSTRUMENT SPECIFICATION SHEETS**

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**INSTRUMENT SPECIFICATION NUMBER:** I111

**DEVICE:** Pressure Transmitter (Gage and Absolute)

**TAG:** Refer to Instrument Index, Section 17700

**SERVICE:** Refer to Instrument Index and P&ID Diagrams

**PROCESS CONNECTIONS:** ½" NPTF

**RANGE:** Refer to Instrument Index, Section 17700

**INACCURACY:** ±1% of span

**OUTPUT:** 4 to 20 mA DC into 500 ohm

**POWER SUPPLY:** Loop powered 24 VDC

**CONSTRUCTION:** Stainless steel wetted parts

**ELECTRONIC ENCLOSURE:** NEMA 4X

**ACCESSORIES:** Stainless steel block and bleed manifold

**MANUFACTURER AND MODEL:** Rosemount Model 3051  
ABB  
Foxboro

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I112
<b>DEVICE:</b>	Pressure Gauge
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Refer to Instrument Index and P&ID Diagrams
<b>PROCESS CONNECTION:</b>	6.35 mm bottom connection
<b>CASE:</b>	75 mm stainless steel complete with stainless steel wetted parts
<b>ACCURACY:</b>	±1% of span
<b>RANGE:</b>	Refer to Instrument Index, Section 17700
<b>ACCESSORIES:</b>	Stainless steel snubber and shut-off cock
<b>MANUFACTURER AND MODEL:</b>	Ashcroft H.O. Trerice Budenberg

**INSTRUMENT SPECIFICATION SHEETS**

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**INSTRUMENT SPECIFICATION NUMBER:** I115

**DEVICE:** Pressure Switch

**TAG:** Refer to Instrument Index, Section 17700

**SERVICE:** Refer to Instrument Index and P&ID Diagrams

**PROCESS CONNECTION:** ½" NPTF

**SENSOR:** Brass Bellows

**RANGE:** Refer to Instrument Index, Section 17700

**MOUNTING:** Bottom, Stem mounted

**ENCLOSURE:** NEMA 4X

**OUTPUT:** Form C Contacts rated 5 amps @ 120 VAC

**MANUFACTURER AND MODEL:** Ashcroft  
United Electric  
Barksdale

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I116
<b>DEVICE:</b>	Differential Pressure Switch
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Clogged air filter detection
<b>RANGE:</b>	Refer to Instrument Index, Section 17700, with adjustable trip point
<b>PROCESS CONNECTIONS</b>	Barbed tube fittings on switch and static pressure probes.
<b>INACCURACY:</b>	±1.0% of span or better
<b>OUTPUT:</b>	Form C dry contact rated for pilot duty
<b>POWER SUPPLY:</b>	N/A
<b>ENCLOSURE:</b>	Manufacturer's standard
<b>MOUNTING:</b>	Direct mount static pressure probes to the duct. Wall mount bracket for the switch body.
<b>ACCESSORIES:</b>	Wall mount bracket. 5 mm copper sensing lines.

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I120
<b>DEVICE:</b>	Liquid Level Transmitter
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>TYPE:</b>	Ultrasonic
<b>SERVICE:</b>	Refer to Instrument Index and P&ID Diagrams
<b>RANGE:</b>	Refer to Instrument Index, Section 17700
<b>INACCURACY:</b>	±0.5% of span
<b>OUTPUT:</b>	4 to 20 mA DC into 500 ohm load 5 configurable alarm relays
<b>POWER SUPPLY:</b>	120 VAC, 60 HZ
<b>ENCLOSURE:</b>	NEMA 4X Transmitter Housing NEMA 4X Sensor
<b>MOUNTING:</b>	
<b>(TRANSMITTER)</b>	Wall Mount
<b>(SENSOR)</b>	Provide PVC pipe stilling well where shown on the drawings and in accordance with manufacturer's recommendations to ensure stable readings in turbulent locations. Mount sensor on stilling well. Install sensors at least 300 mm above maximum liquid level. Provide PVC blind flange for mounting sensor.
<b>ACCESSORIES:</b>	1 - hand-held programmer
<b>MANUFACTURER AND MODEL:</b>	Siemens Multiranger 100/200 Magnetrol Endress & Hauser

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I122
<b>DEVICE:</b>	Sludge Blanket Level Transducer and Transmitter
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>TYPE:</b>	Ultrasonic
<b>SERVICE:</b>	Refer to Instrument Index and P&ID Diagrams
<b>RANGE:</b>	Refer to Instrument Index, Section 17700
<b>INACCURACY:</b>	±0.5% of span
<b>OUTPUT:</b>	4 to 20 mA DC into 500 ohm load Minimum of 2 configurable alarm relays
<b>POWER SUPPLY:</b>	120 VAC, 60 HZ
<b>ENCLOSURE:</b>	NEMA 4X Transmitter Housing NEMA 6 Transducer
<b>MOUNTING:</b>	
<b>(TRANSMITTER)</b>	Wall Mount
<b>(SENSOR)</b>	Install sensors at least 300 mm above maximum liquid level. Provide PVC blind flange for mounting sensor.
<b>ACCESSORIES:</b>	Transducer to be equipped with a self cleaning mechanism
<b>MANUFACTURER AND MODEL:</b>	Partech Hach Siemens Cerlic

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I125
<b>DEVICE:</b>	Float Switch
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Refer to Instrument Index and P&ID Diagrams
<b>OUTPUT:</b>	SPDT Contacts
<b>ENCLOSURE:</b>	Polypropylene float casing with preterminated signal cable
<b>MOUNTING:</b>	Provide strain relief-type connectors to suspend float at desired location. Fabricate mounting brackets from 316 SS. Provide anti-sway rings to prevent sway in turbulent tanks.
<b>MANUFACTURER AND MODEL:</b>	Flygt ENM-10 Consolidated Electric Warwick Magnetrol

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I126
<b>DEVICE:</b>	Conductivity Level Switch
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Refer to Instrument Index and P&ID Diagrams
<b>RANGE:</b>	4 conductivity measuring ranges selectable via dip switches
<b>OUTPUT:</b>	SPDT Contacts
<b>POWER SUPPLY:</b>	120 VAC, 60 HZ
<b>ENCLOSURE:</b>	PBT Housing; Polypropylene rod insulation
<b>MOUNTING:</b>	Provide PVC blind flange for mounting probes.
<b>MANUFACTURER AND MODEL:</b>	Endress & Hauser

**INSTRUMENT SPECIFICATION SHEETS**

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**INSTRUMENT SPECIFICATION NUMBER:** I130

**DEVICE:** Temperature Indicating Transmitter with RTD Sensor

**TAG:** Refer to Instrument Index, Section 17700

**SERVICE:** Ambient Air

**RANGE:** 0°C to 50°C

**INACCURACY:** ±0.5% of span

**INDICATION:** 3½ Digit LED display scaled in engineering units

**OUTPUT:** 4 to 20 mA DC into 500 ohm load

**POWER SUPPLY:** Loop powered

**ENCLOSURE:** Transmitter: NEMA 4X  
RTD Probe: 5 mm dia x 100 mm L ambient air probe

**MOUNTING:** Wall mounting

**MANUFACTURER AND MODEL:** Rosemount Type 3044C  
ABB  
Foxboro

**INSTRUMENT SPECIFICATION SHEETS**

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**INSTRUMENT SPECIFICATION NUMBER:** I131

**DEVICE:** Temperature Indicating Transmitter with RTD Sensor

**TAG:** Refer to Instrument Index, Section 17700

**SERVICE:** Process Water

**RANGE:** 0 - 100°C

**INACCURACY:** ±0.5% of span

**INDICATION:** 3½ Digit LED display scaled in engineering units

**OUTPUT:** 4 to 20 mA DC into 500 ohm load

**POWER SUPPLY:** Loop powered

**ENCLOSURE:** Transmitter: NEMA 4X  
RTD Probe: Platinum 100 OHM Spring Loaded

**MOUNTING:** Direct to process, use a thermowell with 50 mm insertion at a pipe tee or elbow fitting

**MANUFACTURER AND MODEL:** Rosemount Type 3044C  
ABB  
Foxboro

**INSTRUMENT SPECIFICATION SHEETS**

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**INSTRUMENT SPECIFICATION NUMBER:** I132

**DEVICE:** Water Temperature Transmitter

**TAG:** Refer to Instrument Index, Section 17700

**SERVICE:** Heating/Cooling Loop Temperature

**RANGE:** 0 to 100°C

**PROCESS CONNECTION:** 3/4" NPT Thermowell with 75 mm insertion

**INACCURACY:** ±0.5% of span

**OUTPUT:** 4 to 20 mA DC

**POWER SUPPLY:** Loop powered

**ENCLOSURE:** NEMA 4

**MOUNTING:** Direct to process, locate at tee or elbow in system.

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I133
<b>DEVICE:</b>	Outdoor Air Temperature Transmitter
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>TYPE:</b>	Platinum RTD Sensor with Transmitter
<b>RANGE:</b>	-40 to 50°C
<b>INACCURACY:</b>	±0.5% of span
<b>OUTPUT:</b>	4 to 20 mA DC
<b>POWER SUPPLY:</b>	Loop powered
<b>ENCLOSURE:</b>	Stainless steel temperature probe and weatherproof electronics enclosure.
<b>ACCESSORIES:</b>	Wall mount bracket

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I134
<b>DEVICE:</b>	Duct Averaging Temperature Transmitter
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>TYPE:</b>	Platinum RTD Sensor with Transmitter
<b>SERVICE:</b>	Air handling units
<b>RANGE:</b>	-40 to 50°C
<b>INACCURACY:</b>	±0.5% of span
<b>OUTPUT:</b>	4 to 20 mA DC
<b>POWER SUPPLY:</b>	Loop powered
<b>ENCLOSURE:</b>	Manufacturer's standard
<b>ACCESSORIES:</b>	Duct mounting kit with sensor element holder

**INSTRUMENT SPECIFICATION SHEETS**

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**INSTRUMENT SPECIFICATION NUMBER:** I135  
**DEVICE:** Thermometer  
**TAG:** Refer to Instrument Index, Section 17700  
**TYPE:** Gas Filled or Bimetal Dial Thermometer  
**SERVICE:** Refer to Instrument Index, Section 17700  
**RANGE:** -40°C to +50°C  
**INACCURACY:** ±1% or better  
**CONSTRUCTION:** Stainless Steel  
**MOUNTING:** ½" NPT Thermowell with 200 mm insertion  
**MANUFACTURER AND MODEL:** H.O. Trerice Co.  
Taylor  
Weiss

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I136
<b>DEVICE:</b>	Room Thermostat
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Ambient Air
<b>RANGE:</b>	0 to 60°C
<b>INACCURACY:</b>	±0.5% of span or better
<b>OUTPUT:</b>	Form C dry contacts. Rated 10A@120 VAC resistive.
<b>ENCLOSURE:</b>	Manufacturer's standard
<b>MOUNTING:</b>	Wall mount

**INSTRUMENT SPECIFICATION SHEETS**

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**INSTRUMENT SPECIFICATION NUMBER:** I137  
**DEVICE:** Heating Coil Freeze-Stat  
**TAG:** Refer to Instrument Index, Section 17700  
**TYPE:** Duct Averaging Vapor-Charged Capillary  
**SERVICE:** Air handling units  
**RANGE:** -9.4 to 12.8°C  
**SETPOINT:** 1.6°C trip with manual reset  
**OUTPUT:** 1 N.O. and 1 N.C. contact with pilot duty rating  
**POWER SUPPLY:** N/A  
**ENCLOSURE:** Manufacturer's standard  
**ACCESSORIES:** Duct mounting kit with sensor element holder

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I140
<b>DEVICE:</b>	Humidity & Temperature Transmitter
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Ambient Air Temperature Transmitter with built-in Humidity Transmitter.
<b>RANGE:</b>	0°C to 50°C
<b>DISPLAY:</b>	Three digit LED display with one decimal point.
<b>OUTPUT:</b>	4 to 20 mA DC Humidity 4 to 20 mA DC Temperature
<b>ENCLOSURE:</b>	NEMA 4, 4x.
<b>MOUNTING:</b>	Wall
<b>MANUFACTURER AND MODEL:</b>	EE10 Series model EE10 FT6D04 or approved equal.

**INSTRUMENT SPECIFICATION SHEETS**

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**INSTRUMENT SPECIFICATION NUMBER:** I150

**DEVICE:** Motion Detector

**TAG:** Refer to Instrument Index, Section 17700

**TYPE:** Combination Infra-red and microwave

**CALIBRATION:** User adjustable detection patterns

**OUTPUT:** Form C Reed Relay rated 500 mA @ 300 VDC

**POWER SUPPLY:** 9 to 30 VDC

**MOUNTING:** Surface Mount

**MANUFACTURER AND MODEL:** C&K Systems DT-450C  
or approved equal

**INSTRUMENT SPECIFICATION SHEETS**

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**INSTRUMENT**

**SPECIFICATION NUMBER:** I151

**DEVICE:** Door Switch

**TAG:** Refer to Instrument Index, Section 17700

**TYPE:** Electronic

**DISPLAY:** LED Status Indicator

**OUTPUT:** SPDT Contact

**ENCLOSURE:** Surface Mount

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I160
<b>DEVICE:</b>	Inline Turbidity/TSS Monitor/Transmitter
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Residuals Plant refer to PID'S for liquid type
<b>SENSOR MATERIAL:</b>	Stainless Steel with wiper
<b>SENSOR MOUNTING</b>	Inline with proprietary Carbon Steel mounting kit or suspended in liquid as defined in instrument index and PID'S
	See drawing WB-A0410 for details
<b>RANGE:</b>	0-500 mg/L
<b>INACCURACY:</b>	Less than 5% of reading
<b>REPEATABILITY</b>	Less than 3% of reading
<b>OUTPUT:</b>	4 to 20 ma DC into 500 ohm load
<b>POWER SUPPLY:</b>	120 VAC, 60 Hz
<b>INDICATION:</b>	Local indication of TSS/ Turbidity
<b>ELECTRONIC ENCLOSURE:</b>	NEMA 4X. Remote wall-mount.
<b>MANUFACTURER AND MODEL:</b>	Hach Cerlic

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I162
<b>DEVICE:</b>	Turbidimeter
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Refer to Instrument Index and P&ID Diagrams
<b>MOUNTING:</b>	Wall mount.
<b>RANGE:</b>	0.001 – 100 NTU
<b>INACCURACY:</b>	±2% of reading from 0 to 40 NTU; ±5% of reading from 40 to 100 NTU
<b>REPEATABILITY</b>	Less than 1% of reading
<b>OUTPUT:</b>	4 to 20 ma DC into 500 ohm load 2 Configurable alarm relays including a dedicated fault relay
<b>POWER SUPPLY:</b>	120 VAC, 60 Hz
<b>INDICATION:</b>	Local indication of Turbidity
<b>ELECTRONIC ENCLOSURE:</b>	NEMA 4X.
<b>MANUFACTURER AND MODEL:</b>	Hach 1720E Turbidimeter and sc100 Controller Rosemount Endress & Hauser

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I165
<b>DEVICE:</b>	Flow Through pH/Temperature Analyzer
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Refer to Instrument Index and P&ID Diagrams
<b>SENSOR MATERIAL:</b>	Glass electrode
<b>SENSOR MOUNTING</b>	Wall mount
<b>TEMPERATURE COMPENSATION:</b>	Automatic, 0 to 100 Deg. C
<b>RANGE:</b>	0-14 pH
<b>INACCURACY:</b>	Less than $\pm 0.5\%$ of span
<b>REPEATABILITY</b>	Less than 0.01 pH
<b>OUTPUT:</b>	Two 4-20 mA DC outputs for process measurement and temperature 4 Configurable alarm relays including a dedicated fault relay
<b>POWER SUPPLY:</b>	120 VAC, 60 Hz
<b>INDICATION:</b>	Local indication of pH and temperature
<b>ENCLOSURE:</b>	NEMA 4X transmitter housing. Wall-mount sensor and transmitter.
<b>ACCESSORIES:</b>	Flow through sensor housing
<b>MANUFACTURER AND MODEL:</b>	Rosemount 320B Sensor and 54e Analyzer Endress & Hauser ABB Foxboro

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I164
<b>DEVICE:</b>	Particle Counter
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Filtered Water
<b>RANGE</b>	0-2500 particles
<b>PARTICLE SIZE</b>	2-50 micron threshold
<b>OUTPUT:</b>	4-20 mA DC output Dedicated fault relay output
<b>POWER SUPPLY:</b>	120 VAC, 60 Hz
<b>INDICATION:</b>	Local indication of Particle Count
<b>ENCLOSURE:</b>	NEMA 4X transmitter housing. Wall-mount sensor and transmitter.
<b>SAMPLE CONNECTIONS</b>	1/4"
<b>MANUFACTURER AND MODEL:</b>	Hach 2200 PCX Chemtrac

**INSTRUMENT SPECIFICATION SHEETS**

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<b>INSTRUMENT SPECIFICATION NUMBER:</b>	I170
<b>DEVICE:</b>	Online Chlorine Residual Analyzer
<b>TAG:</b>	Refer to Instrument Index, Section 17700
<b>SERVICE:</b>	Refer to Instrument Index and P&ID Diagrams
<b>MEASUREMENT METHOD:</b>	Amperometric
<b>MOUNTING:</b>	Wall mount
<b>RANGE:</b>	0-5 mg/L
<b>INACCURACY:</b>	Less than $\pm 1.0\%$ of span
<b>REPEATABILITY</b>	Less than $\pm 1.0\%$ of span
<b>OUTPUT:</b>	4 to 20 mA DC into maximum 600 ohm load 3 Configurable alarm relays including a dedicated fault relay
<b>POWER SUPPLY:</b>	120 VAC, 60 Hz
<b>INDICATION:</b>	Local indication of Free/Total Chlorine
<b>ENCLOSURE:</b>	NEMA 4X transmitter housing. Wall-mount sensor and transmitter.
<b>MANUFACTURER AND MODEL:</b>	Wallace & Tiernan Micro/2000 Hach Rosemount Endress & Hauser

**END OF SECTION**