#### **FT-3200 Master Specification**

#### Basis of Design**: ONICON Model FT-3200** Series Inline Electromagnetic Flow Meter. Manufacturers approved to bid, subject to compliance with requirements include:

##### Insert additional MFG’s pre-approved to bid.

#### Description: Provide an inline electromagnetic flowmeter complete with NIST traceable, wet calibrated flow-measuring element, transmitter, visual display, ANSI Class 150 or 300 mounting flanges, and calibration certificate.

#### Application Range: This contractor shall be responsible for selecting the flowmeter options submitted based on the application. Flowmeter shall be constructed, calibrated and scaled for the intended application in terms of pipe size, pipe material, installation requirements, expected flow rate, ambient conditions and fluid characteristics which include but are not limited to pressure, temperature, conductivity and viscosity.

#### Sensing Technology: Electromagnetic velocity-measuring element.

#### Design: Electromagnetic sensing element shall utilize a minimum of two 316L stainless steel electrodes to measure the average flow rate velocity.

#### Construction: Flowmeter shall consist of epoxy painted carbon steel outer body, 304 stainless steel flow tube and integral liner to be selected based on operating temperature and fluid. Individual calibration tag shall be attached indicating calibration and programming information.

#### Maximum Pressure Rating: 580 psig.

#### Maximum Temperature Rating: 266 deg F.

#### End Connections for NPS 1.0” and Larger: ANSI Class 150 Flange typical.

#### Flow Range: Flow-measuring element and transmitter shall cover operating range of equipment or system served.

#### Accuracy**:** Flowmeter shall provide calibrated outputs directly from the transmitter, throughout the operating range with the accuracy stated as follows:

##### Plus or minus 0.2% of rate from 1.6 to 33.0 ft/sec velocity.

##### Plus or minus 0.0033 ft/s at flow rates < 1.6 ft/s

#### Calibration:  Each flowmeter shall receive a wet calibration, within the expected operating range, against a primary volumetric standard directly traceable to international standards in accordance with ISO 9104:1991 and ISO 17025:2005.

#### Transmitter Enclosure: Transmitter enclosure shall be cast aluminum, IP67 rated

#### Display: Menu driven via three (3) button programming keys and shall include 16 character, 8 line graphic LCD backlit display. Display shall provide instantaneous flow rate information, totalized flow information, flow velocity, flow direction, short term trend data and shall be factory configured for a specific flowmeter application.

#### Warranty: Each flowmeter shall be covered by the manufacturer’s three-year warranty.