

# SECTION 15167 - ROTARY GAS METERS

## City of San Diego, CWP Guidelines

### PART 1 -- GENERAL

#### 1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing rotary-type positive displacement meters designed and fabricated for measuring [digester gas] [natural gas] at pressures up to 125 psi equipped with flow indicators and totalizers.

#### 1.2 RELATED SECTIONS

- A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.

- 1. Section 15150 Meters, General

### PART 2 -- PRODUCTS

#### 2.1 GENERAL

- A. **Basic Design:** The meters shall be of the rotary, positive displacement lobe or vane type, designed for vertical or horizontal installation and with moving parts enclosed in a cast aluminum housing. Meter shall be designed for measuring and totalizing gas flow in cubic feet units at an accuracy of plus or minus 0.5 percent from 10 to 100 percent of capacity, and with a maximum pressure loss of 0.8-inch W.G. at 100 percent of rated capacity.

- B. **Schedule:** Meters shall comply with the following:

<u>I.D. No.</u>	<u>Service</u>	<u>Capacity (CFH)</u>	<u>Pipe Size (in.)</u>	<u>Inlet Pressure ([ ])</u>	<u>Flow Range ([ ])</u>
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

#### 2.2 BASIC MATERIALS

- A. **Meter Body:** The meters shall include magnetic coupling or sealed stainless steel bearings designed to transmit the rotation of the rotor to the instrument drive mechanism. The drive mechanism shall be isolated from the rotor and the gas flow. The rotor shall be dynamically balanced and fabricated of corrosion-resistant material. The body shall be of cast iron coated in accordance with Section 09800, or cast aluminum, hard-coat anodized internally and shall include 125-lb flanges complying with ANSI B16.1. Bearings and shafts exposed to the gas stream shall be stainless steel. Bearings shall comply with Section 11000. The

meters shall be suitable for outdoor installation. The bearings shall be shielded with self-lubricating timing gear or shall be splash-lubricated and monitored by oil level gauge.

- B. **Instrumentation:** Meters shall be furnished with a flow transmitter producing a 4-20 mA output signal complying with Section 13300.

## 2.3 MANUFACTURERS

- A. Meters shall be manufactured by one of the following (or equal):

Dresser Industries, Inc. - Dresser Measurement Division

## PART 3 -- EXECUTION

### 3.1 INSTALLATION

- A. Rotary gas meters shall be installed in accordance with the manufacturer's installation instructions and Section 15150.

**\*\* END OF SECTION \*\***