

SECTION 15168 - TURBINE 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 turbine-type gas meters designed for measuring the flow of [digester gas] [and] [or] [natural gas] at pressures up to 175 psi and equipped with integral flow 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:** Meters shall be of the turbine type with flanged cast aluminum body, built-in straightening vanes, molded plastic turbine rotors, and magnetic drives, and designed for vertical or horizontal installation. Meters shall be suitable for totalizing the flow of gas in cubic feet units at an accuracy of plus or minus 1 percent over a range of 10 to 1, at 0.25 psig pressure. Meters shall be designed for a differential pressure drop of 4.25 inches W.G., based on 0.6 specific gravity and 0.25 psig inlet pressure.

- 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:** Meters shall be cast aluminum or cast steel bodies with 150-lb flanged ends, a flanged, interchangeable pre-calibrated measuring cartridge, integral plastic straightening vanes, and plastic rotors with magnetic drives. Meters shall include precision bearings fabricated of stainless steel with external fittings designed to permit lubrication while the meter is in operation. Parts exposed to gas shall be fabricated of corrosion-resistant materials. Meters shall include direct mounted totalizers, reading in cubic feet.

- B. **Instrumentation:** Meters shall be equipped for direct-mounting of mechanical, electro-mechanical, or electronic read-out and transmitting devices complying with Section 13300.

2.3 MANUFACTURERS

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

Rockwell International - Equimeter
Singer - American Meter Division

PART 3 -- EXECUTION

3.1 INSTALLATION

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

**** END OF SECTION ****