



## V-Cone Application Guide

**Industry:** Power

**Application:** Measure the digester gas consumption of the power generation boilers.

**Measurement Challenge/Difficulty:** Digester gas is usually corrosive and can be wet. It is difficult and impractical to measure with any meter other than the V-Cone. The short pipe run required for the V-Cone makes it extremely practical to install.

**Previous Method:** High meter maintenance costs and lack of accuracy.

**Solution:** The V-Cone was installed in the gas flow on the high pressure side before the regulator. Installation on the high pressure side allows for the use of a smaller V-Cone and helps keep the customers costs down. The piping may be downsized to the V-Cone as long as the gas velocity does not exceed 30 feet per second or McCrometers recommended velocity. The gas train pipe should be downsized both before and after the V-Cone for the recommended pipe diameters. It helps to upsize the pipe downstream to reduce the velocity before the next device. In this high pressure V-Cone application we recommended the McCrometer EA275 mass flow computer. Pressure and temperature transducers were also required to complete the volume correction.

**Date Installed:**

**System Diagram:** none

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**Additional Comments:**

**Literature No.**

24509-85/Rev. 1.1

**Industry:**

Sanitation

**Niche Market:**

Facilities, Power  
Generation

**Process:**

Digester gas to power  
boilers

**Product:**

N/A

**Fluid:**

Digester Gas

**Viscosity:**

**Flow Rate:**

**Pressure:**

**Temperature:**

**Size:**

**Date:**

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