

Gas Turbines

Dry, Wet, Sweet and Sour Gas Applications

Flowstar turbine flow meters can withstand entrained liquids within the gas stream. These turbines can also handle extremely corrosive solution such as hydrogen sulfide wet gas.

Improved Accuracy

Flowstar turbine flow meters have a very large turn down ratio—40:1 or more—which produces a substantial increase in flow measurement accuracy compared to the traditional orifice plate system. If an optional MCP pickup is used then the turn down ratio is increased to 100:1.

Extended Service Life

Flowstar turbine flow meters have been designed to last up to five times that of current products. Turbine flow meters that once lasted two to five years can now last 10 to 25 years.

Reduced Installation Costs

With a turbine and DCR system, upfront costs for new installations are reduced and both new and retrofit installations benefit greatly from the reduced maintenance cost as

there are no plates to change when the gas flow depletes, no bellows to blow out, and no paper charts to read!

APPLICATIONS

- Coal Bed Methane—Measure low pressure gas!
- Plunger Lift—Measure highly variable gas flow!
- Test Separators—No need to change orifice plates!
- Fuel Gas—Measure start gas on compressors!
- Wet Gas Measurement—Meter building not required!
- Sales Gas—Extreme accuracy when calibrated on air!



World's most advanced flow measurement computer and next generation turbine technology.

Key Features

- Outstanding accuracy
- Low pressure drop
- Provides a wide range of flow ranges
- Operates over a wide range of temperatures and pressures
- Low cost
- Low maintenance
- Wide variety of process connections available

Gas Turbines SPECIFICATIONS

Overrange

150% of Maximum Flow

Repeatability

+/- 0.25% over tabulated repeatable range

Linearity

+/- 1% of reading

Calibration Accuracy

+/- 2% over full range on water calibration

+/-1% over full range on air calibration

Available Turn Down Ranges

1" Turbine 40:1 Turn Down Ratio

2" Turbine 40:1 Turn Down Ratio

3" Turbine 70:1 Turn Down Ratio

4" Turbine 70:1 Turn Down Ratio

Additional Turbine sizes from 1/4" to 20" available

Please call for Turn Down Ratio

MCP Pickup Option

Typical 100:1 Turn Down Ratio

(Requires power source)

Pickup Coils

Intrinsically safe (IS) magnetic coil

Optional IS MCP coil (Modulated Carrier Pickup)

Material

316 Stainless steel standard for body, rotor, and supports. NACE spec. available

End Fittings

NPT for all sizes Flanged styles from 150# to 2500# ANSI

Bearing Style

Self-lubricating ball bearings

Gas Meter Sizing

Contact Flowstar Application Group

The following information is required:

Flow rate Min: Max:

Pressure Min: Max:

Temp. Min: Max:

Gas analysis

Pipe size

INSTALLATION

Horizontal or Vertical

Ensure there is a minimum of 10 straight pipe diameters upstream and minimum 5 straight pipe diameters downstream of turbine.

Dimensions for NPT Turbines

	Dimension A
1" Turbine	3.50"
2" Turbine	4.75"
3" Turbine	7.50"
4" Turbine	10.00"

Field Photos

Before



After



"The DCR replaces the traditional equipment shown on the left with one compact, easy to use, and reliable unit."

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NASDAQ-OTCBB:WSCE

Document #40113