## Sur-Tech Instruments Ltd

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## **Turbine Flow Meter**

The Sur-Tech turbine flow meter is designed to withstand the demands of the most rigorous flow measurement applications. Originally developed for the secondary oil recovery market, the turbine flow meter is an ideal meter for liquid flow measurement on or off the oil field.

The meter features a rugged 316 stainless steel housing and rotor support assemblies, CD4MCU stainless steel rotor, and abrasive-resistant tungsten carbide rotor shaft and journal bearings. The turbine flow meter maintains measurement accuracy and mechanical integrity in the corrosive and abrasive fluids commonly found in oil field water flood projects and many industrial applications.

When paired with a Sur-Tech flow monitor, the Sur-Tech turbine flow meter meets a wide range of measurement requirements. This makes it ideal for applications such as pipelines, production/ injection fields, in-situ mining operations, offshore facilities, and other industrial applications.

STTFM1100-02

## **FEATURES**

- Offers accurate and repeatable flow measurement in ranges from 0.6... 5000 gmp (20... 171,000 bpd)
- Cost-effective solution for turbine flow meter applications
- Rugged 316 stainless steel construction offers long service life in severe operating environments
- Available in NPT, BSP, Victaulic®, flange, or hose barbed end connections
- NIST traceable calibration
- Installation in pipe sizes from 1/2...10 in. Can integrate electronically with a Blancett flow monitor
- K-factor Scaler, or the F to I/F to V Intelligent Converter Field replaceable repair kits allow for turbine replacement without loss of accuracy

## SPECIFICATIONS

Materials of Construction	Body: 316 Stainless Steel
	Rotor: CD4MCU Stainless Steel
	Rotor Support: 316 Stainless Steel
	Rotor Shaft: Tungsten Carbide
Turndown Ratio	10:1
Flow Accuracy	±1% of reading for 7/8 in. and larger meters
	$\pm$ 1% of reading over the upper 70% of the measuring range for 3/8, 1/2, and 3/4 in. meters
Repeatability	±0.1%
Calibration	Water (NIST traceable calibration)
Pressure Rating	5000 psi max.
Turbine Temperature	-150350°F (-101177°C)
End Connections	NOT, BSP, Victaulic®, flange, hose barbed
Certifications	CSA Class I Div 1, Groups C & D
	Class II Div 1, Groups #, F & G: intrinsically safe*
	CSA Class I Div 1 Groups C & D; complies to UL 1203 and CSA 22.2 No. 30
	Met Labs File No. E112860 (for explosion proof models only)