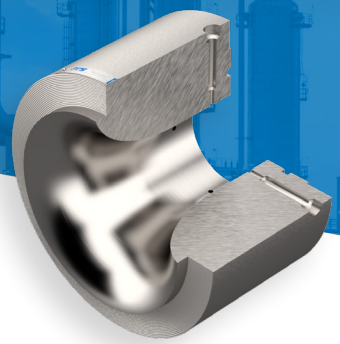
PRODUCT DATASHEET

ASME Throat Tap Flow Nozzle



Description

The ASME Throat Tap Flow Nozzle provides high accuracy and precision which is often used for the testing of steam turbine efficiency as prescribed in the ASME PTC-6 Performance Test Code. A standard ASME Throat Tap nozzle offers a bit more flexibility in application and calibration. An ASME Throat Tap Nozzle is manufactured to the same exacting standards as a PTC-6 throat tap nozzle. However, calibration is optional.

Common Materials

- Carbon Steel
- 304 / 316SS
- Chrome Moly

Other Available Materials

- Aluminum
- Monel
- Tantalum
- Zirconium
- Duplex SS
- 321 SS
- Hastelloy B & C
- Titanium

Design Standards

- ASME PTC-6
- ASME PTC 19.5

Construction Standards

- ASME Section I
- ASME B31.1 – Power Piping
- ASME B31.3 – Process Piping

Applications

- Clear Liquids, Gas and Steam

Special Features

- High accuracy Uncalibrated ASME dP device
- Optional Laboratory Calibration Requirements
- Extended product life with no moving parts
- Lower susceptibility to erosion
- Widely used for high pressure and/or high temperature steam and water flow
- Useful for flow measurement at high velocities
- Repeatability better than ± 0.1%
- Designed per ASME PTC-19.5
- Can be used in power plant efficiency test applications

Model Types

- PTFFR – PTC, Flanged Nozzle, Flanged Ends, Run
- PTFWR – PTC, Flanged Nozzle, Welded Ends, Run
- PTWFR – PTC, Welded Nozzle, Flanged Ends, Run
- PTWWR– PTC, Welded Nozzle, Welded Ends, Run

Specifications

Standard Line Size: 4 to 28 inches (not limited to)

Head Loss (permanent pressure loss) in % of Differential: 60% to 85% (18% to 25% with optional outlet diffuser cone), Beta Dependent

Basic Accuracy (% of Total): [Calibrated +/- 0.25%] [Uncalibrated +/- 0.70%]

Recommended Application, THROAT Reynolds Number: Greater than 1,000,000 (lower possible with calibration)

Recommended Straight Piping: 20D Upstream / 10 D Downstream

Recommended Beta Range: 0.25 through 0.50

Useful Service Life: Medium to Long

Service Functional Limits: Clear Liquids, Gas and Steam