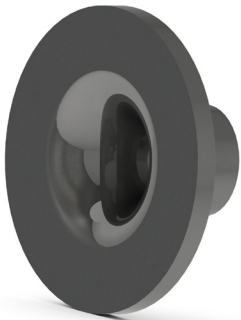




# Armstrong ASME Flow Nozzle

The ASME flow nozzle is a high performance, reliable measurement device, that can be installed in various design and material configurations with conformance to ASME MFC-3M, ASME PTC-6, and ASME PTC 19.5 codes.

General Features		
Line Size	Discharge Coefficient	ASME Design Standards
2" to 24" (50.8mm to 609.6mm)	±2.0% wall tapped nozzle (ASME MFC standard)	ASME PTC-6
	±1.0% wall tapped nozzle (ASME PTC 19.5 standard)	ASME PTC 19.5
<b>Beta Ratio</b>	±0.25% throat tapped nozzle (ASME PTC 6 standard)	ASME MFC-3M
0.20 to 0.80		ISO-5167
<b>Nozzle Material</b>	<b>End Connections</b>	<b>ASME Fabrication Standards</b>
300 series stainless steel Other materials available	Flanged or Welded	
<b>Piping Requirements</b>	<b>Pressure Taps</b>	ASME Section 1
	ASME specified	Wall Tap – 1D upstream, 0.5D downstream Throat Tap – 1D upstream, code spec'd downstream



### ANZF – Nozzle Flanged

Nozzle designed to be mounted between two flanges. ANZW model available to be welded-in between upstream and downstream pipe sections.



### ANZFFR – Flanged Nozzle, Flanged Meter Run

Flow nozzle machined with a holding flange. The nozzle is mounted concentrically with the process flange of two pipe sections.



### ANZWFR – Welded Nozzle, Welded Meter Run

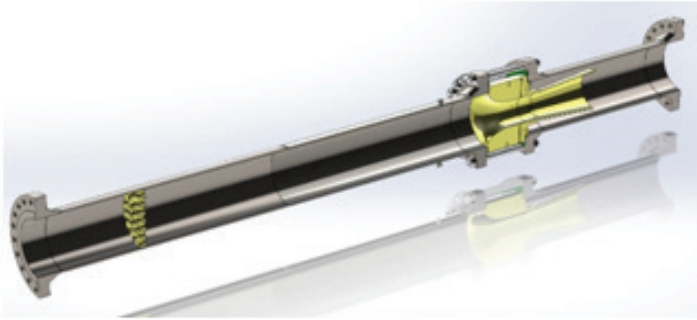
Flow nozzle installed within a meter run by welding. Used regularly in high pressure and temperature feedwater and steam applications within power plants where flanged mounting is precluded.



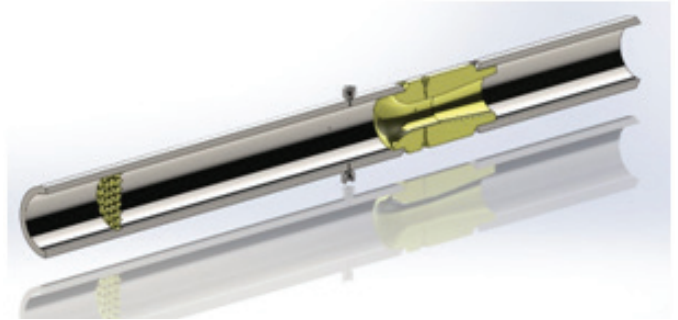
# Armstrong PTC-6 ASME Flow Nozzle

## PTC-6 ASME Flow Nozzle

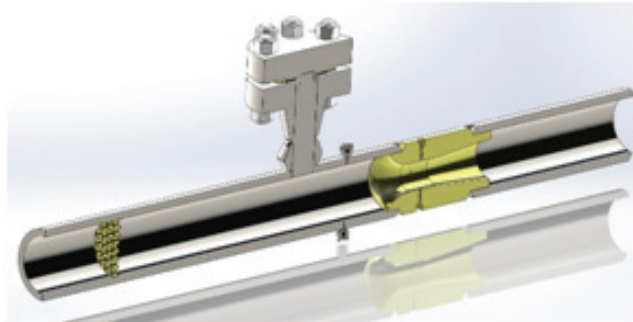
This flow nozzle provides high accuracy and precision required by ASME PTC-6 in steam turbine testing applications. The assembly consists of a flow conditioner for added accuracy, a diffuser cone for reduced pressure loss, and either a flanged or weld-in flow nozzle. Available in line sizes 4” to 24” with perforated plate or tube bundle flow conditioner, flanged-in or weld-in end connections, and four integrally machined throat pressure taps that are precision-machined and polished. Design standard ASME PTC-6 or ASME PTC 19.5.



**Model APTFFR – PTC-6 flanged nozzle in a flanged meter run**



**Model APTWWR – PTC-6 welded nozzle in a welded meter run**



**Model APTWWR – PTC-6 welded nozzle in a welded meter run with inspection port**

Flow Nozzle Meter Offerings - Model Numbers	
<b>AHN</b>	Halmi Nozzle
<b>ANZF</b>	Nozzle Flanged
<b>ANZFFR</b>	Nozzle Flanged, Flanged, Meter Run
<b>ANZFWR</b>	Nozzle Flanged, Welded, Meter Run
<b>ANZW</b>	Nozzle Weld-In
<b>ANZWFR</b>	Nozzle Weld-In, Flanged, Meter Run
<b>ANZWWR</b>	Nozzle Weld-In, Welded, Meter Run
<b>APTFFR</b>	PTC-6 Flanged Nozzle, Flanged, Meter Run
<b>APTFWR</b>	PTC-6 Flanged Nozzle, Welded, Meter Run
<b>APTWFR</b>	PTC-6 Welded Nozzle, Flanged, Meter Run
<b>APTWWR</b>	PTC-6 Welded Nozzle, Welded, Meter Run