



MSD & SMSD Manifolds for Steam Distribution

As Steam Distribution Assemblies (MSD/SMSD), the manifolds place all steam supply valves in one location. Standardizing components and centralizing their location simplifies installation while providing cost savings. You also save because routine maintenance is faster. Insulation can also be provided...and can be a major savings in most installations.

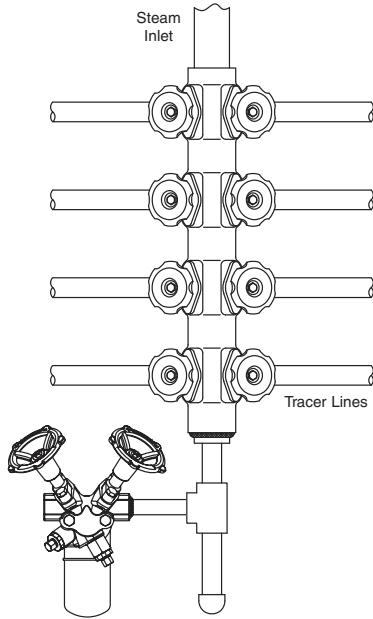
Cost Savings

- Reduced design specification costs
- Prefabrication vs. field assembly for easy installation
- Reduced shipping and field handling costs
- Lower long-term maintenance and operating costs
- **3-years guarantee**

Design Flexibility

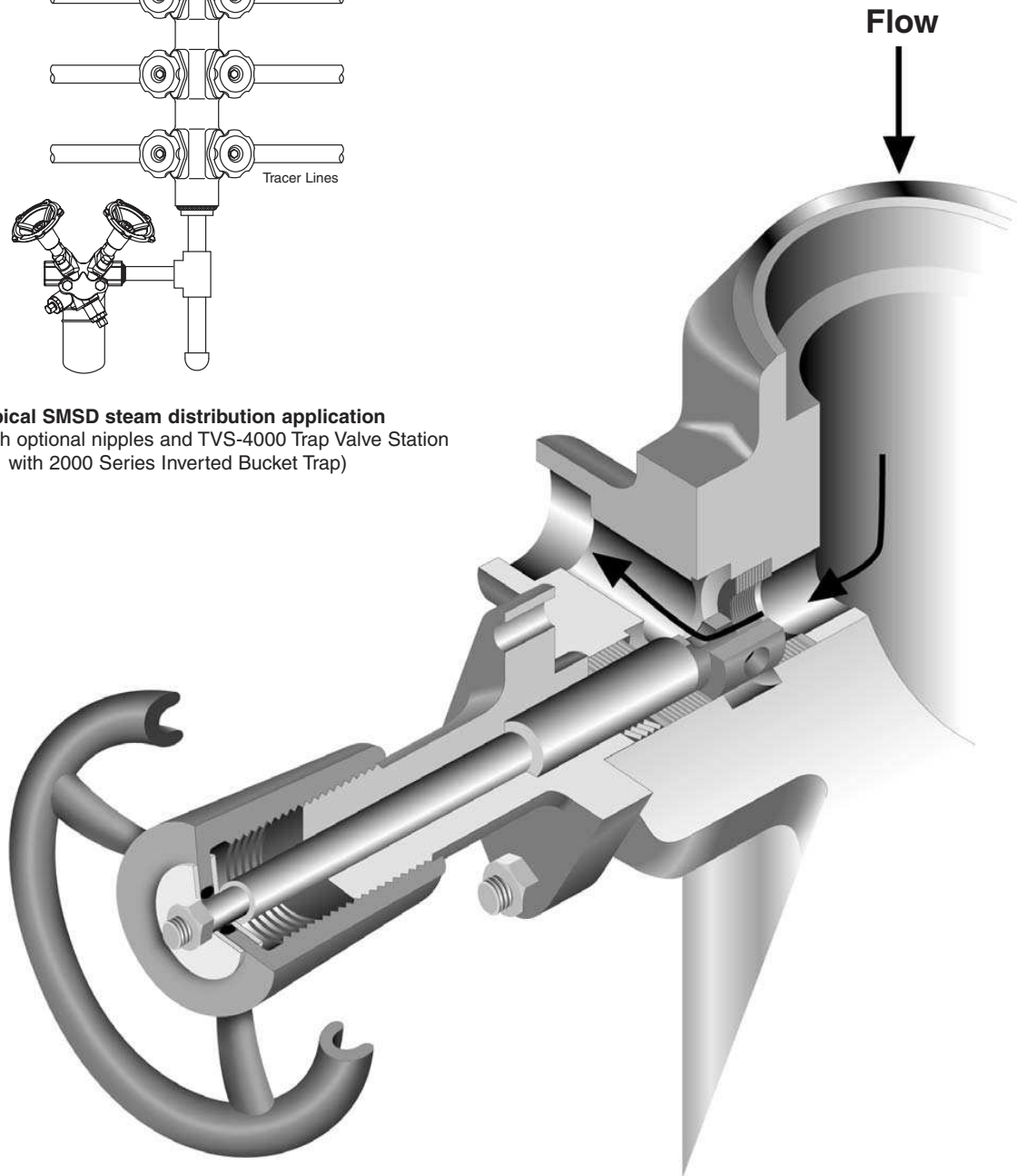
- Dimensional consistency
- Space savings
- Insulation package available

Steam Tracing Equipment



Typical SMSD steam distribution application

(shown with optional nipples and TVS-4000 Trap Valve Station with 2000 Series Inverted Bucket Trap)



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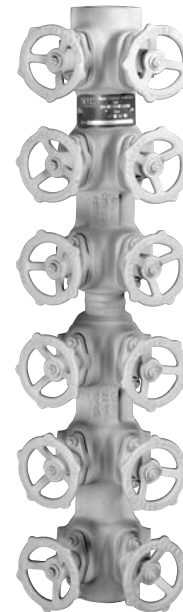
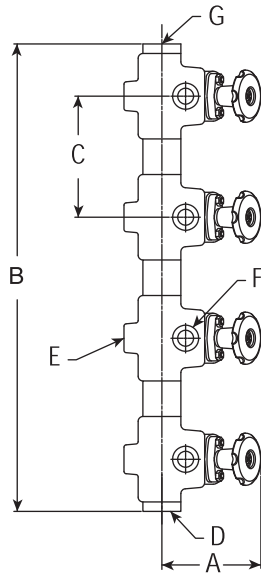


Table STE-191-2. MSD and SMSD List of Materials

Name	Material
Manifold Body	ASTM A105 Forged Steel
Handwheel	Ductile Iron
Bonnet	ASTM A105 Forged Steel
Spring Washer	Stainless Steel
Bolts and Nuts	Bolts: ASTM A193 grade B7 Nuts: ASTM A194 grade 2H
Piston & Stem	17% Chrome Stainless Steel
Valve Sealing Rings	Expanded Graphite & Stainless Steel
Bushing, Valve	Stainless Steel

Options

Top Inlet:

- Socketweld
- Flanged DIN or ANSI
- Gate valve 1 1/2" SW or Flanged
- Armstrong RP-2000 double sealed valve 1 1/2" SW or Flanged

Drain:

- 1/2" or 3/4" SW reducer
- TCMS piston valve
- TVS-4000 with 2011 steam trap (horizontal or vertical piping)

Insulation:

- Armstrong Insulation Jacket
- Modular or 1 piece versions
- Insulation jackets could be installed without removing the handwheels

Table STE-191-2. MSD and SMSD Steam Distribution Manifolds (dimensions in mm)

Model	MSD Series			SMSD Series		
	MSD-04	MSD-08	MSD-12	SMSD-04	SMSD-08	SMSD-12
Number of tracers	4	8	12	4	8	12
"A" Open Position	118	118	118	118	118	118
"B" Manifold Height (SW)	272	596	920	240	480	720
"C" \varnothing to \varnothing	162	162	162	120	120	120
"D" Drain Connection	1 1/2" SW			1 1/2" SW		
"E" Number of Holes for Mounting (1/2 - 14 M)	2	4	6	2	4	6
"G" Inlet	1 1/2" SW			1 1/2" SW		
"F" Outlet to tracer	1/2" and 3/4" – Socketweld and Screwed NPT			1/2" and 3/4" – Socketweld and Screwed NPT		
Weight in kg (SW)	10	21	30	9	18	27
Maximum Operating Pressure	32 bar @ 400°C					

All MSD and SMSD models are CE Marked according to the PED (97/23/EC). For TVS and traps, please check the specific page.

All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.