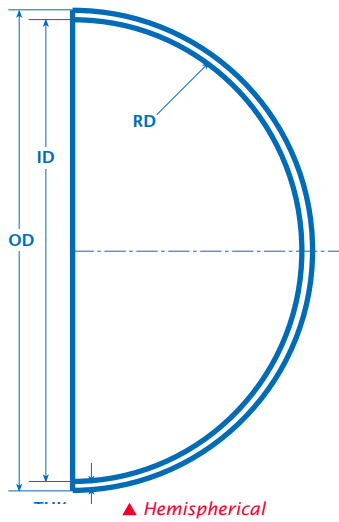
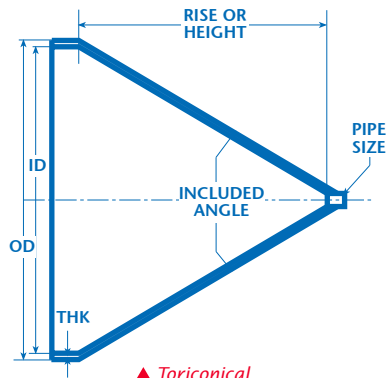




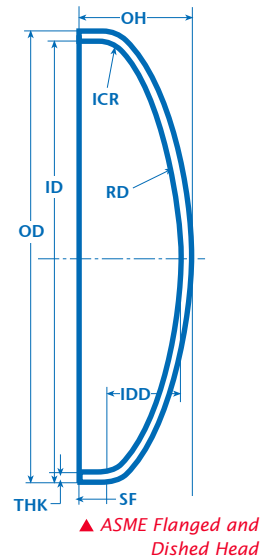
STANDARD VESSEL HEADS



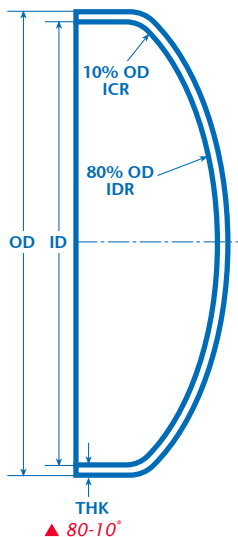
▲ Hemispherical



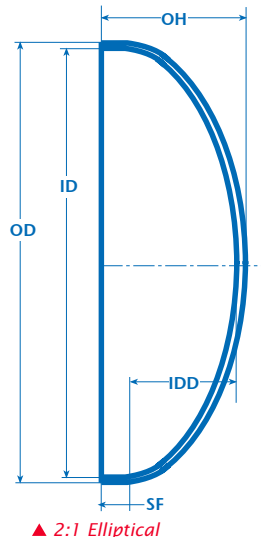
▲ Toriconical



▲ ASME Flanged and Dished Head



▲ 80-10°



▲ 2:1 Elliptical

GLOSSARY

- DR Dish radius, also referred to as the crown radius
- ID Inside diameter of head, or insulation
- IDR Inside dome radius
- IDD Inside depth of head dish
- ICR Inside corner radius, also known as the Knuckle Radius (KR) of a vessel head. For ASME code heads, the ICR is a minimum of 6% of the head diameter.
- OH Overall height of head
- OD Outside diameter of head or insulation
- RD Radius
- SF Straight flange, the extension beyond the head tangent to weld the head to the shell.
- THK Thickness

Typical HATS® Installation Steps



1. Install the two center half sections (with the Pamrod logo) in the center of the head using specified adhesives or mechanical supports. Your HATS may have been designed to fit around the center nozzle if it is 16" IPS or larger. Each course is numbered for ease of installation starting at 1, 2, 3 to the last course.
Note: Multi-layered systems are identified accordingly



2. Install one of each different numbered segment in sequence starting at the bottom of the center section and continuing in a straight line towards the "six o'clock" position. This "row" will confirm the proper location of the center and verify the fit of the HATS on the head. The row should end at the tangent of the head and the straight flange, short of the weld line.



3. Proceed in this fashion by adding additional "rows" of each numbered block on each side of the first row in a clockwise and counterclockwise fashion. Continue insulating the head to finish at the "twelve o'clock" position.

The HAT® installation is complete in a fraction of the time required to field cut and fit block insulation. The precision machined segments optimize system thermal performance and finishes great with our prefabricated metal jacket.