



Ordering Specialty Heads and Vessels

Please provide the following information when ordering specialty heads and vessels.

1) Type of Insulation

- Polyisocyanurate JM **TRYMER**®
- Polystyrene Dow **STYROFOAM**™
- Owens Corning **FOAMGLAS**®

2) Insulation thickness and number of layers needed.

3) Vessel O.D. (or I.D. and the wall thickness)

4) Vessel Length (Not including heads)

5) Number and Type of Heads (2:1 Elliptical, Flanged and Dished, or Hemispherical)

*If you have access to the manufacturer's drawings, please send those and we will try to help verify the vessel and head dimensions.

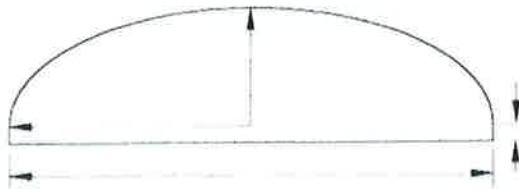
General Information About Ordering Specialty Heads

Points to Consider

Covering the Heads of Vessels and Tanks with insulation is always a challenge. Cook Brothers fabricates Heads and Cones from Trymer/XPS and Foamglas® material. There are three basic head configurations:

1. 2:1 Elliptical Heads
2. Flanged and Dished Heads (F&D)
3. Hemi-Spherical Heads

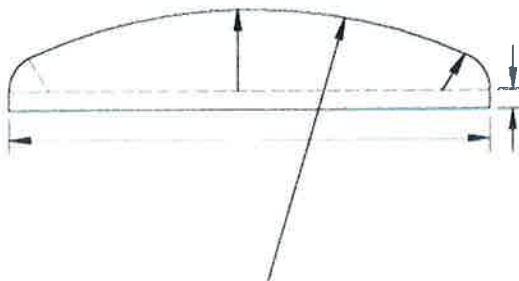
Regardless of the shape, it is extremely important to provide Cook Brothers with an accurate drawing of the Head with all the required dimensions. Tank Manufacturer and Drawing NO. are required. Drawing dimensions do not always reflect actual installation dimensions. Cook Brothers accepts no responsibility for fabricating heads based on manufacture drawings that do not represent actual construction.



2:1 Elliptical Head

D = Tank Diameter
A = D/2 (Major Axis)
B = A/2 (Minor Axis)
L = Straight Flange

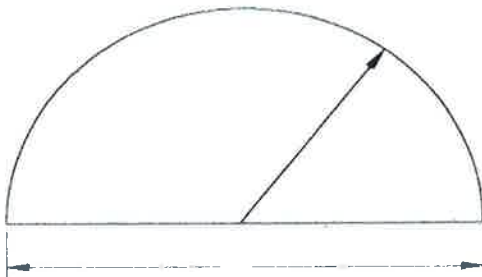
Flanged & Dished Head (F&D)



Flanged & Dished Head (F&D)

D = Tank Diameter
H = Height above Tangent
CR = Dish or Crown Radius
(80% to 100% D)
KR = Knuckle Radius
(0% to 20% D)
L = Straight Flange

Hemi-Spherical Head



Hemi-Spherical Head

D = Diameter
R = Radius (D/2)

Note: Some F & D Heads look like 2:1 Elliptical Heads with CR = 80% D & KR = 10% to 20% D

COOK Brothers

Pipe, Fitting, & Vessel Insulation

Insulation Systems Which Set The Standard!

- Curved Tank Covering -
- Flat & Domed Head Covers -
- All Ammonia Valves and Jacketing -



- Pipe Insulation and Jacketing -
- Spray Foams & Billets -
- Installation Supplies -

Materials

Styrofoam®, Trymer®, Foamglas®, EPS 1# & 2#, and Perlite for insulation. Metal and PVC for jacketing systems.

Fabrication

Personal service by qualified staff ensures customers of both large and small orders their material will be fabricated using state-of-the-art machinery, including CAD/CAM.

Delivery

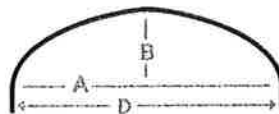
Centralized location and same-day freight pick-up allows expedient delivery to any area of the country.

VESSEL HEADS by

COOK Brothers

- The Best Fit -
- Easy Installation -
- Less Pieces -
- Fewer Seals -
- Top Performance -
- Long Life -

Designs for These Vessel Heads

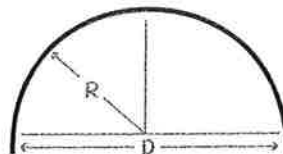
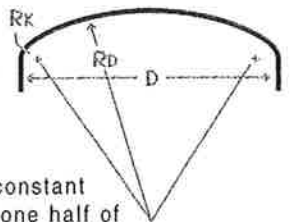


2:1 Elliptical

At the center, the dish radius is equal to the vessel diameter. At the tangent of the head and the shell, the dish radius is 1/8 of the vessel diameter.

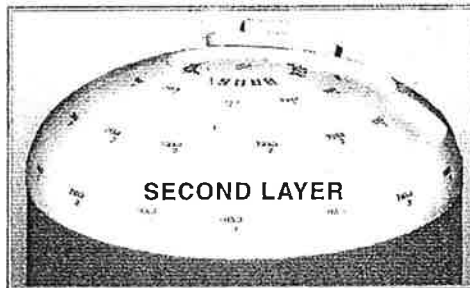
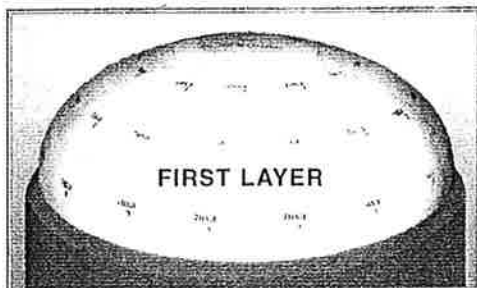
ASME Flanged & Dished ^{Rk}

The dish radius is usually between 80% - 100% of the vessel diameter, and the knuckle is between 4% - 8% of the vessel diameter.



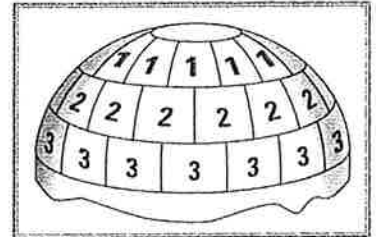
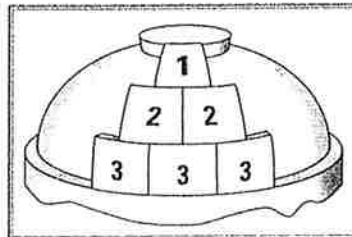
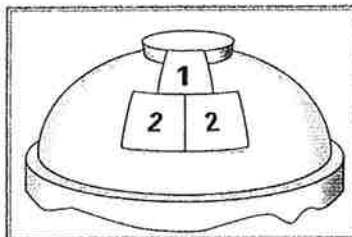
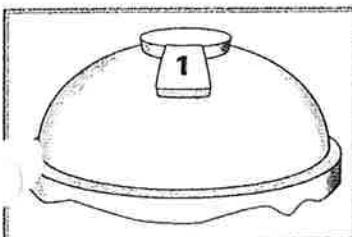
Hemispherical

These heads have a constant dish radius equal to one half of the vessel diameter.



Ease of Installation

Pieces fit the head contour, minimizing costly field fabrication. Use of a three number system aids in installation of our heads.



www.cookbro.com
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