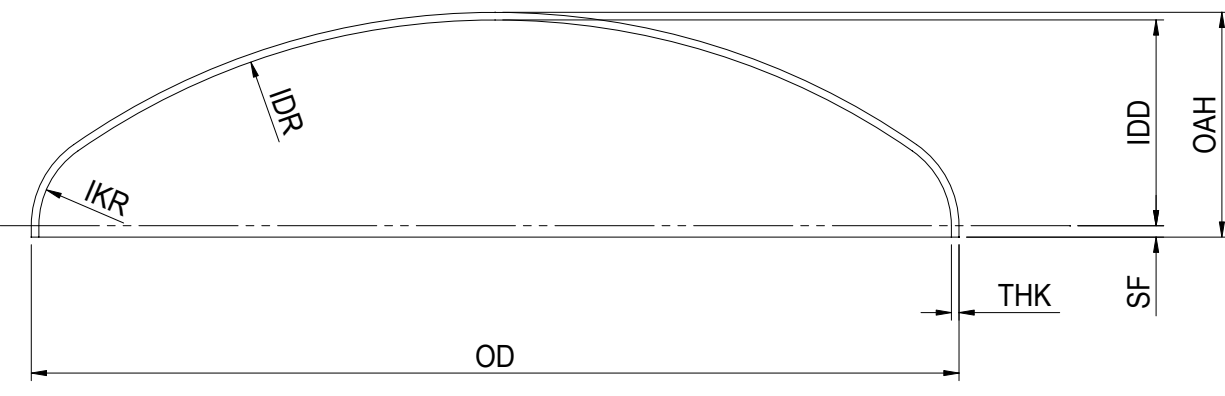




# ASME 80-10



IKR - Inside Knuckle Radius  
 IDR - Inside Dish Radius  
 THK - Thickness  
 OD - Outside Diameter  
 SF - Straight Flange  
 IDD - Inside Depth of Dish  
 OAH - Overall Height

## SPECIFICATIONS

- Inside Dish Radius - 80% of Diameter
- Inside Knuckle Radius - 10% of Diameter
- Typical Thin Out Allowance - 1/2" and Under - Add .0625" to the minimum
- Over 1/2" - Add .0625" or 15% of minimum, whichever is greater

## WHY USE AN 80-10?

As the inside diameter of high alloy pressure vessel heads increases in size, savings in material cost can be achieved by designing 80-10 Torispherical heads rather than Standard ASME Torispherical or Ellipsoidal shapes. It features a dish radius equal to 80% of the diameter, and an inside knuckle radius equal to 10% of the head diameter. The 80-10 is typically only 66% the thickness of the ASME Torispherical. The Ellipsoidal head is slightly thinner, but cost savings will be offset by added labor cost and a larger blank size. The 80-10 head, developed by Brighton Corporation, meets all the requirements of the ASME Unfired Pressure Vessel Code.

Diameter	3/16	1/4	5/16	3/8	1/2	3/4	1	1 1/4	1 1/2
24	X	X	X	X	X				
42	X	X	X	X	X				
48	X	X	X	X	X	X	X		
60	X	X	X	X	X	X	X		
72	X	X	X	X	X	X	X	X	X
84	X	X	X	X	X	X	X	X	X
96	X	X	X	X	X	X	X	X	X
108		X	X	X	X	X	X	X	X
120		X	X	X	X	X	X	X	X
144		X	X	X	X	X	X	X	X
156			X	X	X	X	X	X	X
164			X	X	X	X	X	X	X
180			X	X	X	X	X	X	X
192			X	X	X	X	X	X	X
216				X	X	X	X	X	
240				X	X	X	X	X	
268				X	X	X	X	X	
276				X	X	X	X	X	

\*Heads over 276" can be fabricated as segmented heads. Heads over 1-1/2" on application.  
 Parameters are given as reference only. Please call your salesman for specific inquiries.  
 Other sizes and thickness, including light gauge jacket heads, are available on application.  
 Ask us about polishing, burning nozzle openings, or applying jacketing to your 80-10 Heads.