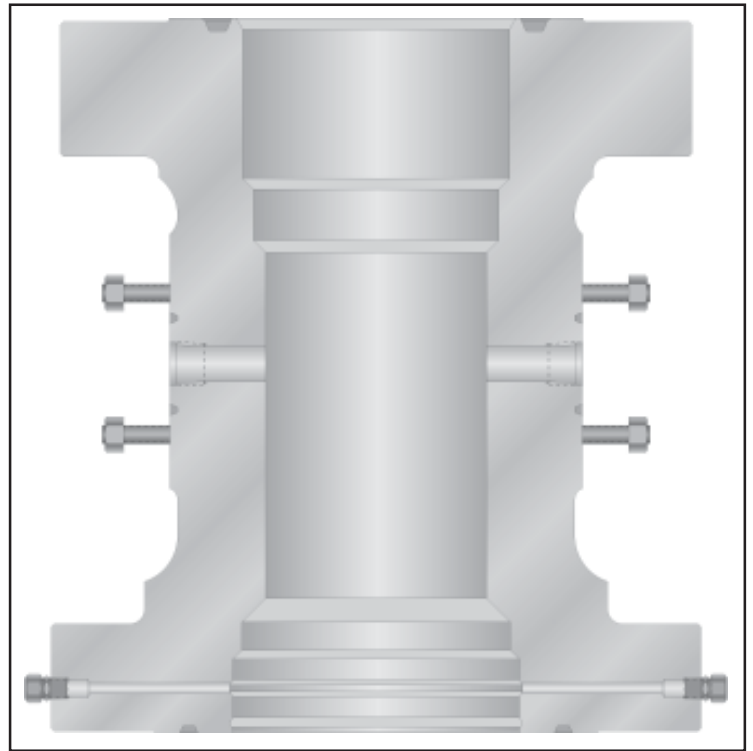
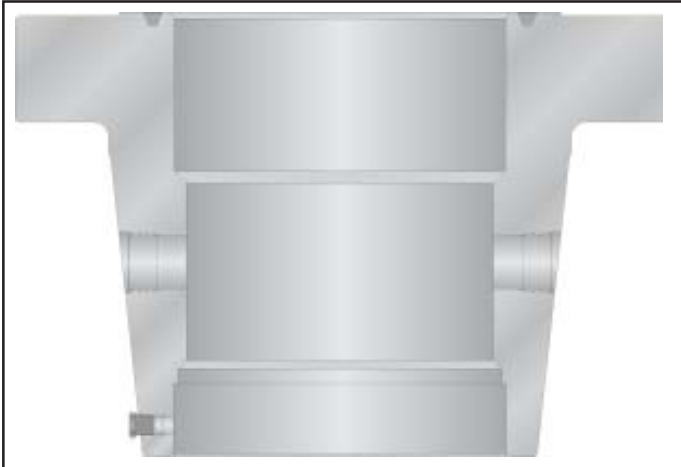


S-22 Casing Heads and Spools

The Seaboard conventional wellhead system incorporates the S-22 straight bowl design with a 45 degree load shoulder.

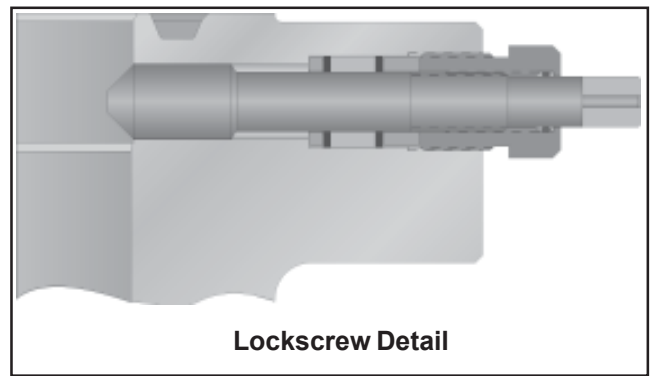
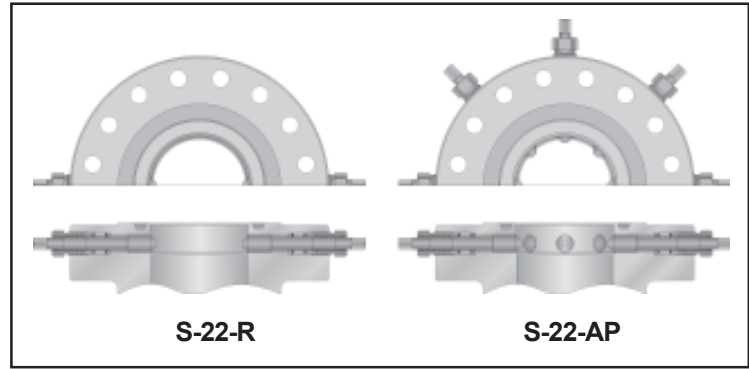


Significant advantages of the S-22 bowl:

- One bowl design that universally accepts slip-type or mandrel casing hangers. Low-weight hangers for tieback applications and high capacity hangers are also accommodated due to the straight bowl and 45 degree load shoulder which diminishes hoop stress on the casing heads and spools.
- Design concept is carried forward into the Fas-Dril and SMB-22 multibowl systems for component interchangeability and retention of superior design characteristics.
- Damage during drilling activities is minimized, thereby decreasing the frequency of maintenance and/or potential replacement.
- Wear bushings can enhance the protection of important sealing surfaces.
- Test plugs and wear bushings often wedge in tapered bowls under pressure, a possibility virtually eliminated with the S-22 bowl design.

System Features

- Scope
 - 2,000 through 20,000 PSI
 - API 6A PSL-1 through PSL-4
 - Appendix F Qualified
- Top Connections
 - API Flanges
 - API Hubs
- Bottom Connections
 - Threaded
 - Slip-on Weld
 - NW-A Sliplock
 - Baseplates (Welded or threaded)
- Secondary Seals - Casing Spools
 - Elastomer Seal Bushings (SP)
 - High pressure Seal Bushings (SP-H)
 - Integral Seal Bottoms (IPS)
- Lockscrews (optional)
- Outlets
 - Threaded
 - Studded
 - Flanged



S-22 Casing Head Sizing Data

Rated Working Pressure	Casing Size (in.)	Top Flange		Minimum Bore (in.)	Weight (lbs.)
		Size (in.)	PSI		
2,000 psi	20	21-1/4	2,000	19.00	1,550
3,000 psi	8-5/8	11	3,000	8.00	470
	9-5/8	11	3,000	9.00	450
	10-3/4	11	3,000	10.00	430
	13-3/8	13-5/8	3,000	12.50	645
	16	16-3/4	3,000	15.38	825
	20	20-3/4	3,000	19.00	1,640
5,000 psi	8-5/8	11	5,000	8.00	720
	9-5/8	11	5,000	9.00	617
	10-3/4	11	5,000	10.00	600
	13-3/8	13-5/8	5,000	12.50	675
	16	16-3/4	5,000	15.38	1,655
	20	21-1/4	5,000	19.00	1,825

S-22 Casing Spool Sizing Data

Rated Working Pressure	Bottom Flange		Top Flange		Minimum Bore (in.)	Weight (lbs.)
	Size (in.)	PSI	Size (in.)	PSI		
3,000 psi	11	3,000	11	3,000	10.00	745
	13-5/8	3,000	11	3,000	10.00	1050
	16-3/4	3,000	11	3,000	10.00	1145
	16-3/4	3,000	13-5/8	3,000	12.50	1170
	21-1/4	2,000	13-5/8	3,000	12.50	1450
	20-3/4	3,000	16-3/4	3,000	15.38	2710
5,000 psi	11	3,000	11	5,000	10.00	760
	11	5,000	11	5,000	10.00	1250
	13-5/8	3,000	11	5,000	10.00	1260
	13-5/8	5,000	11	5,000	10.00	1395
	16-3/4	3,000	11	5,000	10.00	1220
	16-3/4	3,000	13-5/8	5,000	12.50	1325
	20-3/4	3,000	13-5/8	5,000	12.50	2530
	20-3/4	3,000	16-3/4	5,000	15.38	3005
10,000 psi	21-1/4	5,000	13-5/8	5,000	12.50	2840
	21-1/4	5,000	16-3/4	5,000	15.38	3305
	13-5/8	5,000	11	10,000	10.00	2190
	16-3/4	5,000	11	10,000	10.00	2380
	16-3/4	5,000	13-5/8	10,000	12.50	2905
	21-1/4	5,000	13-5/8	10,000	12.50	3365