Wellhead Systems



# **Casing Spools** Models WFT-22 and WFT-29

Weatherford's WFT-series casing spools have the same design features as WFT-22 and WFT-29 casing heads, with the addition of a bottom flange connection with secondary seal preps for either a WFT-PE or between the WFT-HPPE seal assembly or WFT-4-0 reducer bushing. The straight bowl design with a 45° load shoulder is the preferred wellhead geometry and is superior to tapered designs because of its ability to accommodate heavy hanger loads, provide precise hanger placement, and resist sticking or wedging of hangers.

The WFT-22 is designed for pressures up to 5,000 PSI and accepts WFT-21, WFT-21-P and WFT-22 casing hangers.

The WFT-29 is designed for medium to high pressures (to 15,000 PSI) and accepts WFT-29 casing hangers. Weatherford's WFT-29 isolation ring is available for this model to isolate the casing hanger from the flange connection test pressure. (Note: Type H isolation ring cannot be used when casing head has lockdown screws or BX ring gasket.)

Standard temperature ratings for both models of this cost-saving piece of equipment are -50 to +250°F.

#### High-capacity 45° load shoulder suspends casing load weights, limited only by the load rating of hangers used in bowl; ensures precise landing/location of hanger necks and seal sleeves; facilitates hanger removal for workover; and protects the seal area during drilling

Straight bowl design

operations.

handles a full range of hanger loads without modifications to the spool; prevents sticking or wedging of hangers, which requires costly removal; affords ready availability of aftermarket parts; and saves overall costs.



**Connections.** Standard bottom prep for WFT-PE and WFT-4-0 secondary seals. For other applications the prep for WFT-HPPE (high pressure) 15,000-PSI secondary seal is supplied. (Other types available on request.) Externally threaded lockscrews for wear bushing (-BP) and hanger retention (-L) (Example: WFT-22-BP, two lock-screws; WFT-29-L, full set of lock-screws)

#### Deep bowl

design. WFT-22 accepts WFT-21 and WFT-21-P casing hangers for application flexibility. WFT-29 accepts WFT-29 casing hangers.

Weatherford International Ltd. 515 Post Oak Blvd., Suite 600 Houston, Texas 77027 USA Tel: 713-693-4000 www.weatherford.com



## Casing Spools Models WFT-22 and WFT-29

### Advantages

Cost-saving WFT-series casing spools offer the following advantages:

- Reduced downtime associated with modifying the head to accept different hanger loads
- Ability to handle a full range of hanger loads without modifications to the spool
- Resistance to sticking or wedging of hangers
- Ready availability of after-market parts

## **Options**

### Top bowl

- Choice of threaded, studded, or flanged outlets for flexibility to use any type of outlet equipment. (Note: Studded and flanged outlets usually require valve removal threads.)
- Flanged (standard) or clamp hub top connections
- WFT-22 or WFT-29 with the inclusion of -L = full set of lockdown screws. (Example: WFT-29-L)
- WFT-22 or WFT-29 with the inclusion of -BP = two lockdown screws for bowl protector hold-down only. (Example: WFT-22-BP)

operations

and seal sleeves

#### Bottom bowl

 Prep uses the WFT-4-0 secondary bushing or WFT-PE secondary seal. Will accommodate a WFT-HPPE secondary seal assembly (with slight modification).

Precise landing/location of hanger necks

Easier hanger removal for workover

Seal-area protection during drilling

Wear bushing and hanger retention

Choice of connection type

 Prep can be furnished with an integral OO bottom prep (two O-ring seals) or double P bottom prep (two P seals, which are energized by mechanically pumping plastic packing).

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### **Specifications**

Top Flange		Bottom Flange		Outlet		
				Threaded	Studded	
Nominal	Working	Nominal	Working			Working
Size	Pressure	Size	Pressure	Size	Size	Pressure
(in.)	(PSI)	(in.)	(PSI)	(in.)	(in.)	(PSI)
11	3,000	13-5/8	3,000	2	2-1/16	5,000
	5,000	11	3,000			
			5,000			
		13-5/8	3,000			
			5,000			
		16-3/4	3,000			
	10,000	11	10,000	N/A	1-13/16	10,000
		13-5/8	5,000			
			10,000			
13-5/8	5,000	13-5/8	5,000	2	2- 1/16	5,000
	10,000		5,000	N/A	1-13/16	10,000
	5,000	20-3/4	3,000	2	2-1/16	5,000

Other sizes and configurations available on request.

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