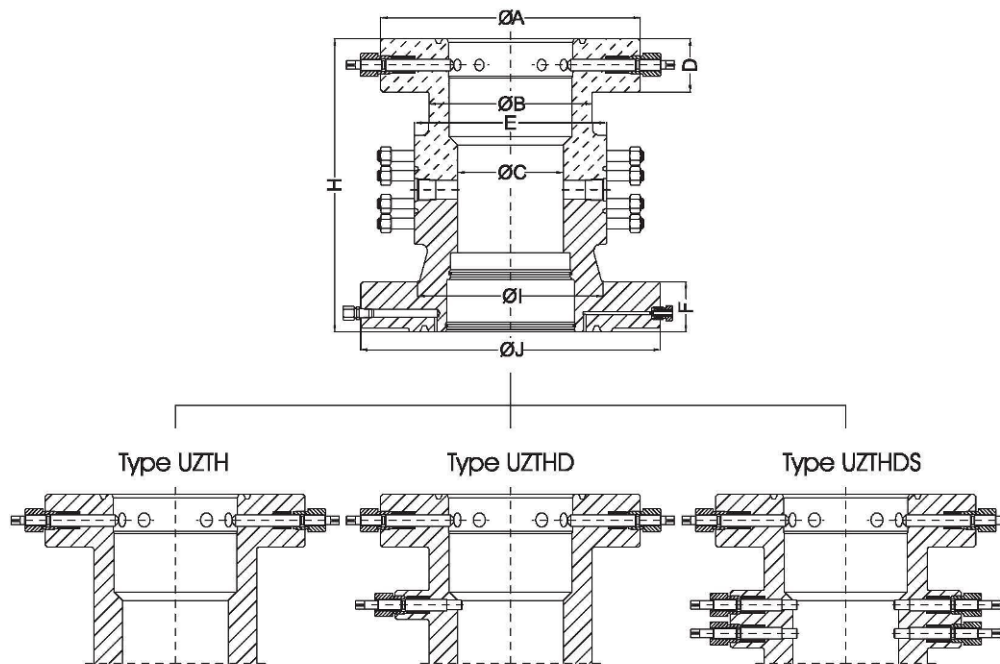


Tubing Head Spools

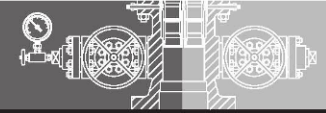


Tubing heads are straight-bore, high capacity spools. Landing shoulder can safely support maximum loads. Standard: flanged studded side outlets with valve removal thread. Bottom is prepared to receive UZ-B secondary seal as standard. This spool has the following versions:
UZTH standard for single completion (without aligning pins);
UZTHD with one aligning pin for dual tubing completion with two-mandrel hangers within a master bushing;
UZTHDS with two aligning pins for dual tubing completion with split half hangers

All versions for dual tubing are designed for use also for single completion.



Tubing Head Spools



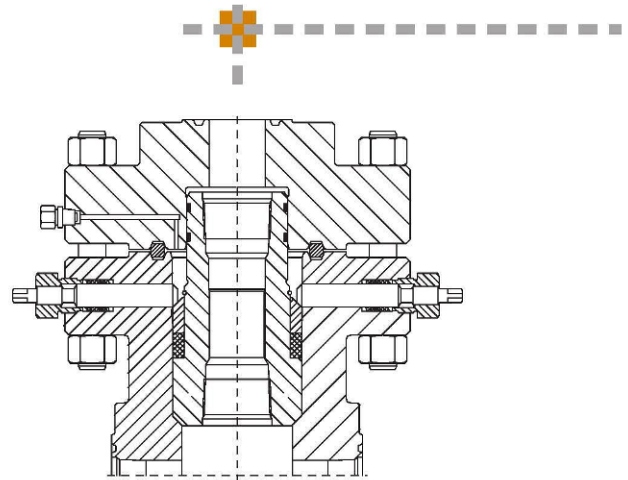
Bottom flange		Top Flange		A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	H (in)	I (in)	J (in)
Size (in)	Press (PSI)	Size (in)	Press (PSI)									
11	2,000	7 1/16	2,000	14.00	8.75	6.38	2.67	11.02	2.81	20.87	13.50	20.00
			3,000	15.00	9.25	6.38	2.67	11.02	2.81	20.87	13.50	20.00
		9	2,000	16.50	10.75	8.07	2.67	12.60	2.81	20.87	13.50	20.00
			3,000	18.50	11.75	8.07	2.67	12.60	2.81	20.87	13.50	20.00
	3,000	7 1/16	3,000	15.00	9.25	6.38	2.67	11.02	3.06	20.87	14.50	21.50
			5,000	15.50	9.00	6.38	3.85	11.02	3.06	23.82	14.50	21.50
		9	3,000	18.50	11.75	8.07	3.85	12.60	3.06	25.60	14.50	21.50
			5,000	19.00	11.50	8.07	3.85	12.60	3.06	25.60	14.50	21.50
	5,000	7 1/16	5,000	15.50	9.00	6.38	3.85	11.02	4.69	25.60	14.50	23.00
			10,000	18.88	10.00	6.38	4.56	12.60	4.69	25.60	14.50	23.00
		9	5,000	19.00	11.50	8.07	3.85	12.60	4.69	25.60	14.50	23.00
			10,000	21.75	12.88	8.07	5.31	15.75	4.69	25.60	14.50	23.00
10,000	7 1/16	10,000	18.88	10.00	6.38	4.56	13.78	5.56	25.60	17.75	25.75	
		15,000	19.88	10.88	6.38	5.12	14.96	5.56	27.95	17.75	25.75	
	9	10,000	21.75	12.88	8.07	5.31	15.75	5.56	27.95	17.75	25.75	
		15,000	25.50	13.75	8.07	6.30	17.72	5.56	31.50	17.75	25.75	
13 5/8	2,000	7 1/16	2,000	14.00	8.75	6.38	2.67	11.02	2.94	20.87	15.75	22.00
			3,000	15.00	9.25	6.38	2.67	11.02	2.94	20.87	15.75	22.00
		9	2,000	16.50	10.75	8.07	3.85	12.60	2.94	20.87	15.75	22.00
			3,000	18.50	11.75	8.07	3.85	12.60	2.94	20.87	15.75	22.00
	3,000	11	2,000	20.00	13.50	9.35	3.85	14.96	2.94	25.60	15.75	22.00
			3,000	21.50	14.50	9.35	3.85	14.96	2.94	25.60	15.75	22.00
		7 1/16	3,000	15.00	9.25	6.38	3.85	11.02	3.44	25.60	16.50	24.00
			5,000	15.50	9.00	6.38	3.85	11.02	3.44	25.60	16.50	24.00
	5,000	9	3,000	18.50	11.75	8.07	3.85	12.60	3.44	25.60	16.50	24.00
			5,000	19.00	11.50	8.07	3.85	12.60	3.44	25.60	16.50	24.00
		11	3,000	21.50	14.50	9.35	3.85	14.96	3.44	25.60	16.50	24.00
			5,000	23.00	14.50	9.35	3.85	14.96	3.44	25.60	16.50	24.00
	10,000	7 1/16	5,000	15.50	9.00	6.38	3.85	11.02	4.44	25.60	18.94	26.50
			10,000	18.88	10.00	6.38	4.56	12.60	4.44	27.95	18.94	26.50
		9	5,000	19.00	11.50	8.07	3.85	12.60	4.44	27.95	18.94	26.50
			10,000	21.75	12.88	8.07	5.31	15.75	4.44	27.95	18.94	26.50
	10,000	11	5,000	23.00	14.50	9.35	5.12	14.96	4.44	27.95	18.94	26.50
			10,000	25.75	15.75	9.35	6.10	18.90	4.44	27.95	18.94	26.50
		7 1/16	10,000	18.88	10.00	6.38	4.56	13.78	6.62	27.95	21.75	30.25
			15,000	19.88	10.88	6.38	5.12	14.96	6.62	27.95	21.75	30.25
	10,000	9	10,000	21.75	12.88	8.07	5.31	15.75	6.62	27.95	21.75	30.25
			15,000	25.50	13.75	8.07	6.30	17.72	6.62	31.50	21.75	30.25
		11	10,000	25.75	15.75	9.35	6.10	18.90	6.62	31.50	21.75	30.25
			15,000	32.00	16.81	9.35	7.87	23.62	6.62	33.46	21.75	30.25

Tubing Hangers



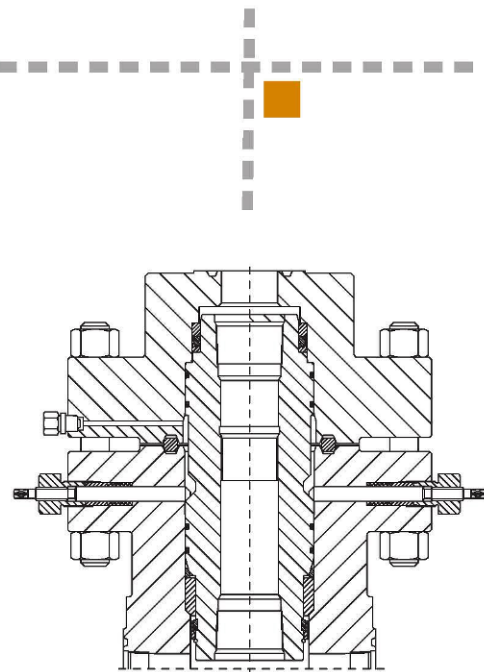
Type TH 1

Annular seal is lockdown screws energized and isn't affected by tubing weight.
Two seals on the tubing hanger neck isolate down hole control (DHCV) lines.
No special running tools are required.
Installation is quick and easy without awkward manipulation of the tree.
A threaded type UZ-HBPV preparation is furnished as standard.
Available with one or two control lines.

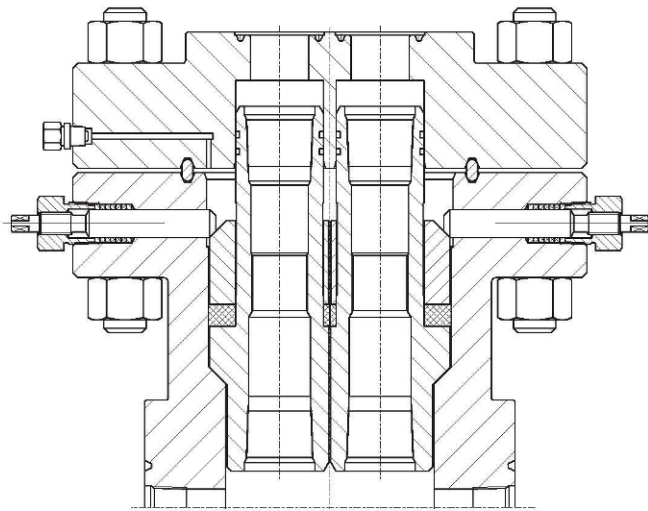


Type TH-MBS

It is recommended for critical service applications up to 15,000psi.
Hanger upper seal is a pressure energized, metal U cup seal. This seal is also bidirectional, which eliminates need for auxiliary test seals.
The upper metal seal is simultaneously energized with flange make-up.
Metal seals are made of high alloy materials to withstand corrosive and high temperature environments.
Extended neck design ensures positive alignment for the metal U cup seal during installation.



Tubing Hangers



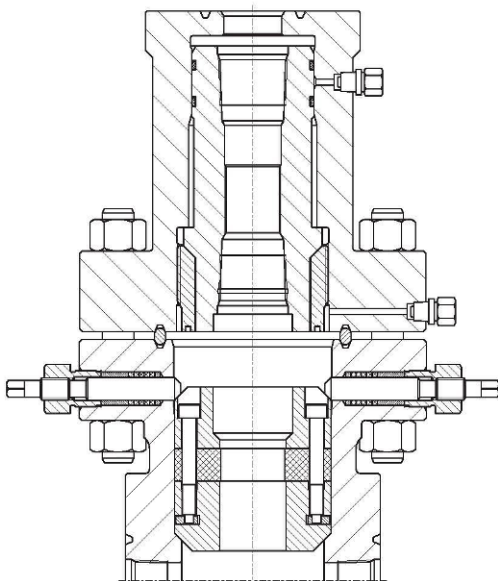
Type TH-DS

Dual hanger split system TH-DS is a split hanger with an integral compression type annulus seal actuated by lockdown screws that provides maximum clearance for control lines.

Split hanger can be run and pulled independently.

A threaded type UZ-HBPV preparation is furnished standard.

Available with one or two control lines.



Type TH-W

Coupling and Adapter; coarse ACME thread makes up easily.

Coupling:

- a thread UZ-HBPV preparation is normally furnished

- special running tools are required

Adapter: - top and bottom connections are available in many sizes, but are normally configured with a flanged bottom and studded top.

Wrap around hanger reliable compression seal controls pressure in the tubing annulus during mounting of the Christmas Tree, reciprocation of the tubing, as well as making up the tree.