



PRODUCT CATALOG

API 6A WELLHEAD & PRESSURE CONTROL

Gate Valves • Wellheads • Choke Equipment • BOPs • 1502 Flowline

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Field-Focused Oilfield Equipment Solutions

FracSync supplies high-quality API 6A pressure control equipment and 1502 flowline products engineered for demanding oilfield applications. We support drilling, frac, flowback, production, and well service operations with dependable equipment, fast turnaround, and responsive customer support.

Our product offering includes API 6A gate valves, wellhead equipment, christmas trees, choke valves, manifolds, BOP equipment, flanges, adapters, and 1502 flowline products.

FracSync focuses on delivering reliable field-ready solutions while maintaining a modern, customer-driven approach to oilfield supply.

API 6A Gate Valves

Wellhead Equipment

Choke Valves

Choke & Kill Manifolds

BOP Equipment

1502 Flowline Products

Flanges & Adapters

Integral Fittings

Christmas Tree

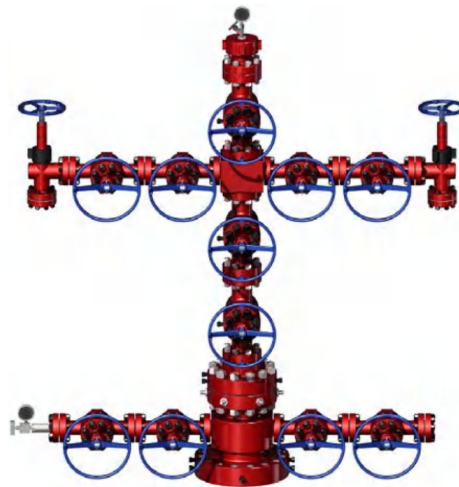
The christmas tree is wellhead equipment used to direct and control oil & gas from the well. This key piece of equipment for controlling the upper part of an oil & gas well and production adjustment and consists of a casing head, tubing head and oil (gas) tree ontology.

Gas production christmas trees and tubing heads are mainly used to produce and inject gas. While the relative density and gas column pressure is low, well head pressure is high and is prone to leakage. Sometimes natural gas may also contain corrosive media such as H_2S and CO_2 . As a result, gas production christmas trees have more stringent requirements for both materials and sealing characteristics. To ensure a safe operating environment, two gate valves are used on the tubing and casing respectively. Some gate valves, which are used for high pressure and ultra-high pressure gas wells, are integrated valves manufactured from high quality forged steel.

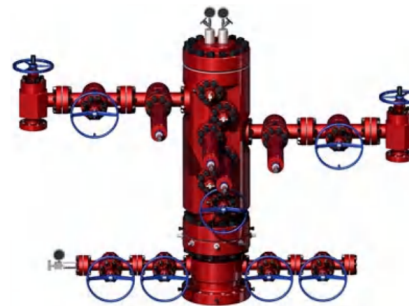
The christmas tree and tubing spools are both safe and reliable with a high pressure-bearing made of forged or special smelt steel.

Specifications:

- Working pressure: 2000 psi ~ 20000 psi
- Nominal diameter: $2\frac{1}{16}" \sim 5\frac{1}{8}"$
- Working media: oil, gas, mud, H_2S and CO_2 gases
- Working temperature: LU (-51°F/-46°C ~ 250°F/121°C)
- Material grades: AA, BB, CC, DD, EE, FF, HH
- Specification level: PSL1 ~ 3G
- Performance level: PR1 ~ 2
- Installable (pneumatic) hydraulic safety valve



Typical Christmas Tree



Dual-Tubing Integral-Type Christmas Tree

Casing Head

The casing head is a component connecting casings and various wellhead assemblies and is used to support the weight of technical casing and production casing, sealing the annular space between the casing and installing BOP stacks. The casing head also provides a transition joint for the tubing head, christmas tree and other wellheads. The head can also supply cement, monitor & control a well's sinking and inject balance liquids via the two side outlets on the casing head housing.

Base Position

- PE seal
- Used for the secondary seal casing (secondary seal can be customized according customer needs)

Locking Device

- Casing head can provide locking nail used to wear bushing
- Casing head provides a set of lock screw for spindle casing hanger and sealing device

Side Outlet Connection Format

- Studded
- LP Threaded

The casing head is a standard type composition and equipped with a casing hanger inside the shell. Casing hangers of varying dimensions can be provided according to casing programs and wellhead conditions. All casing heads are equipped with an API 6B or API 6BX flange on the top.



Casing Head – Slip Bottom



Casing Head – Threaded or Welded Bottom

Tubing Spool

Tubing Head

The tubing head connects the upper casing head with the christmas tree and is used for hanging the tubing hanger and sealing the space for the string and oil-layer casing.

Side Outlet Connection Format

- Studded
- LP Threaded

Base Position

- PE seal
- Used for the secondary seal casing (secondary seal can be customized)

The tubing spool manufactured is in full accordance with API 6A requirements. The body is constructed of forged, or special smelt steel, resulting in safe and reliable operations. Side outlets can be pipe threaded or of the studded variation. The studded side outlet is processed with VR internal thread and both valves offer convenient changing procedures.



Tubing Head Spool – Single Tubing



Tubing Head Spool – Dual Tubing



Tubing Head Spool – c/w Cable Penetrator

Slab Gate Valve

The **slab** gate valve is a type of closure device for the parallel slide valve of a gate. The closure pieces can be single **seat** or double **seat** with open institution.

Specifications:

- Working pressure: 2000 psi ~ 20000 psi
- Nominal diameter: $2\frac{1}{16}" \sim 7\frac{1}{16}"$
- Working media: oil, gas, mud, H₂S and CO₂ gases
- Working temperature: LU (-51°F/-46°C ~ 250°F/121°C)
- Material grades: AA, BB, CC, DD, EE, FF, HH
- Specification level: PSL1 ~ 3G
- Performance level: PR1 ~ 2

Features:

- Complied with API 6A;
- Seating and sealing face of valve **gate** are **harden faced**;
- Valve seat and **gate** are sealed, stem seal uses a safe and reliable lip type combination wellhead sealing structure;
- The valve has low torque **and easy to operate**;
- Inverted stem seal design, packing can be replaced under pressure;
- Gate structure has a rising stem and a non-rising stem, the opening of the valve is clearly marked;
- Valve **Gate** structure has integral or expandable forms;
- The seat structure has floating and fixed forms;
- **Operation Type** has manual, hydraulic and gear;
- Connections have flanged, thread **types**.



Manual Gate Valve - Rising
Stem



Hydraulic Gate Valve -
Manual Locking



Manual Gate Valve -
Non Rising Stem



Hydraulic Gate Valve

Expanding gate valve is a bi-directional, with a preferred seating side, valve for application on wellheads, production trees and manifolds with working pressure at and below 5000psi.

Specification Standard:

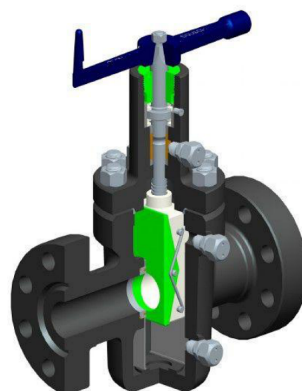
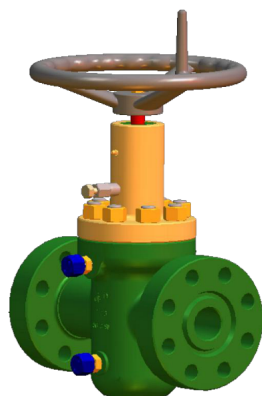
Expanding gate valve meet the requirements of the latest edition of API 6A

Service Condition:

General Service, Sour Service complied with NaceMR0175

Reliable Performance

- ◆ Forged bonnet
- ◆ Low operation torque
- ◆ Metal-to-metal body / bonnet seal
- ◆ Lubrication fittings for easy maintenance
- ◆ Gate guides retain body lubricants and protect gate surface
- ◆ Manual or actuated operation
- ◆ Simple design assures low cost
- ◆ Flanged or threaded outlets



Main Technology Parameters:

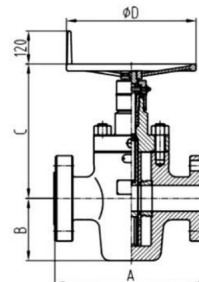
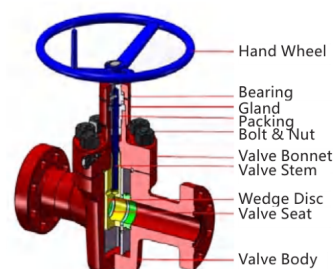
Working Pressure	2M, 3M, 5M, 10M
Material Class	AA, BB, CC, DD, EE, FF
Product Specification Level	PSL1, PSL2, PSL3, PSL3G, PSL4
Performance Requirement Level	PR1, PR2
Nominal bore	1-13/16, 2-1/16, 2-9/16, 3-1/8, 4-1/16, 7-1/16

FC-Type Gate Valve

The FC-type gate valve is a type of one-gate valve as well as a full-bore gate valve. It can be used for double-flange, threaded-end and special connection configuration. Pressure ranges from 2000 to 15000 psi and aperture sizes from 1-¹³/₁₆" to 7-¹/₁₆". In addition, it can be utilized with the actuator manufactured by us.

Features:

- Bi-directional downstream seal structure, improved service life;
- Fixed metallic seal (between value plate and valve seat, and between valve seat and valve body);
- Simple and reliable design for wedge disc and valve seat, which can reduce on-site service and minimize spare and accessory parts inventory;
- Seal ring between valve seat and valve body can facilitate low-pressure sealing and prevent particulate contamination entering into valve body cavity and sealing area.
- Valve stem seal design covers all pressure ratings, full temperature range and all possible fluid conditions in wellhead and manifold environment;
- Metallic seal is applied between valve bonnet and valve body;
- Valve stem's rear seal structure allows for valve to be replaced when valve stem seal is under pressure;
- In order to ensure safety, a grease injection device can be placed behind the valve stem's rear seal and set on the valve bonnet to eliminate leakage into valve body;
- Small switch working torque is easy to be turned on and off.



FC-Type Flat Gate Valve Specifications:

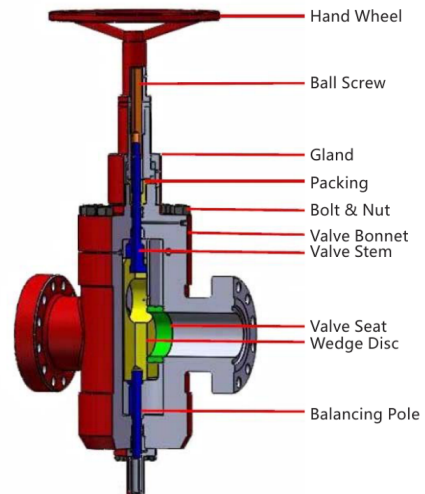
Nominal Diameter (in)	Nominal Pressure (psi)	Dimensions				Weight (lbs)	Number of Switch Turns
		A (in)	B (in)	C (in)	D (in)		
1-13/16"	10000	18	6	17	14	240.5	12-1/3
	15000	18	6	17	14	280.2	12-1/3
2-1/16"	2000	12	5	15	14	101.5	12-1/3
	3000	15	6	15	14	185.3	12-1/3
	5000	15	6	17	14	185.3	12-1/3
	10000	21	6	17	18	271.4	12-1/3
	15000	19	6	17	18	300.1	12-1/3
2-9/16"	2000	13	6	16	14	150.0	15-1/8
	3000	17	6	16	14	229.5	15-1/8
	5000	17	7	19	14	229.5	15-1/8
	10000	22	7	18	20	370.7	15-1/8
	15000	21	8	20	20	562.7	15-3/4
3-1/8"	2000	14	7	19	14	211.8	18-1/8
	3000	17	7	19	14	280.2	18-1/8
	5000	19	7	19	18	342.0	18-1/8
3-1/16"	10000	24	8	18	20	529.6	18-1/8
	15000	24	8	22	22	893.6	22-7/8
4-1/16"	2000	17	9	21	20	350.8	23-1/4
	3000	20	9	21	20	452.3	23-1/4
	5000	22	9	21	20	540.6	23-1/4
	10000	26	10	21	24	871.6	23-1/4
	15000	29	12	36	24	1557.8	23-1/4
5-1/8"	3000	24	11	23	24	933.3	27-1/2
	5000	29	12	24	24	1101.0	27-1/2
	10000	29	13	25	24	1312.9	29
7-1/16"	3000	28	15	48	43	1875.5	46-1/2
	5000	32	15	48	43	1977.0	46-1/2

Ball Screw Gate Valve

Ball screw gate valve was designed for large-diameter, high-pressure manual valves. The valve is combined with a rear balancing pole and unique ball balance creating an easy to use, low torque device.

Features:

- Bi-directional downstream seal structure, improved service life;
- Fixed metallic seal (between valve plate and valve seat, and between valve seat and valve body);
- Simple and reliable design for wedge disc and valve seat, which can reduce on-site service and minimize spare and accessory parts inventory;
- Seal ring between valve seat and valve body can facilitate low-pressure sealing and prevent particulate contamination entering into valve body cavity and sealing area;
- Valve stem seal design covers all pressure ratings, full temperature range and all possible fluid conditions in wellhead and manifold environment;
- Metallic seal is applied between valve bonnet and valve body;
- Valve stem's rear seal structure allows for valve to be replaced when valve stem seal is under pressure;
- In order to ensure safety, a grease injection device can be placed behind the valve stem's rear seal and set on the valve bonnet to eliminate leakage into valve body;
- Ball screw can effectively improve switch efficiency, reduce switch working torque, and facilitate easy and quick opening and closing of valves.

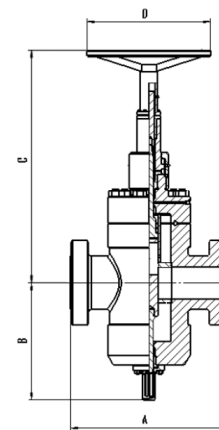


TFLS Ball Screw Gate Valve Specifications:

Nominal Diameter (in)	Nominal Pressure (psi)	Dimensions				Weight (lbs)		Number of Switch Turns
		A (in)	B (in)	C (in)	D (in)			
4-1/16"	15000	29	24	42	24	1721	19	19
	10000	29	30	43	24	1898	23	23
5-1/8"	15000	31	31	43	31	3133	24	24
	10000	35	35	48	43	3972	31	31
7-1/16"	15000	41	37	58	31	5792	31	31

Switch Working Torque Comparison:

Torque (7-1/16"-10000 psi)	FC Flat Wedge Disc	Ball Screw Gate
Opening torque (full differential pressure)	2035 Nm (1500 fl. lbs.)	205 Nm (151 fl. lbs.)
Operating torque (without differential pressure)	75 Nm (55 fl. lbs.)	21 Nm (15 fl. lbs.)



Choke Valve

A major component of the christmas tree and manifold, the choke valve is mainly used for controlling the production rate of an oil well at a working pressure of up to 20,000 psi. The choke valve can be classified as an adjustable choke valve or a positive choke valve. The adjustable choke valve is designed to adjust the effective area available, for the flow to control the production rate, through rotating the hand wheel. The positive choke valve is designed to control the production rate through changing flow beans.

Features:

- Use API 6A, 6D and NACE MR0175 standard design and manufacturing;
- The structure is simple, convenient to manufacture and maintain and low cost;
- The coupling nut used for connecting the bonnet and body allows for fast make-up and break-out;
- The stem tip and bean adaptor are fabricated from special carbide allows for corrosive and abrasive resistance;
- The indicator lens with scale marks allows the operator to know the stem's position and actual orifice area.

Specifications:

- Working pressure: 2000 psi ~ 20000 psi
- Working pressure: $2\frac{1}{16}'' \sim 3\frac{1}{16}''$
- Working media: oil, gas and various drilling fluids
- Working temperature: LU (-51°F/-46°C ~ 250°F/121°C)
- Material grades: AA, BB, CC, DD, EE, FF, HH
- Specification level: PSL1 ~ 3G
- Performance level: PR1 ~ 2

Positive Choke Valve

- Choke bean material is fabricated from ceramic and tungsten carbide, which has sufficient corrosion resistance, anti-erosion and wearable capacity;
- The valve adopts a union bonnet so as to change choke quickly;
- The valve can be applied to wellheads, christmas trees and choke lines.



Manual Choke Valve

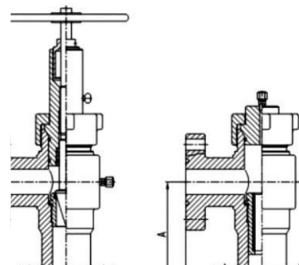


Hydraulic Choke Valve



Positive Choke Valve

Inner Cavity of Valve Seat	Inspection (flange type)	Dimensions	
		A (in)	B (in)
1"Choke diameter	2-1/16" 5000psi	8	7
	2-7/16" 5000psi	8	7
	2-7/8" 10000psi	9	8
	2-9/16" 10000psi	9	8
	2-1/2" 15000psi	10	9
	2-23/32" 15000psi	12	11
2"Choke diameter	2-9/16" 5000psi	10	8
	2-9/16" 10000psi	12	10
	2-3/4" 15000psi	12	10
	3-1/16" 3000psi	12	9
	3-1/16" 5000psi	12	9
	3-1/8" 10000psi	12	10
	3-1/2" 15000psi	12	10
	4-1/16" 3000psi	12	10
	4-1/16" 5000psi	12	10
	4-1/8" 10000psi	12	10
3"choke diameter	4-1/4" 3000psi	14	11
	4-1/8" 5000psi	12	10
		12	10

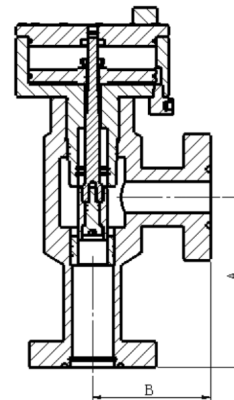
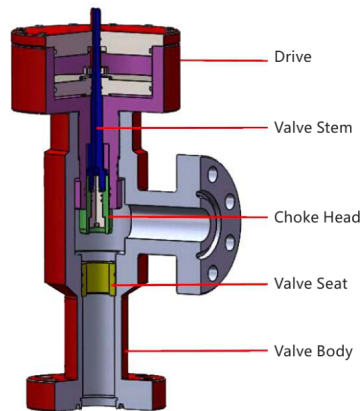


Adjustable Manual Choke Valve

- The valve needle and spool are constructed of tungsten carbide, which has sufficient corrosion resistance, anti-erosion and wearable capacity;
- The two kinds of adjustable choke, needle type and external sleeve type, can be applied to wellheads, christmas trees and choke manifolds;
- There are two manual hydraulic drive modes.

Cage Type Choke Valve

Cage type choke valve is used for choking is the choke manifold or other high-pressure pipelines. The valve is flush resistant, has a simple structure, long service life and a remote control for assembly actuator.



Inner Cavity of Valve Seat	Inspection (flange type)	Dimensions (mm/in)	
		A (in)	B (in)
1" Choke diameter	2-1/16" * 5000 psi	8	7
	2-9/16" * 5000 psi	8	7
	2-1/16" * 10000 psi	9	8
	2-9/16" * 10000 psi	9	8
2" Choke diameter	2-9/16" * 5000 psi	10	8
	2-9/16" * 10000 psi	12	10
	3-1/8" * 3000 psi	12	9
	3-1/8" * 5000 psi	12	9
	3-1/16" * 10000 psi	12	10
	4-1/16" * 3000 psi	12	10
	4-1/16" * 5000 psi	12	10
	4-1/16" * 10000 psi	14	11
3" Choke diameter	4-1/16" * 3000 psi	12	10

Orifice Choke Valve

The orifice choke valve is molded from two pieces of special carbon tungsten plates that are erosion resistant. One of the plates rotate to alter the concentricity between the upper orifice and lower orifice so as to adjust the flow rate of the fluid or gas.

The valve has an advantageous long working life and is erosion/corrosion resistant when compared to other choke valves.

Unique Design

The orifice plate is molded from two pieces of special carbon tungsten and is ground by a diamond brushing wheel. The opening dimensions of orifice plate are regulated by rotating the valve stem.

Positive Closure

A 17° overlap type sealing tape beyond the full-close position was designed to ensure closure. This will protect the sealing in the event of a sudden increase in pressure or abrasion.

Tungsten-Carbide Wear Brushing

The overlay applied to the face of the wear brushing increases the service life and improves the extensibility of wear brushing. This helps to accept abrasive downstream turbulence, especially during unbalanced drilling operations.

Multiple Applications

Both remote control and on-site manual operation are available during onshore and offshore operations.

Features:

- Built for oil fields;
- Precision manufacturing;
- One-way plate to plate design;
- Wear-resistance tungsten carbide wear brushing increases its service life;
- Versatile for onshore and offshore operations;
- On-site control or remote control available.



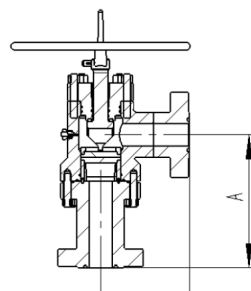
Manual Orifice
Choke Valve



Hydraulic Orifice
Choke Valve

Orifice Choke Valve

Inner cavity of valve seat	Inspection (flange-type)	Dimensions	
		A (in)	B (in)
1" choke diameter	2-1/16" 5000 psi	8	7
	2-9/16" 5000 psi	8	7
	2-1/16" 10000 psi	9	8
	2-9/16" 10000 psi	9	8
	2-1/16" 15000 psi	10	9
	2-9/16" 15000 psi	12	11
2" choke diameter	2-9/16" 5000 psi	10	8
	2-9/16" 10000 psi	12	10
	2-9/16" 15000 psi	12	10



Mud Gate Valve

Mud gate valve is a product that was developed in accordance with API 6A requirements to improve on the standard ram flat gate valve. When compared to the standard ram flat gate valve, the mud valve's height was reduced by one third, opening and closing time was reduced by one half, and production costs were reduced dramatically. The mud valve is suitable for a variety of complex applications such as oil and gas wellheads and christmas trees.

Mud gate valve has two sealing types: metal to metal seal and rubber seal.

Metal to Metal Seal Features:

- Gate's seal face and seat are spray coated with a long service life hard allow;
- Rising stem structure makes it easy to check the status of the valve;
- Can change stem packing without removing the bonnet;
- Designed with on-sight maintenance in mind, allowing inspection and/or replacement of internal parts by opening the bonnet, without needing to remove it from the pipe.

Rubber Seal Mud Valve Features:

- All parts are interchangeable with Cameron manufactured DEMCO gate valve;
- On-site repair ability: The bonnet can be easily removed for internal parts inspection and/or replacement without requiring to remove it from the pipe;
- Simple design allows for fast and easy service without special tools;
- Floating gate design: The place connected by T-type grooved valve stem allows the wedge disc to float to the valve seat, and the valve seat to tighten the pressure sealing.



Metal To Metal Seal Mud Valve – Welded End



2" 5,000 psi Rubber Seal Mud Valve – Welded End



2" 5,000 psi Rubber Seal Mud Valve – Threaded End



Check Valve

The check valve creates a seal between the valve core and body via fluid pressure. The higher the pressure the better the seal and the cavity can contain pressure in all pipes at all times. The body is constructed of a forged alloy steel which has good mechanical properties, pressure endurance and is safe and reliable.

The valve bonnet and valve body are bolted together. Sealing elements include a seal ring on the valve bonnet and an inner wall seal in the valve body.

Cemented carbide is overlapped on sealing faces of valve and the body, providing favorable wear-resistance and corrosion-resistance performance.

Specifications:

- Working pressure: 2000 psi ~ 15000 psi
- Nominal diameter: $2\frac{1}{16}" \sim 7\frac{1}{16}"$
- Working temperature: LU (-51°F/-46°C ~ 250°F/121°C)
- Material grades: AA, BB, CC, DD, EE and FF
- Specification level: PSL1 ~ 3G
- Performance level: PR1 ~ 2
- Working media: oil and gas



Plug Valve

The plug valve is an indispensable component that is utilized with a high pressure manifold during well cementing and fracturing services as well as high pressure fluid control systems. It has a compact structure, is easy to maintain, and has low torque and quick opening making it an ideal valve for cementing and fracturing manifolds.

Inlets and outlets of all plug valves adopt a union connection (which can be customized according to customer requirements). The cylinder fits between the body and seal segment and seal rings are inlaid into the outside of the seal segment for optimal sealing.

Specifications:

- Working pressure: 2000 psi ~ 15000 psi
- Nominal diameter: 2" and 3"
- Working temperature: LU (-51°F ~ 250°F)
- Material grades: AA, BB, CC, DD, EE and FF
- Specification level: PSL1 ~ 3G
- Performance level: PR1 ~ 2
- Working media: oil and gas



Choke Manifold

Application:

The choke manifold is a necessary piece of equipment used for controlling the well kick and implementing oil-gas well pressure control technologies.

Through opening and closing the choke valve, it can control certain pressure maintaining a bottom hole pressure that is higher than the formation pressure. This aids preventing fluid formation from further entering the well. It is also used for blowout protection (BOP) to protect the wellhead in the event that in-hole pressure exceeds certain limits.

Composition and Structure:

The throttle manifold is composed of a choke valve, gate valve, pipeline, fittings, pressure gauge, etc.

Working Principle:

As the in-hole pressure increases, the in-hole fluid can be released by opening and closing the choke valve located on the choke manifold, to control casing pressure. In case of excessively high casing pressure, it can be directly blown out via the gate valve.

Specifications:

The pressure of the choke manifold can be divided into six classes: 2000 psi, 3000 psi, 5000 psi, 10000 psi, 15000 psi and 20000 psi. It also can be designed according to customer requirements.

Usage Requirements:

- Working pressure of all choke manifold components shall be matched with that of the blowout preventer unit used;
- The choke manifold shall be installed in an accessible place for operation personnel, and pressure tests must be conducted during installation. Its seal test pressure shall be equal to the rated working pressure;
- The pipelines shall be as straight as possible with sufficient apertures. 120 degree forged-steel bends shall be applied at turnings of the pipelines;
- A working pressure gauge must be installed;
- For winter construction, the choke manifold shall have good performance in cold conditions.

The choke manifold meets the requirements of API Standard Spec 16C:

- Working pressure: 2000 psi ~ 20000 psi
- Nominal diameter: 2 $\frac{1}{16}$ "-4 $\frac{1}{16}$ "



Kill Manifold

Application:

As the wellhead pressure increases, the kill manifold can be used to pump heavy drilling fluid into the well, balancing the bottom hole pressure and avoid well kick and blowout. The bottom hole pressure can also be released via the relief pipeline connected to kill manifold. The kill manifold can also be used for injecting water and fire extinguishing agents into the well during cement squeeze and well cementing operations. Kill fluid or other fluids can only be injected into the well via the check valve of the kill manifold, but cannot back flow, achieving aims of well killing and other operations.

Composition:

The kill manifold is mainly composed of check valves, gate valves, pressure gauges, and pipelines. One end is connected to the drilling spool and the other end is connected to the injection pump. Both the kill manifold and choke manifold are designed in accordance to API standards. Currently, kill manifolds cover the following pressure classes: 2000 psi, 3000 psi, 5000 psi, 10000 psi, 15000 psi and 20000 psi.



Instructions for Use:

- Working pressure of all pipelines, gate valve, check valve, etc. shall be matched with that of blowout preventer unit used;
- The kill manifold shall not be used as the main pipeline for daily injection of drilling fluid.

Standpipe Manifold

- Vertical Structure: Can be used on a deck as it takes up limited space;
- Proper Match: The choke manifold is combined with two sets of kill manifolds, and is fabricated with two layers of drilling floor for easy operation;
- Complete Functions: It is equipped with all the functions of a horizontal manifold. The hard supporting frame is totally enclosed and corrosion proof;
- Easy Assembly: As a result of excessively large volume, it is designed as four components which are easy to transport.

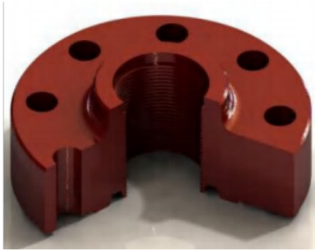


Our flowline products cover of pup joints, plug valves, swivel joints and union fittings, etc.

Available in :

- Size: 1" ~ 4"
- Connection: Fig100, 200, 300, 400, 602, 1002, 1502, 2002, etc
- Standard Service
- H2S Sour Gas Service





Companion Flange



Studded Flange



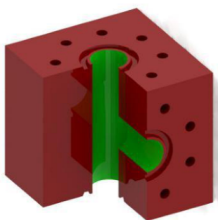
Weld Neck Flange



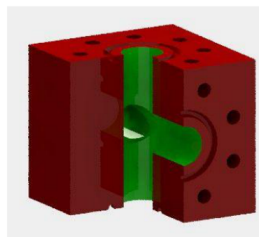
Adapter Flange / Spool



Blind Flange



Studded Tee



Studded Cross



Flanged Tee



Flanged Cross

Ram BOP

Ram **type** BOP can effectively control wellhead pressure, preventing blowout related accidents during drilling and workover operations.

When equipped with a well string, the ram BOP can be coupled with a ram assembly to seal the annular space between the casing and tubing string. When not equipped with a well string, the ram BOP can be coupled with a full sealing disc assembly to close the wellhead.

When equipped with a tight type damper control device and the situation is urgent, the ram BOP can be coupled with a shear ram cut tubing string in the well to seal the entire mouth. In the event that the ram BOP has closed, sealing the well, it can be connected to the outlet side of the choke & choke manifold kill blowout to conduct well washing and other special operations.

The ram BOP is available in **shaffer**, **Cameron** and **Hydril type**. It is designed and manufactured in accordance to API 16A requirements and is available in a variety of sizes and specifications.

- Working pressure: 2000 psi ~ 20000 psi
- Nominal diameter: 7¹/₁₆" ~ 30"
- Working media: oil, gas, mud, including H₂S and CO₂ gases
- Temp Class: T75, T20, T0
- Metal seal temperature level: A ~ D (-15°F/-26°C ~ 250°F/121°C)
- Rated hydraulic controlled working pressure: 3000 psi
- Recommended working pressure: 1200 psi ~ 1500 psi
- Upper and lower connection: flanged, **studded**
- Lock: hydraulic and manual lock
- Fluid containment specifications: 1" NPT
- Optional rams: **pipe ram**, **blind shear ram**, **variable bore ram**
- Outlet side connection: flanged, **studded**



Double Ram BOP



Single Ram BOP



Double Ram BOP-Lower Cavity with tandem booster



Pipe Ram



Blind Shear Ram



Variable Bore Ram

Annular BOP

Annular BOP is an important well control device that is mainly used for drilling, workover, and other tasks to effectively control wellhead pressure. This creates a safe working environment and prevents blowout accidents. The annular BOP must be equipped with a hydraulic control system. Typically, the annual BOP is used in conjunction with a ram BOP, but it can also be used individually, and can either be spherical or conical.

- Working pressure: 2000 psi ~ 20000 psi
- Nominal diameter: $7\frac{1}{16}$ " ~ 30"
- Working media: oil, gas, mud, including H₂S and CO₂ gases
- Metal temp Class: T75, T20, T0
- Non metal seal temperature class: A ~ D (-15°F/-26°C ~ 250°F/121°C)
- Rated hydraulic controlled working pressure: 3000 psi
- Recommended working pressure: 1200 psi ~ 1500 psi
- Upper and lower connection: the upper flange, planted wire, clamp connection; the lower flange, planted wire connection
- Fluid containment specifications: 1" NPT



Shaffer Type
Annular BOP



Cameron Type
Annular BOP



Hydril Annular BOP
(Screw Head)



Hydril Type Annular
BOP (Latched Head)



Drilling Spool



29 1/2" 500psi Diverter



30" 1000psi Diverter