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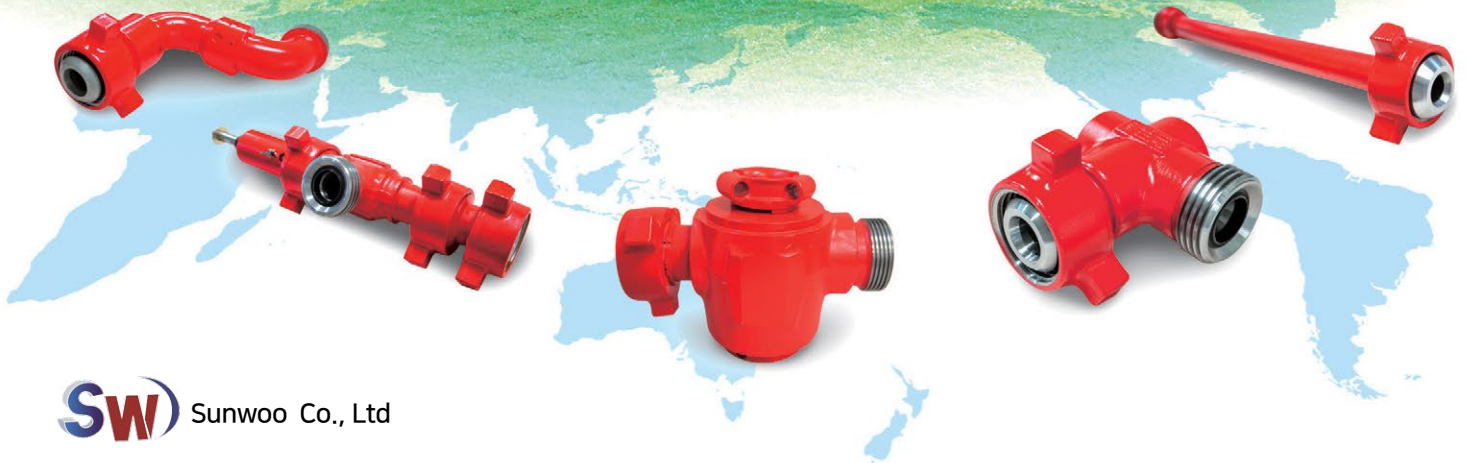
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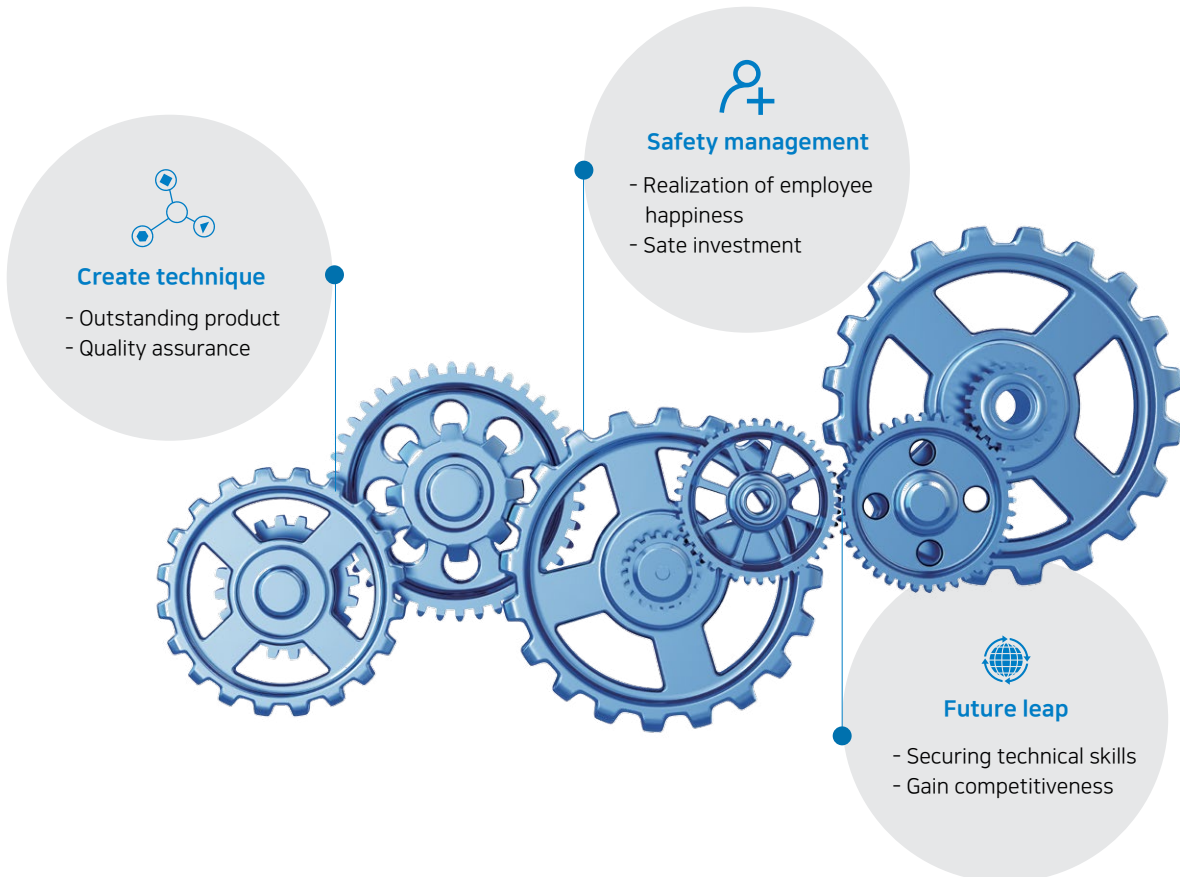


Reliable Service of VALVES

SUNWOO Co.,Ltd



Company Vision

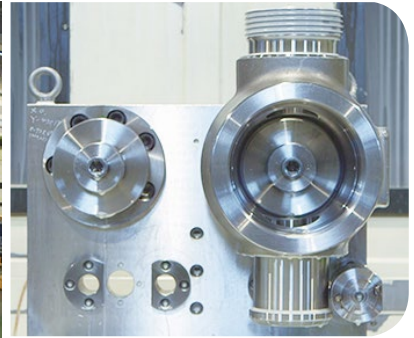


Company ideology

SUNWOO aims to be a company trusted by its customers and employees through a safe management structure that shares happiness with all employees and strengthens the company's competitiveness. In order to provide unrivaled services and technologies, We will leap forward by realizing customer impressions through activities, securing technological capabilities for the future, and securing competitiveness.

Company Overview

Machining Factory



Assembly Factory



Painting Factory





Connection to the world.
Reliable Service of VALVES





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Sunwoo Positive Choke Valves

Sunwoo Adjustable and Positive Choke Valves are field tested and provide control in Fracturing and Flowback applications up to 15,000-psi CWP. Both chokes are offered with 2" industry standard Male and Female End connections, have a Standard Service Rating of 15,000-psi NSCWP and are suitable for many types of manifold applications. Chokes are serialized and pressure tested to 1.5 times NSCWP.



Description	Weight lbs.
2" Figure 1502 Adjustable Choke Valve with 1" Seat Assembly	106.5
2" Figure 1502 Adjustable Choke Valve with 1" Seat and 9/16" Autoclave Assembly	106.5
2" Figure 1502 Adjustable Choke Valve with 3/4" Seat Assembly	106.5
2" Figure 1502 Offset Adjustable Choke Valve with 1" Seat Assembly	106.5
2" Figure 1502 Offset Adjustable Choke Valve with 3/4" Seat Assembly	106.5
2" Figure 1502 Positive Choke Valve No Bean with 1/2" NPT in Bull Assembly	-
2" Figure 1502 Positive Choke Valve No Bean with 9/16" Autoclave in Tee Assembly	83
2" Figure 1502 Positive Choke Valve No Bean with 9/16" Autoclave in Bull Assembly	83
2" Figure 1502 Offset Positive Choke Valve No Bean	71
2" Choke Valve 1" Bonnet Kit Assembly with Stem and Handwheel	-
2" Choke Valve 3/4" Bonnet Kit Assembly with Stem and Handwheel	-
2" Figure 1502 Adjustable Choke Valve Repair Kit	-



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Low Torque Plug Valves

Sunwoo Low Torque Plug Valves are field tested and provide flow control for oilfield applications such as: Cementing, Fracturing, Acidizing, Coiled Tubing, Sand Control and Manifold Trailers. The valves are offered with industry standard Male and Female End connections and have a Standard Service Rating of 15,000-psi NSCWP. Additionally, Heavy Duty Connections are available for only the 3" valve. Other connections are also available.



Description	Weight lbs.
1" Plug Valve Low Torque (1X1) Male X Female Figure 1502 1.06 Bore Standard Service - Bar Nut Operated	40.9
1" Plug Valve Low Torque (1X2) Male X Female Figure 1502 1.06 Bore Standard Service - Bar Nut Operated	49.9
2" Plug Valve Low Torque Male X Female Figure 1502 2.06 Bore Standard Service - Bar Nut Operated	96.5
2" Plug Valve Low Torque Male X Female Figure 1502 2.06 Bore Standard Service - Gear Operated with 12" Handwheel	93.9
2" Plug Valve Low Torque Male X Female Figure 1502 2.06 Bore Standard Service with Hydraulic Actuator	123
2" Plug Valve Low Torque Male X Female Figure 1502 2.06 Bore Standard Service with Hydraulic Actuator (valve only)	91
3" Plug Valve Low Torque Male X Female Figure 1502 3.06 Bore Standard Service - Bar Nut Operated	205.8
3" Plug Valve Low Torque Male X Female Figure 1502 3.06 Bore Standard Service - Gear Operated with 16" Handwheel	291.5
3" Plug Valve Low Torque Male X Female Figure 1502 3.06 Bore Standard Service with Hydraulic Actuator	385
3" Plug Valve Low Torque Heavy Duty Male X Female Figure 1502 3.06 Bore Standard Service - Bar Nut Operated	207.5
3" Plug Valve Low Torque Heavy Duty Male X Heavy Duty Female Figure 1502 2.63 Bore Standard Service - Bar Nut Operated	232
2" Plug Valve Low Torque Repair Kit	13.2
2" Plug Valve Low Torque Seal Kit	0.1
3" Plug Valve Low Torque Repair Kit	30.5
3" Plug Valve Low Torque Seal Kit	0.1



Sunwoo Extra High Pressure [Code Red] Long Radius Swivel Joints

Sunwoo Extra High Pressure (Code Red) Long Radius Swivel Joints feature superior alloy steel forgings with our standard and proven ball race and seal designs for reliability and long service. Through tightly controlled heat treatment, Sunwoo Extra High Pressure Swivels have an optimal combination of both core strength and case hardness, without sacrificing ductility. Fully traceable, including low temperature Charpy Impact tests, these long radius swivels are recommended for fracturing, acidizing, testing, or cementing on temporary or permanent well service and production lines at 10,000 and 15,000 psi cold working pressures.



Long Radius Swivel Joints

2" Extra High Pressure		3" Extra High Pressure	
Description	Weight lbs.	Description	Weight lbs.
Style 50 Male x Female	55	Style 50 Male x Female	112.5
Style 10 Male x Female	64	Style 10 Male x Female	138
Style 10 Male x Male	72.5	Style 10 Male x Male	147.9
Style 20 Male x Female	29.3	Style 20 Male x Female	55
Style 30 Male x Female	36.8	Style 30 Male x Female	71
Style 50 Male x Female	55.2	Style 50 Male x Female	113.2
Style 80 Male x Female	73.6	Style 80 Male x Female	154.2



Sunwoo

Non-Pressure Seal Pup Joints

Sunwoo Non-Pressure Seal Pup Joints are available in 1½", 2", 3" and 4" nominal sizes. These Pup Joints are factory fabricated, 100% hydrostatically tested at 1.5 times the rated cold working pressure, and certified for service. Sunwoo Non-Pressure Seal Hammer Unions feature API Round Tubing Threads which are epoxied power tight to high tensile strength oilfield tubing. The tubing is then machined flush to the union seal ring counter bore to provide a smooth inside diameter, minimizing erosion and fluid turbulence.



Non-Pressure Seal Pup Joints

2" Figure 1502 - 15,000 psi CWP		3" Figure 1502 - 15,000 psi CWP	
Length	Weight lbs.	Length	Weight lbs.
2 ft. long	30.71	2 ft. long	30.71
3 ft. long	37.2	3 ft. long	37.2
4 ft. long	44.5	4 ft. long	44.5
5 ft. long	51.8	5 ft. long	51.8
6 ft. long	60	6 ft. long	60
7 ft. long	66.8	7 ft. long	66.8
8 ft. long	73.8	8 ft. long	73.8
10 ft. long	88.9	10 ft. long	88.9
12 ft. long	103.5	12 ft. long	103.5
15 ft. long	125.8	15 ft. long	125.8
20 ft. long	161.8	20 ft. long	161.8



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High Pressure Figure 1502 Integral Union Ells

Sunwoo Extra High Pressure Figure 1502 Integral Union Ells are manufactured from hot forged alloy steel with special chemical properties, and are carefully heat-treated to enhance tensile strength and low temperature impact properties.



Integral Flow Ell's

Sunwoo Figure 1502 - 15,000 psi CWP

Description	Union Size	Weight lbs.
Integral 1502 Union End Flow ELL - Female x Male	1 X 1	38.5
	1½ X 1½	44
	2 X 2	41
(Thread x Nut)	3 X 3	86
	4 X 4	176
Description	Union Size	Weight lbs.
Integral 1502 Union End Cushion ELL (Flowbackn Ell) Female x Male	1 X 1	38
	1½ X 1½	-
(Thread x Nut)	2 X 2	43
	3 X 3	91
Description	Union Size	Weight lbs.
Integral 1502 Union End Cushion ELL (Flowbackn Ell) Male x Female	1 X 1	-
	1½ X 1½	-
(Nut x Thread)	2 X 2	43
	3 X 3	91
Description	Union Size	Weight lbs.
Integral 1502 Union End Flow ELL - Male x Male	1 X 1	37.5
	1½ X 1½	52
(Nut x Nut)	2 X 2	48
	3 X 3	98.5



Sunwoo

Extra High Pressure Figure 1502 Integral Union Tees

Sunwoo Extra High Pressure Figure 1502 Integral Union Tees are manufactured from hot forged alloy steel with special chemical properties, and are carefully heat-treated to enhance tensile strength and low temperature impact properties.



Integral Flow Tee's

Sunwoo Figure 1502 - 15,000 psi CWP		
Description	Union Size	Weight lbs.
Integral 1502 Union	1 X 1 X 1	24
End Flow TEE	1 X 1 X 1	24
Female x Female x Male	1 X 1 X 1	24
(Thread x Thread x Nut)	1 X 1 X 1	24
Description	Union Size	Weight lbs.
Integral 1502 Union	1 X 1 X 1	44
End Flow TEE	1½ X 1½ X 1½	60
Female x Male x Male	2 X 2 X 2	55
(Thread x Nut x Nut)	3 X 3 X 3	108



Sunwoo Crosses

Sunwoo Crosses are field tested and provide the necessary connections for demanding applications. They are manufactured from high strength alloy steel and heat treated to exacting requirements for strength and longevity. Crosses are available in 2" industry standard Male and Female End connections.



2" Flow Crosses	
Description	Weight lbs.
2" Flow Cross with M X M X M X M 2" 1502 Ends Assembly	77.5
2" Flow Cross with F X F X F X F 2" 1502 Ends Assembly	48
2" Flow Cross with M X M X F X F 2" 1502 Ends Assembly	36
2" Flow Cross with M X M X M X F 2" 1502 Ends Assembly	70
2" Flow Cross with F X F X F X M 2" 1502 Ends Assembly	55

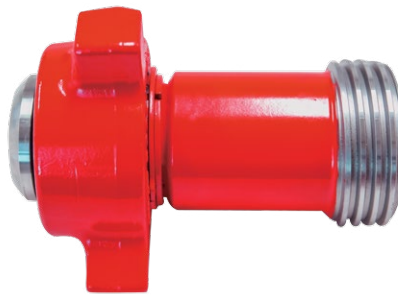
3" Flow Crosses	
Description	Weight lbs.
3" Flow Cross with F X F X F X M 3" 1502 Ends Assembly	140
3" Flow Cross with F X F X M X M 3" 1502 Ends Assembly	148.5
3" Flow Cross with F X M X F X M 3" 1502 Ends Assembly	148.5
3" Flow Cross with F X M X M X M 3" 1502 Ends Assembly	156.9
3" Flow Cross with M X M X M X M 3" 1502 Ends Assembly	171



Sunwoo

Integral Hammer Union Crossovers

Sunwoo Integral Hammer Union Crossovers are manufactured to the same stringent specifications for material, heat treatment and dimensional tolerance as are Sunwoo Hammer Unions. Standard lengths and Union Figure Number combinations are stocked for immediate delivery and custom combinations or lengths can be delivered to order with minimal lead times.



Sunwoo Integral Crossovers

Male X Male		
Description	CWP psi	Weight lbs.
1" 1502 MALE X 2" 1502 MALE	15,000	24.8
1 ½" 1502 MALE X 1 ½" 1502 MALE	15,000	31
2" 1502 MALE X 1 ½" 1502 MALE	15,000	30
2" 1502 MALE X 2" 1502 MALE	15,000	28
2" 2002 MALE X 2" 1502 MALE	15,000	-
3" 602 MALE X 3" 602 MALE	6,000	47.3
3" 1502 MALE X 2" 1502 MALE	15,000	39
3" 1502 MALE X 3" 1502 MALE	15,000	47.9

Female X Female		
Description	CWP psi	Weight lbs
2" 1502 FEMALE X 1" 1502 FEMALE	15,000	11.5
2" 1502 FEMALE X 1 ½" 1502 FEMALE	15,000	14.5
2" 1502 FEMALE X 2" 1502 FEMALE	15,000	14
2" 2002 FEMALE X 2" 1502 FEMALE	15,000	-
2" 2002 FEMALE X 2" 2002 FEMALE	20,000	-
3" 1502 FEMALE X 2" 1502 FEMALE	15,000	18
3" 1502 FEMALE X 3" 2002 FEMALE	15,000	-
3" 1502 FEMALE X 3" 1002 FEMALE	10,000	19.6
3" 1502 FEMALE X 3" 1502 FEMALE	15,000	22

Male X Female		
Description	CWP psi	Weight lbs.
1" 1502 MALE X 2" 1502 FEMALE	15,000	14.5
2" 1502 MALE X 1" 1502 FEMALE	15,000	19.5
1½" 1502 MALE X 1½" 1502 FEMALE	15,000	21.3
2" 1502 MALE X 1½" 1502 FEMALE	15,000	21
1½" 1502 MALE X 2" 1502 FEMALE	15,000	22.5
2" 1502 MALE X 2" 1502 FEMALE	15,000	21
3" 1002 MALE X 2" 1502 FEMALE	10,000	29.3
3" 1502 MALE X 2" 1502 FEMALE	15,000	31.5
2" 1502 MALE X 3" 1502 FEMALE	15,000	25.3
3" 1002 MALE X 3" 1502 FEMALE	10,000	32.5
3" 1502 MALE X 3" 1502 FEMALE	15,000	34.5



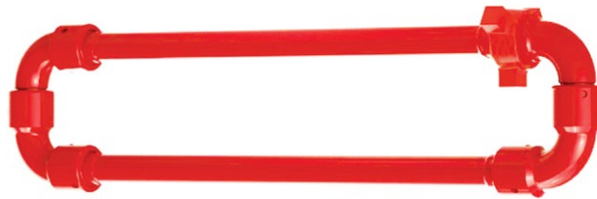
Sunwoo

Extra High Pressure [Code Red - 15,000 psi CWP] Cementing / Circulating Hose Loops

Sunwoo Extra High Pressure (Code Red - 15,000 psi CWP) Cementing / Circulating Hose Loops are now available.

Manufactured, assembled and tested to stringent quality standards, these fully traceable and certified steel hoses are suitable for temporary service line, discharge line, test line, as well as high pressure abrasive service such as circulating and cementing.

Superior materials and heat treatment assure long life in tough service conditions for handling any oilwell servicing fluid at working pressures up to 15,000 psi.



✓ Sunwoo Figure 1502 - 15,000 psi Extra High Pressure

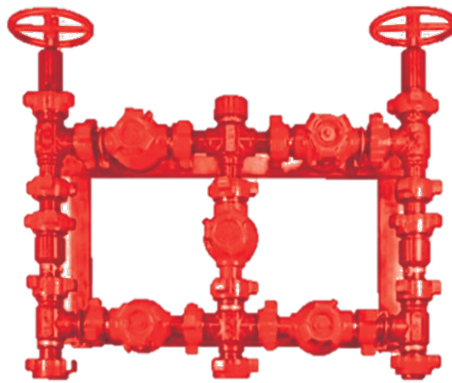
Cementing / Circulating Steel Hose		
Description	NSCWP psi	Weight lbs.
SJL15i - 2" Figure1502 Integral Long Radius Steel Hose - 6 Foot (Style 50 Swivels x 10 Swivels)	15,000	133
SJL15i - 2" Figure1502 Integral Long Radius Steel Hose - 8 Foot (Style 50 Swivels x 10 Swivels)	15,000	154.9
SJL15i - 2" Figure1502 Integral Long Radius Steel Hose - 10 Foot (Style 50 Swivels x 10 Swivels)	15,000	162
SJL15i - 2" Figure1502 Integral Long Radius Steel Hose - 12 Foot (Style 50 Swivels x 10 Swivels)	15,000	183



Sunwoo

Dual Choke Manifolds (DCM)

Sunwoo Dual Choke Manifolds (DCM) are available in 2" Figure 1502, 5 valve and 9 valve configurations. Other Figures and sizes available - consult factory for availability. A variety of manifolds are offered in many configurations: two (2) Adjustable Chokes, one (1) Adjustable Choke and one (1) Positive Choke; with or w/out gage ports, 1" or 3/4" Adj Choke; 1" or 2" Plug Valves; other valves. Other non-DCM available: 4 valve both boxed and unboxed.



Dual Choke Manifolds

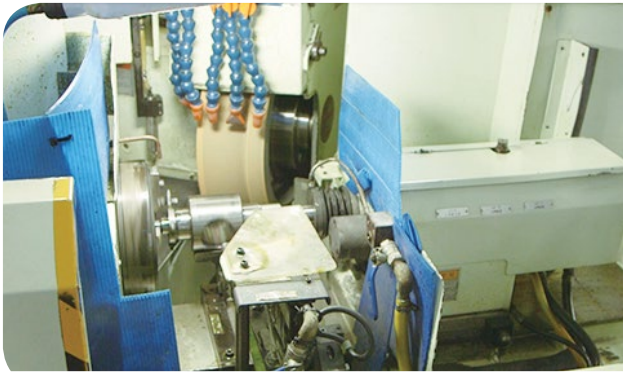
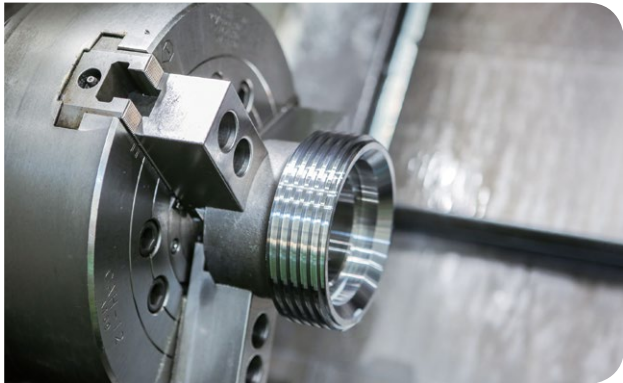
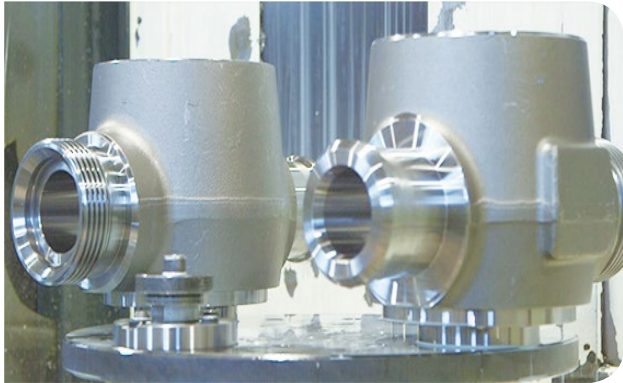
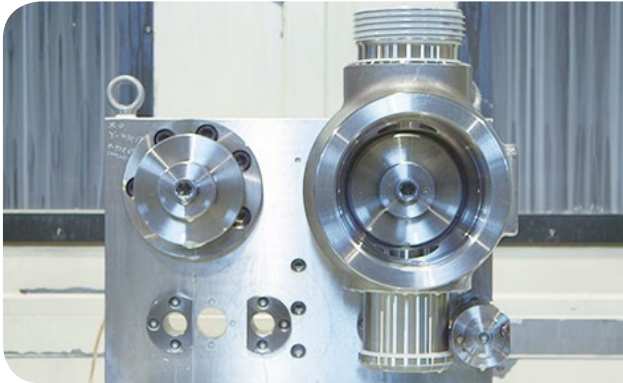
Description	Weight lbs.
2" Figure 1502 Dual Choke Manifold Adjustable 3/4 with Adjustable Choke / Positive 4 Valve 1X2 Plug Valve	676
2" Figure 1502 Dual Choke Manifold Adjustable 3/4 with Adjustable Choke / Positive 4 Valve 2X2 Plug Valve	848
2" Figure 1502 Dual Choke Manifold Adjustable 3/4 / Positive 4 Valve 1X2 Plug Valve	675
2" Figure 1502 Dual Choke Manifold Adjustable 1 with Adjustable Choke / Positive 4 Valve 1X2 Plug Valve	675
2" Figure 1502 Dual Choke Manifold Adjustable 1 / Positive 4 Valve 1X2 Plug Valve	675
2" Figure 1502 Dual Choke Manifold Adjustable 3/4 / Positive 4 Valve 2X2 Plug Valve	848
2" Figure 1502 Dual Choke Manifold Adjustable 1 with Adjustable Choke / Positive 4 Valve 2X2 Plug Valve	848
2" Figure 1502 Dual Choke Manifold Adjustable 1 / Positive 4 Valve 2X2 Plug Valve	848

Dual Choke Manifolds

Description	Weight lbs.
2" Figure 1502 Dual Choke Manifold Adjustable 1 with Adjustable Choke 5 Valve 2X2 Plug Valve	1003
2" Figure 1502 Dual Choke Manifold Adjustable 1 / Positive 5 Valve 2X2 Plug Valve	979
2" Figure 1502 Dual Choke Manifold Adjustable 3/4 with Adjustable Choke / Positive Bull Adjustable Choke 5 Valve 1X2 Plug Valve	790
2" Figure 1502 Dual Choke Manifold Adjustable 3/4 with Adjustable Choke / Positive Bull Adjustable Choke 5 Valve 2X2 Plug Valve	950
2" Figure 1502 Dual Choke Manifold Adjustable 1 with Adjustable Choke / Positive Bull Adjustable Choke 5 Valve 2X2 Plug Valve	950
2" Figure 1502 Dual Choke Manifold Adjustable 1 with Adjustable Choke / Positive Bull Adjustable Choke 5 Valve 1X2 Plug Valve	790
2" Figure 1502 Dual Choke Manifold Adjustable 1 with Adjustable Choke 5 Valve 2X2 Plug Valve with Tee & Bull PlugS	1038
2" Figure 1502 Dual Choke Manifold Adjustable 1 with Adjustable Choke 9 Valve 2X2 Plug Valve	1358
2" Figure 1502 Dual Choke Manifold Adjustable 1 with Adjustable Choke / Positive Bull Adjustable Choke 9 Valve 2X2 Plug Valve	1334
2" Figure 1502 Dual Choke Manifold Adjustable 1 with Adjustable Choke 9 Valve 1X2 Plug Valve	1332
2" Figure 1502 Dual Choke Manifold Adjustable 1 with Adjustable Choke / Positive Bull Adjustable Choke 9 Valve 1X2 Plug Valve	1001
2" Figure 1502 Dual Choke Manifold Adjustable 3/4 with Adjustable Choke 9 Valve 2X2 Plug Valve	1358
2" Figure 1502 Dual Choke Manifold Adjustable 3/4 with Adjustable Choke / Positive Bull Adjustable Choke 9 Valve 2X2 Plug Valve	1332
2" Figure 1502 Dual Choke Manifold Adjustable 3/4 with Adjustable Choke 9 Valve 1X2 Plug Valve	1014
2" Figure 1502 Dual Choke Manifold Adjustable 3/4 with Adjustable Choke / Positive Bull Adjustable Choke 9 Valve 1X2 Plug Valve	988
2" Figure 1502 Dual Choke Manifold - Non-Box Adjustable 1 / Positive 4 Valve 1X2 Plug Valve	444
2" Figure 1502 Dual Choke Manifold - Non-Box Adjustable 1 with Adjustable Choke / Positive Tee Adjustable Choke 4 Valve 1X2 Plug Valve	444



Manufacturing Facilities





Assembly & Test Facilities

