



PROFESSIONAL · FOCUSED · EXPERTISE

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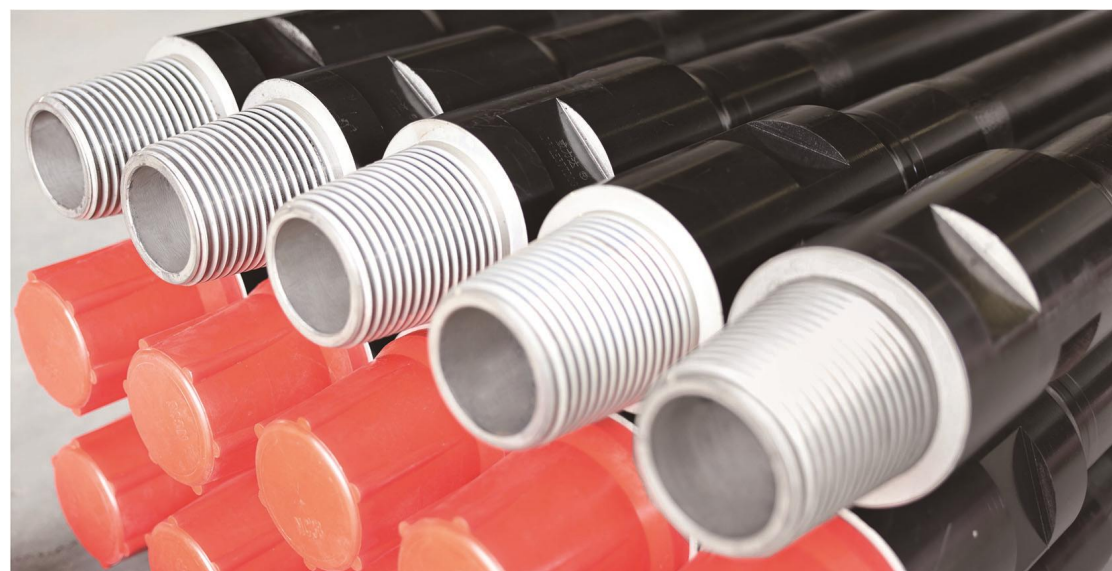
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威力达钻杆
WEILIDA DRILL

PROFESSIONAL MANUFACTURER OF DRILL PIPE |



WEILIDA DRILL · CHINA

COMPANY PROFILE

Shijiazhuang Weilida Prospecting Machinery Co., Ltd. (formerly known as North Petroleum Geophysical Exploration Machinery Factory) was founded in 1988. We are in Jinzhou City, Shijiazhuang City, an important industrial base in Hebei Province. Our factory has a beautiful environment and a superior geographical location. We are only 5-minute drive from the Jinzhou South Exit of Shiheng Expressway, 15-minute drive from Xinji South High-speed Railway Station, 1-hour drive from Zhengding International Airport and 3-hour drive from Beijing Daxing International Airport.

Our company has a modern factory area of 13,000 square meters and 80 employees. We are an enterprise that integrates the design, manufacturing, testing, domestic and foreign trade sales of drilling machinery and drilling tools, that are rare both at home and abroad. We can produce GB, Gost, API and IOS standards drilling tools, and can also design and manufacture special specifications of drilling tools according to customers needs.

Our company mainly produces: HDD drill pipe, DTH drill pipe, anchor drill pipe, coal mine drill pipe, oil drill pipe, water well drill pipe, geological exploration drill pipe, casing drilling tools, adapter sub, hydraulic pipe winching device, tricone bit, core drill bit, mud pump, portable drilling rig, core tube, casing, and so on. We can also design and manufacture drilling machinery equipment with special specifications according to customers needs.

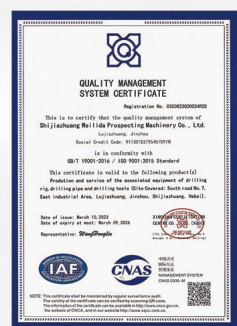
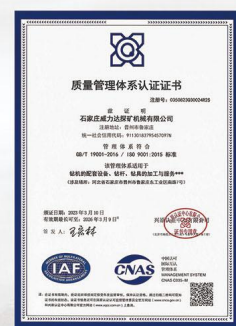
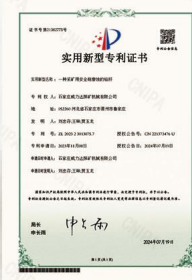
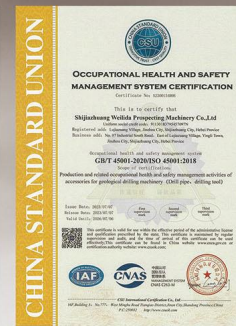
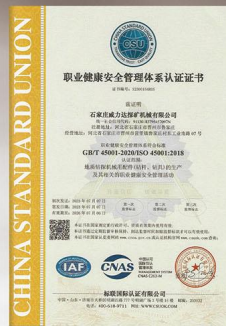
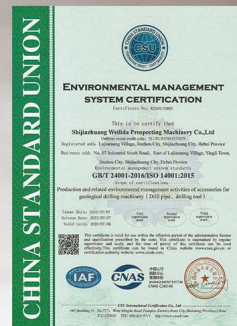
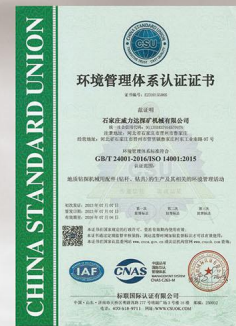
Our company has a number of domestic advanced CNC lathes, friction welding machines, pipe end upsetting and thickening machines, and complete production equipment. The quality management system has been established in accordance with ISO9001, and the professional system management personnel have conducted multiple trainings for all employees. The quality management system is in perfect and effective operation. From the signing of the order to the inspection and delivery of finished products, we use various identification methods such as labels, lettering, and spray paint, and record all data to ensure product traceability. We are also equipped with various specifications of thread gauges, pitch testing instruments, taper testing equipment, flaw testing equipment, hardness testing equipment, with the required physical and chemical testing equipment, and we can conduct comprehensive mechanical performance testing on drilling machinery equipment as required.

We always take sincere cooperation, reliable quality and high-quality service as our corporate philosophy. To improve self-management level, adjust market layout, improve product technology content, and solve customer needs, so that customers can buy with confidence and use comfortably.

**Welcome to learn about Weilida
drill pipes. Opening every page
of the manual will bring you not
only confidence, but also Weili-
da's commitment to quality.**

— WEILIDA DRILL

ENTERPRISE HONOR



FACTORY SCENE



COMPANY ENTRANCE

In order to ensure high-quality products, our raw materials use hot-rolled high-strength alloy structural pipes from China's advanced steel manufacturer (Shanghai Baosteel) to ensure that the raw materials are defect-free.



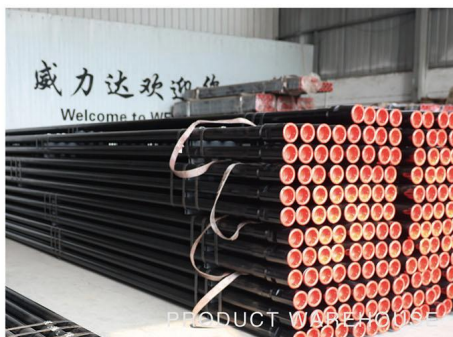
RAW MATERIAL WAREHOUSE



RAW MATERIAL WAREHOUSE



PRODUCT WAREHOUSE



PRODUCT WAREHOUSE



Our company has 3 friction welding machines of 80 tons, 100 tons, and 180 tons. It adopts continuous inertia friction welding technology and detects welding parameters through computers to ensure the quality of drill pipe welding and utilizes welding heat and upsetting deformation. The weld structure is subjected to secondary tempering treatment through solid-state high-frequency quenching equipment. In order to make the weld seam beautiful and tidy and extend the service life of the drill pipe, we use unique internal punching and external grinding technology to eliminate welding stress concentration.



FRICTION WELDING



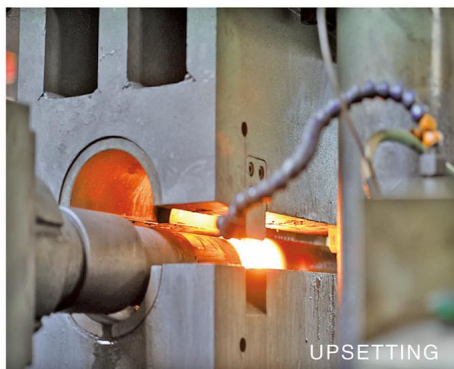
MILLING WELDING SEAM



WELDING SEAM HEAT TREATMENT



LARGE UPSETTING EQUIPMENT

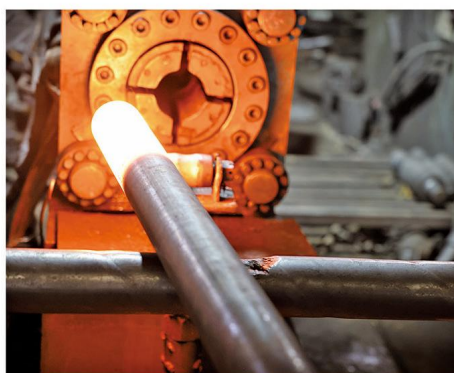


UPSETTING

Our company has three large pipe end upsetting equipments (400 tons, 500 tons, 800 tons), which can process diameters ranging from 42mm to 178mm. The characteristics of the process are smooth and long transition zone, fast molding speed and good stability. The pipe end is tempered after the upsetting is completed, so the quality of the processed drill pipe is stable and reliable, and the service life is greatly extended.



HEAT TREATMENT FOR UPSETTING END



Our company uses precision imported CNC lathes and customized forming cutters for thread processing, strictly ensuring the smoothness and tightness of the threads. All threads we process are equipped with thread gauges that comply with international standards to ensure consistency in product versatility.



QUALITY CONTROL

Weilida's quality inspection department is composed of 5 people. They have more than 6 years of experience in testing drill pipes and more than 5 years of experience in testing physical and chemical properties of metal materials. Two people have non-destructive testing certificates and have received thread testing training. They pursue excellence, pay attention to details, and never allow defective products to be delivered to customers.



Weilida's Mechanics Lab



Tensile testing equipment



Impact testing equipment



Optical spectrum analyzer


Brinell hardness tester
Rockwell hardness tester


Metallurgical microscope



Thread gauge

The main testing equipment equipped by our company includes universal tensile testing machines, impact testing machines, metallographic microscopes, various hardness testers, spectrum analyzers, ultrasonic flaw detection equipment, magnetic particle flaw detection equipment, thread single testers, etc. These devices can fully meet the inspection requires and quality commitments of Weilida.

Raw material inspection



In order to ensure high-quality products, we purchase hot-rolled high-strength alloy structural pipes from China's advanced steel manufacturer (Shanghai Bao-steel) to ensure that the raw materials are defect-free. After the raw materials enter the factory, the outer diameter, wall thickness and surface quality are inspected, and the chemical composition of each batch of raw materials is analyzed.

Pipe end upsetting detection



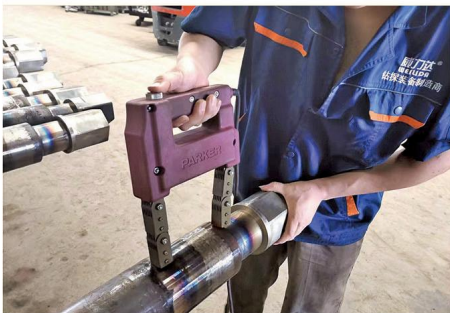
We know that during the upsetting process of the pipe end, abnormal temperature will seriously affect the quality of the drill pipe. During the upsetting process, the quality inspection personnel strictly inspect the length of the drill pipe and the internal and external molding of the upsetted end.

Thread parameter inspection



The inspector uses a thread parameter measuring instrument to conduct individual inspections on each thread. After the thread processing is completed, each workpiece must be inspected with thread gauges and data registered.

Magnetic powder inspection



Our MPI Inspectors have MT2 and UT2 qualification certificates. They conduct flaw detection on the welded part of each drill pipe, with a flaw detection range of 42mm~168mm, to ensure that there are no defects in the connection between the drill pipe and the joint.

Ultrasonic flaw detection

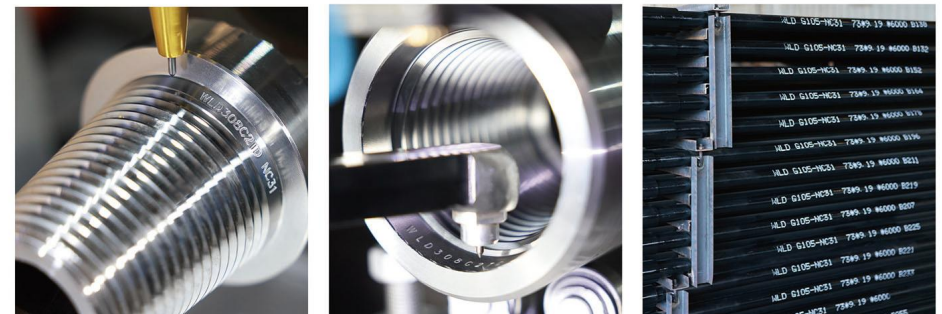


Mechanical property test



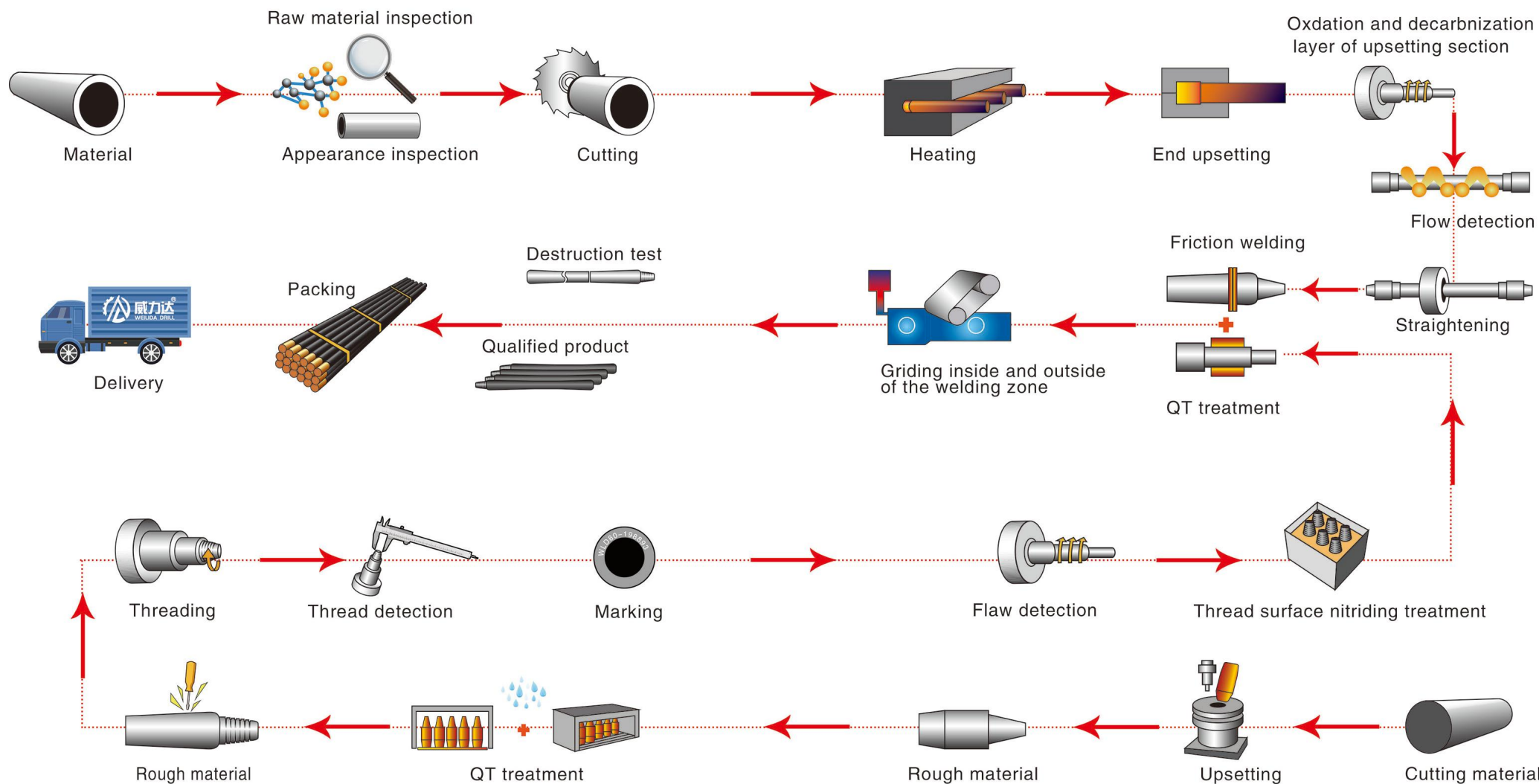
We use universal tensile testing machines and impact testing machines to test the mechanical properties of drill pipes, and use Rockwell hardness testers, Brinell hardness testers, and Leeb hardness testers to test each batch of joints after heat treatment.

Product traceability identification



We have established a complete traceability document, using various methods such as engraving, labeling, and painting identification to ensure product traceability.

FRICITION WELDING PROCESS



HDD DRILL PIPE

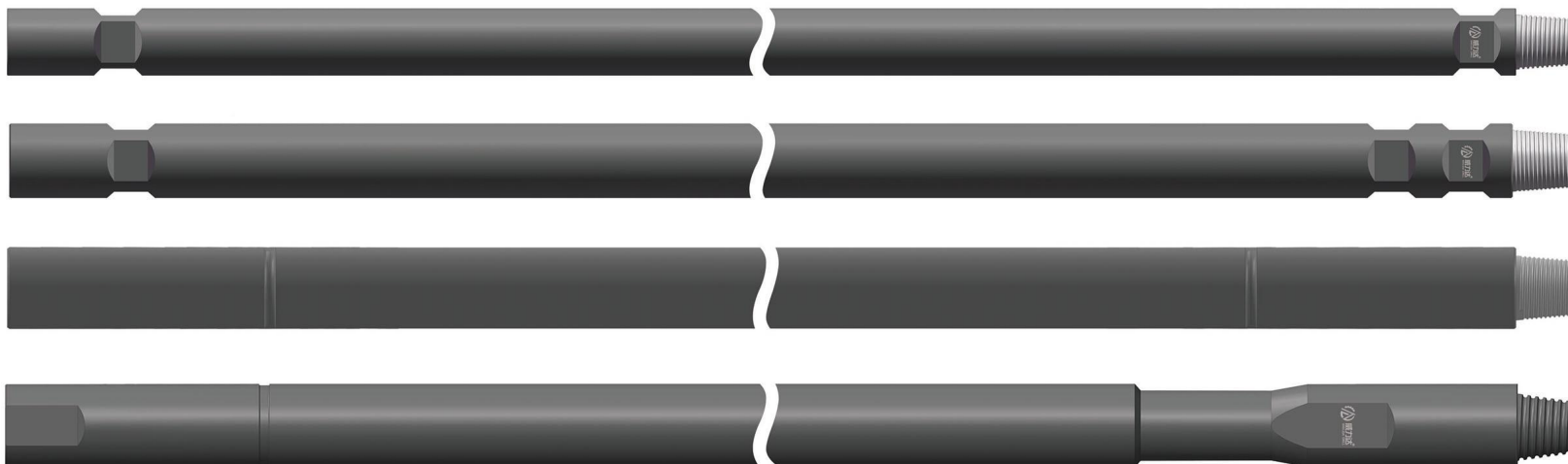


HDD drill pipe is mainly used in horizontal directional drilling pipeline crossing and laying projects. The pipe body is made of special materials that comply with API standards and has stable performance. The thickened pipe end complies with API 5DP standards. The thickened pipe body is quenched and tempered and heat treated. The steel grade can be up to G105 or S135. The tool joint is made of forged blanks. After rough machining, it is tempered and heat treated. After finishing, the surface is nitrided. The threads of the double shouldered high-torsion joint adopt a kind of internal and external composite shoulder structure design, and are all processed by precision CNC lathes. The tight pitch of the threads is strictly guaranteed. Compared with threads of the same specification, it has higher tensile strength and torsional yield strength. All threads are equipped with thread gauges that meet with international standards, so the performance of our drill pipes is stable and reliable.

We can produce HDD friction welding drill pipes of different materials, lengths, diameters, and wall thicknesses, and we can also customize drill pipes according to the materials, lengths, wall thicknesses, and threads required by customers.

O.D		Grade	Welding Type	Thread Type	Drill pipe Wall Thickness		Joint O.D		Length	Torque	Min.Bend	Right Angle Bend Length	Max.Bending Angle	Max.Incline Angle
in	mm				in	mm	in	mm	mm	Nm	m	m	"	%
1.98	50	S135	Friction welding	WLD50	0.256	6.5	2.1	53	2000	3000	32	50	3.6	6
1.98	50	S135	Friction welding	WLD50	0.256	6.5	2.1	53	2500	3000	29	46	4.9	8
1.98	50	S135	Friction welding	WLD50	0.256	6.5	2.1	53	3000	3000	29	46	5.9	10
2.375	60	S135	Friction welding	WLD60	0.279	7.1	2.68	68	2000	6500	33	52	3.5	6
2.375	60	S135	Friction welding	WLD60	0.279	7.1	2.68	68	2500	6500	33	52	4.3	7
2.375	60	S135	Friction welding	WLD60	0.279	7.1	2.68	68	3000	6500	33	52	5.2	9
2.875	73	S135	Friction welding	NC23	0.315	8	3.21	82	3000	13000	45	71	3.8	6
2.875	73	S135	Friction welding	NC23	0.315	8	3.21	82	4000	13000	45	71	5.1	9
3	76	S135	Friction welding	NC26	0.355	9	3.45	88	3000	16000	45	71	3.8	6
3	76	S135	Friction welding	NC26	0.355	9	3.45	88	4500	16000	45	71	5.7	10
3.25	83	S135	Friction welding	WLD83	0.355	9	3.63	92	3000	18000	65	102	2.6	4
3.25	83	S135	Friction welding	WLD83	0.355	9	3.63	92	4500	18000	65	102	4.0	7
3.5	89	S135	Friction welding	NC31	0.368	9.35	4.15	105	3000	24000	85	133	2.0	3
3.5	89	S135	Friction welding	NC31	0.368	9.35	4.15	105	4500	24000	80	126	3.2	5
3.5	89	S135	Friction welding	NC31	0.368	9.19	4.15	105	6000	24000	80	126	4.3	7
4	102	S135	Friction welding	NC38	0.362	9.19	5	127	6000	48000	98	154	3.5	6
4.5	114	S135	Friction welding	NC38	0.362	9.19	5	127	6000	64000	110	173	3.1	5
4.5	114	S135	Friction welding	NC46	0.362	9.19	6.18	157	6000	64000	110	173	3.1	5

DTH DRILL PIPE/FLAT JOINT DRILL PIPE

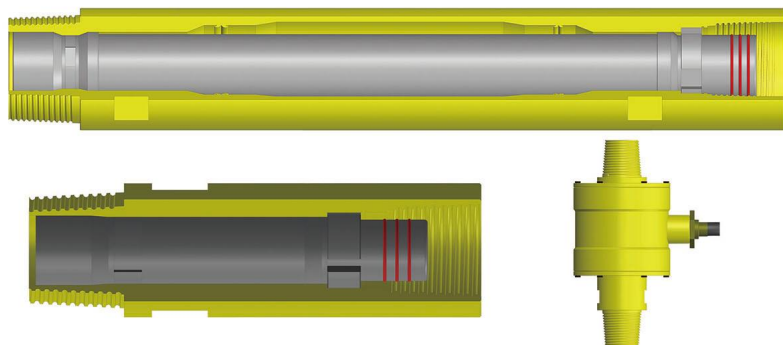


DTH drill pipe is mainly used for rock crushing, anchoring drilling, geothermal air conditioning hole, water well drilling, etc. Materials are purchased from well-known large enterprise of domestic. The ends of pipe are IU processed, then tempered after friction welding. Drill pipe joints are quenched and tempered after rough machining, and surface nitriding treatment after finishing, that makes the joints more wear-resistant and easy to disassemble without thread gluing, breaking and joint expansion and cracking. Precision imported CNC lathes and customized forming cutters are used for thread processing. All threads are equipped with thread gauges that meet international standards. All process can extend service life of drill pipe and make the quality stable and reliable.

O.D		Thread Type	Steel Grade	Wall Thickness	Upsetting Type	Pipe Length
inch	mm			mm		mm
3	76	2-3/8" REG	R780、G105、S135	4-8	IU	1000--6000
3 1/2	89	2 3/8" IF、NC26、BECO	R780、G105、S135	4-15	IU	1000--9000
4	102	2 7/8" IF、NC31、BECO	R780、G105、S135	8-15	IU	1000--9000
4 1/4	108	2 7/8" IF、NC31、BECO	R780、G105、S135	8-15	IU	1000--9000
4 1/2	114	NC35、BECO	R780、G105、S135	6-20	IU	1500--9000
5	127	3 1/2" IF、NC38、BECO	R780、G105、S135	9-20	IU	1500--9000
5.5	140	4" IF、NC46、BECO	R780、G105、S135	8-20	IU	1500--9000

We can produce DTH drill pipes of different materials, lengths, diameters, and wall thicknesses, and we can also customize drill pipes according to the materials, lengths, wall thicknesses, and threads required by customers.

REVERSE CIRCULATION DRILL PIPE



Reverse circulation (RC) drilling represents a fast,economical and efficient way. The RC drilling method will reduce dramatically both overall drilling costs and impact on the environment. It not only prevents cross contamination but also enables a large number of sample bags in a short amount of time.

Weilida reverse circulation drill pipe is made of high-strength alloy steel and wear-resistant inner tube produced by well-known domestic steel mills.Both ends of the pipe body adopt the internal thickening process,then tempered after friction welding.Drill pipe joints are quenched and tempered after rough machining,and surface phosphating and nitriding treatment after finishing,that makes the joints more wear-resistant and easy to disassemble without thread gluing,breaking and joint expansion and cracking.All threads are processed by precision CNC lathes with customized forming cutters, and all threads are equipped with thread gauges that meet international standards. Therefore, the quality of the drill pipes produced is stable and reliable, and the service life is greatly extended.



PARAMETERS

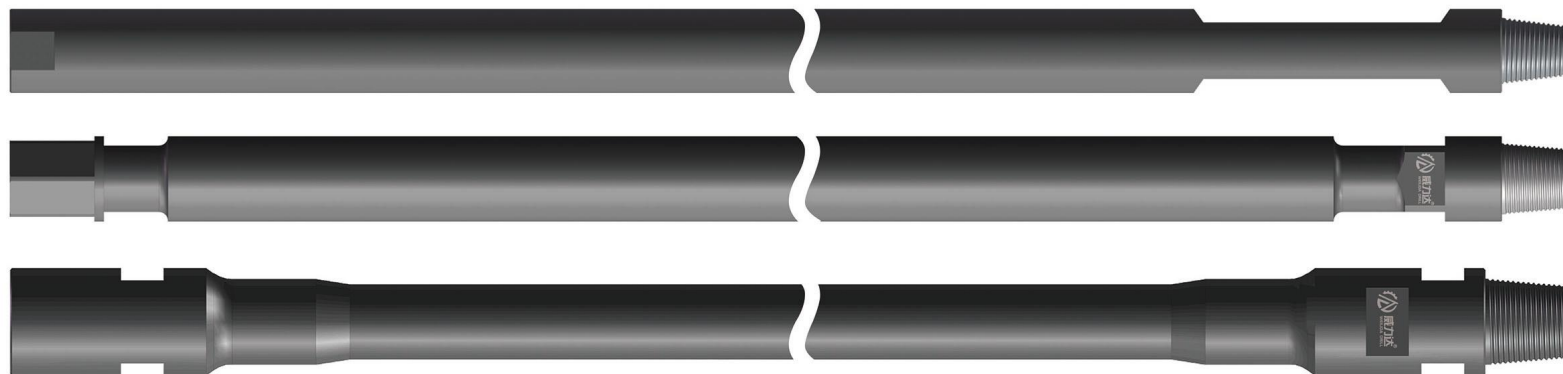
O D		Thickness	Length	Thread
inch	mm	mm	mm	Remet/Metzke/FH/IF
3 1/2	89	6--10	1500--9500	Remet/Metzke/FH/IF
4	102	6--10	1500--9500	Remet/Metzke/FH/IF
4 1/4	108	6--10	1500--9500	Remet/Metzke/FH/IF
4 1/2	114	8--10	1500--9500	Remet/Metzke/FH/IF
5	127	8--10	1500--9500	Remet/Metzke/FH/IF
5 1/2	140	8--10	1500--9500	Remet/Metzke/FH/IF
7	178	8--10	1500--9500	Remet/Metzke/FH/IF

We can produce drill pipes of different materials, lengths, diameters, and wall thicknesses, and we can also customize drill pipes according to the materials, lengths, wall thicknesses, and threads required by customers.

ENGINEERING CASE



WATER WELL DRILL PIPE



Friction Welding Water Well Drill Pipe is mainly used in deep drilling of geothermal energy, water well drilling, etc. The pipe body is made of materials produced by well-known steel companies in China. Both ends of the pipe body are adopted EU and IU processes, and are tempered after friction welding. The drill pipe joint is subjected to quenching and tempering heat treatment after rough machining, and surface phosphating and nitriding treatment after fine machining of threads, which effectively eliminates the probability of failure such as thread gluing, breaking and joint expansion and cracking. It is more wear-resistant and easy to disassemble.

O.D		Normal Weight	Thickness	Upsetting Type	Grade	Thread Type	Joint O.D	Pin Thread Internal Diameter
inch	mm	lb/ft	mm				mm	mm
2-3/8	60.32	6.65	7.11	IEU	E,X,G,S	NC26	85.7	44.5
2-7/8	73.02	10.40	9.19	IEU	E,X,G,S	NC31	104.8	50.8
2-7/8	73.02	10.40	9.19	IEU	E,X,G,S	NC31	111.1	41.3
3-1/2	88.90	13.30	9.35	IEU	E,X,G,S	NC38	120.7	68.3
3-1/2	88.90	13.30	9.35	IEU	E,X,G,S	NC38	127.0	65.1
4	101.60	14.00	8.38	IEU	E,X,G,S	NC40	133.4	71.4
4	101.60	14.00	8.38	IEU	E,X,G,S	NC46	152.4	82.6
4-1/2	114.30	16.60	8.56	IEU	E,X,G,S	NC50	168.3	95.3
4-1/2	114.30	16.60	8.56	IEU	E,X,G,S	NC46	158.8	76.2
5	127.00	19.50	9.19	IEU	E,X,G,S	NC50	168.3	95.3
5	127.00	19.50	9.19	IEU	E,X,G,S	5 (1/2) FH	177.8	95.3

OIL DRILL PIPE



Our company can produce various of oil drill pipes, mainly including API 5DP drill pipe and SY oil standard drill pipe. We can match the same grade of drill pipe joints according to customer's requirements and meets API SPEC 7-1 standard. The advanced friction welding equipments can adjust the welding parameters to the best position to ensure the quality of the welding strip; the heat treatment process of internal and external simultaneous cooling, that make the mechanical properties more uniform and stable. Our equipments can automatically measure the length weighing automatic spray mark recording application to ensure product traceability. Advanced drill pipe upsetting and heat treatment production line are also equipped. We adopt CNC full-length heating furnace, quenching machine and tempering furnace. Advanced heat treatment processes and precise temperature control ensure the mechanical properties of the pipe. The hydraulic pressure of the pipe body ensures the straightness of the pipe body and the coaxiality of the pipe body. We can not only produce oil drill pipes of different materials, lengths, diameters, and wall thicknesses, but we can also customize oil drill pipes according to the requirements of customers.

O.D	Normal Weight	Thickness	Upsetting Type	Grade	Thread Model	Joint External Diameter	Pin Thread Internal Diameter	Pin Thread Length	Box Thread Length	Elevator Diameter
inch	mm	lb/ft	mm			mm	mm	mm	mm	mm
2-3/8	60.32	6.65	7.11	EU	E	NC26	85.7	44.5	177.80	203.20
2-3/8	60.32	6.65	7.11	EU	X,G	NC26	85.7	44.5	177.80	203.20
2-7/8	73.02	10.40	9.19	EU	E	NC31	104.8	54.0	177.80	228.60
2-7/8	73.02	10.40	9.19	EU	X,G	NC31	104.8	50.8	177.80	228.60
2-7/8	73.02	10.40	9.19	EU	S	NC31	111.1	41.3	177.80	228.60
3-1/2	88.90	9.50	6.45	EU	E	NC38	120.7	68.3	203.20	266.70
3-1/2	88.90	13.30	9.35	EU	E	NC38	120.7	68.3	203.20	266.70
3-1/2	88.90	13.30	9.35	EU	X	NC38	127.0	65.1	203.20	266.70
3-1/2	88.90	13.30	9.35	EU	G	NC38	127.0	61.9	203.20	266.70
3-1/2	88.90	13.30	9.35	EU	S	NC38	127.0	54.0	203.20	266.70
3-1/2	88.90	13.50	11.40	EU	E	NC38	127.0	65.1	203.20	266.70
3-1/2	88.90	13.50	11.40	EU	X	NC38	127.0	61.9	203.20	266.70
3-1/2	88.90	13.50	11.40	EU	G	NC38	127.0	54.0	203.20	266.70
3-1/2	88.90	13.50	11.40	EU	S	NC40	139.7	57.2	203.20	266.70
4	101.60	14.00	8.38	IU	E	NC40	133.4	71.4	177.80	254.00
4	101.60	14.00	8.38	IU	S	NC40	133.4	68.3	177.80	254.00
4	101.60	14.00	8.38	IU	G	NC40	139.7	61.9	177.80	254.00
4	101.60	14.00	8.38	IU	D	NC40	139.7	50.8	177.80	254.00
4	101.60	14.00	8.38	EU	E	NC46	152.4	82.6	177.80	254.00
4	101.60	14.00	8.38	EU	X,G	NC46	152.4	82.6	177.80	254.00
4	101.60	14.00	8.38	EU	S	NC46	152.4	76.2	177.80	254.00
4-1/2	114.30	13.75	6.88	IU	E	NC46	152.4	85.7	177.80	254.00
4-1/2	114.30	13.75	6.88	EU	E	NC50	168.3	95.3	177.80	254.00
4-1/2	114.30	16.60	8.56	EU	E	NC50	168.3	95.3	177.80	254.00
4-1/2	114.30	16.60	8.56	EU	X,G	NC50	168.3	95.3	177.80	254.00
4-1/2	114.30	16.60	8.56	EU	S	NC50	168.3	88.9	177.80	254.00
4-1/2	114.30	20.00	10.92	EU	E	NC50	168.3	92.1	177.80	254.00
4-1/2	114.30	20.00	10.92	EU	X,G	NC50	168.3	88.9	177.80	254.00
4-1/2	114.30	20.00	10.92	EU	S	NC50	168.3	76.2	177.80	254.00
4-1/2	114.30	16.60	8.56	IEU	E	NC46	168.3	82.6	177.80	254.00
4-1/2	114.30	16.60	8.56	IEU	X,G	NC46	158.8	76.2	177.80	254.00
4-1/2	114.30	16.60	8.56	IEU	S	NC46	158.8	69.9	177.80	254.00
4-1/2	114.30	20.00	10.92	IEU	E	NC46	158.8	76.2	177.80	254.00
4-1/2	114.30	20.00	10.92	IEU	X	NC46	158.8	69.9	177.80	254.00
4-1/2	114.30	20.00	10.92	IEU	G	NC46	158.8	63.5	177.80	254.00
4-1/2	114.30	20.00	10.92	IEU	S	NC46	158.8	57.2	177.80	254.00
5	127.00	19.50	9.19	IEU	E	NC50	168.3	95.3	177.80	254.00
5	127.00	19.50	9.19	IEU	X	NC50	168.3	88.9	177.80	254.00
5	127.00	19.50	9.19	IEU	G	NC50	168.3	82.6	177.80	254.00
5	127.00	19.50	9.19	IEU	S	NC50	168.3	69.9	177.80	254.00
5	127.00	19.50	9.19	IEU	E	5(1/2)FH	177.8	95.3	203.20	254.00
5	127.00	19.50	9.19	IEU	X,G	5(1/2)FH	177.8	95.3	203.20	254.00
5	127.00	19.50	9.19	IEU	S	5(1/2)FH	184.2	88.9	203.20	254.00
5	127.00	25.60	12.70	IEU	E	NC50	168.3	88.9	177.80	254.00
5	127.00	25.60	12.70	IEU	X	NC50	138.6	76.2	177.80	254.00
5	127.00	25.60	12.70	IEU	G	NC50	168.3	69.9	177.80	254.00
5	127.00	25.60	12.70	IEU	E	5(1/2)FH	177.8	88.9	203.20	254.00
5	127.00	25.60	12.70	IEU	X	5(1/2)FH	177.8	88.9	203.20	254.00
5	127.00	25.60	12.70	IEU	G	5(1/2)FH	184.2	88.9	203.20	254.00
5	127.00	25.60	12.70	IEU	S	5(1/2)FH	184.2	82.6	203.20	254.00

FINER THREAD DRILL PIPE



This kind of pipe is used for geological prospecting, water well drilling, geothermal well drilling project, etc.

The finer thread drill pipe is a kind of drilling tool connected to lock joint, which is used to transmit torque of drill rig to the drill bit in bottom and transmit drilling fluid. The rod material is selected from Shanghai Baosteel STM-R780 (42MnMo7), which is not easy to be bent or broken, and the performance is stable and reliable. The rod end is heated by medium frequency, hydraulically upsetting, and 12 hours of buried tempering to ensure the compactness of the drill pipe and improve the mechanical performance. All of them are made of precision imported CNC lathes, and threaded by customized forming cutter, which ensures the tightness of the connection with the tool joint.



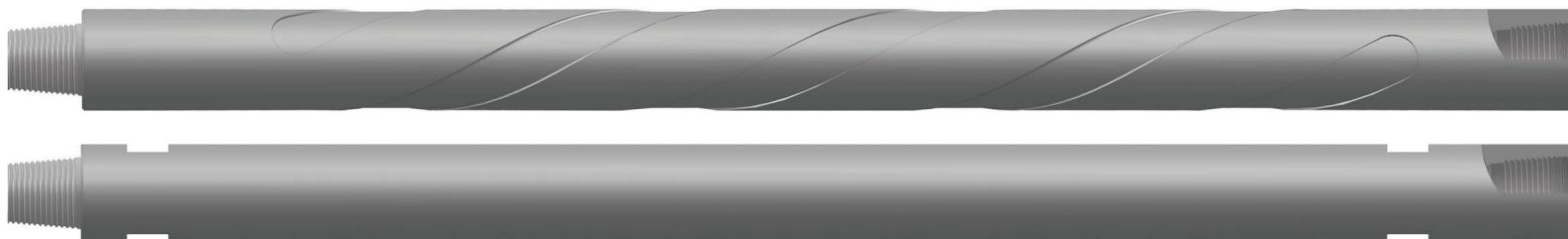
The lock joint/drill pipe joint is made of 35CrMo or 42CrMo material. Quenching and tempering heat treatment after rough machining, surface phosphating and nitriding treatment after finishing threads, which can effectively eliminate the probability of failure such as thread gluing and breaking, joint expansion and cracking, making it more wear resistant and easy to disassemble. Precision CNC lathes and customized forming cutters are used for thread processing, which can not only ensure the tight spacing of the drill pipe and joint threads, but also ensure the precision and interchangeability of the drill pipe and lock joint/drill pipe joint.

External Diameter		Upsetting Type	Steel Grade	Pipe Wall Thickness	Normal Weight	Pipe Length	Thread Model	Joint Diameter
inch	mm			mm	Kg/m	mm		mm
1.6	42	EU	DZ50	6.5	5.7	1000-9000	1:16	57
			R780					
2	50	EU,IU	DZ50	6.5	7.1	1000-9000	1:16	65
			R780					
2.375	60	EU,IU	R780	7.1	9.4	1000-9000	NC26	75
			S135					
2.875	73	EU,IU	R780	8	12.9	1000-9000	NC31	95
			G105	9.19	14.5			
			S135					
3.5	89	EU,IU	R780	8	16	1000-9000	NC38	121
			G105	9.5	19			
			S135					
4	102	EU,IU	R780	6.5	15	1000-9000	NC40	133
			G105	8.38	19			
			S135					
4.5	114	EU,IU	R780	6.8	18	1000-9000	NC46	158
			G105	8.56	22			
			S135					
5	127	EU,IU	R780	9.19	27	1000-9000	NC50	168
			G105	12.7	36			
			S135					

External Diameter	Inside Diameter	Tool Joint Thread		Matching Drill Pipe	Joint Material
		Pitch	Taper		
mm	mm			mm	
57	22	6	1:5	42	40Cr
65	28	6	1:5	50	42CrMo
68	28	6	1:5	50	42CrMo
75	38	6	1:5	60	42CrMo
78	38	6	1:5	60	42CrMo
86	44.5	4	1:6	60	42CrMo
105	50.8	4	1:6	73	42CrMo
121	68	4	1:6	89	35CrMo
127	65	4	1:6	89	42CrMo
140	57	4	1:6	102	42CrMo
152	83	4	1:6	114	42CrMo
168	95	4	1:6	127	42CrMo
178	95	4	1:6	140	42CrMo

We can not only produce finer thread drill pipes of different materials, lengths, diameters, and wall thicknesses, but we can also customize drill pipes according to the requirements of customers.

DRILL COLLAR



The drill collar is an important part of the drill string. It is mainly used to apply drilling pressure to the drill bit, keep the drill pipe in a state of tension, reduce the vibration, swing, and beating of the drill bit, make the drill bit work smoothly, and control the angle of inclination of well.

Our company produces integral drill collars and spiral drill collars. The integral drill collar is a smooth thick-walled round tube with connecting threads processed on both ends. The spiral drill collar is machined with three right-hand spiral grooves on the outer cylindrical surface of the round drill collar to reduce the contact area with the well wall and effectively prevent pressure differential stuck. The drill collar complies with API Spec7-1 specifications and is made of 4145H. It has overall heat treatment, thread phosphate treatment, and good anti-sticking performance. It can also be customized and produced according to customer requirements.

THREAD CONNECTION	OUTER DIAMETER		INNER DIAMETER		LENGTH	CHAMFER DIAMETER	BLENDING RATION
	mm	In	mm	in	mm	mm	
NC23-31	79.4	3 1/8	31.8	1 1/4	9140	76.2	2.57:1
NC26-35(2-3/8IF)	88.9	3 1/2	38.1	1 1/2	9140	82.9	2.42:1
NC31-41(2-7/8IF)	104.8	4 1/8	50.8	2	9150	100.4	2.43:1
NC35-47	120.7	4 3/4	50.8	2	9150	114.7	2.58:1
NC38-50(3-1/2IF)	127	5	57.2	2 1/4	9150	121	2.38:1
NC44-60	152.4	6	57.2	2 1/4	9150/9450	144.5	2.49:1
NC44-60	152.4	6	71.4	2 13/16	9150/9450	144.5	2.84:1
NC44-62	158.8	6 1/4	57.2	2 1/4	9150/9450	149.2	2.91:1
NC46-62(4IF)	158.8	6 1/4	71.4	2 13/16	9150/9450	150	2.63:1
NC46-65(4IF)	165.1	6 1/2	57.2	2 1/4	9150/9450	154.8	2.76:1
NC46-65(4IF)	165.1	6 1/2	71.4	2 13/16	9150/9450	154.8	3.05:1
NC46-67(4IF)	171.4	6 3/4	57.2	2 1/4	9150/9450	159.5	3.18:1
NC50-67(4-1/2IF)	171.4	6 3/4	71.4	2 13/16	9150/9450	159.5	2.37:1
NC50-70(4-1/2IF)	177.8	7	57.2	2 1/4	9150/9450	164.7	2.54:1
NC50-70(4-1/2IF)	177.8	7	71.4	2 13/16	9150/9450	164.7	2.73:1
NC50-72(4-1/2IF)	184.2	7 1/4	71.4	2 13/16	9150/9450	169.5	3.12:1
NC56-77	196.8	7 3/4	71.4	2 13/16	9150/9450	185.3	2.70:1
NC56-80	203.2	8	71.4	2 13/16	9150/9450	190.1	3.02:1
6-5/8REG	209.6	8 1/4	71.4	2 13/16	9150/9450	195.7	2.93:1
NC61-90	228.6	9	71.4	2 13/16	9150/9450	212.7	3.17:1
7-5/8REG	241.3	9 1/2	76.2	3	9150/9450	223.8	2.81:1
NC70-97	247.6	9 3/4	76.2	3	9150/9450	232.6	2.57:1
NC70-100	254	10	76.2	3	9150/9450	237.3	2.81:1
8 5/8 REG	279.4	11	76.2	3	9150/9450	266.7	2.84:1

TRANSITION JOINT/CONVERSION JOINT



The conversion joint is used in rock drilling, anchor drilling, oil drilling, and geological water well drilling operations. It is used for the conversion connection of drill string components. It is one of the main tools for connecting the upper drilling tool and the lower drilling tool.

Our company can provide various forms of conversion joints. The conversion joint is made of 35CrMo, 42CrMo, and 4137H materials. Quenching and tempering heat treatment after rough machining, and surface phosphating and nitriding treatment after fine machining of threads, which can effectively eliminate the probability of failure such as thread gluing and breaking, joint expansion and cracking, making it more wear-resistant and easy to disassemble.

Precision CNC lathes and customized forming cutters are used for thread processing, which can not only ensure the tight spacing of the conversion joints, but also ensure the precision and interchangeability of the conversion joints. We can not only produce conversion joints of different materials, lengths, diameters, and wall thicknesses, also we can customize conversion joints according to the requirements of customers.



Generally coupling/adaptor sub are API standard thread

full-hole(FH) style connection threads

3 1/2"FH	4"FH	4 1/2"FH	5 1/2"FH	6 5/8"FH	
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internal-flush(IF) style connection threads

2 3/8"IF	2 7/8"E	3 1/2"F	4"IF	4 1/2"IF	5 1/2" IF
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regular(REG) style connection threads

2 3/8"REG	2 7/8"REG	3 1/2"REG	4 1/2"REG	5 1/2" REG	6 5/8"REG
7 5/8"REG	8 5/8"REG				

number (NC) style connection threads

NC16	NC23	NC26	NC31	NC35	NC38
NC40	NC44	NC46	NC50	NC56	NC61
NC70	NC77				

PIPE WRENCHING DEVICE

The NY-3A WLD-5T hydraulic pipe wrenching device is mainly matched with the hydraulic vertical shaft drilling rig, which replaces the manpower to unload the drill pipe and the drilling tool, so that the process of unloading the drill pipe is mechanized and automated, and can reduce the labor intensity of the drilling operation and improve production efficiency. This device is suitable for geological core drilling within 2500 meters, and the need for screw and unscrew the drill pipe of $\Phi 42$, $\Phi 50$, $\Phi 60$, $\Phi 71$, $\Phi 73$, $\Phi 89$ while hydrological drilling.

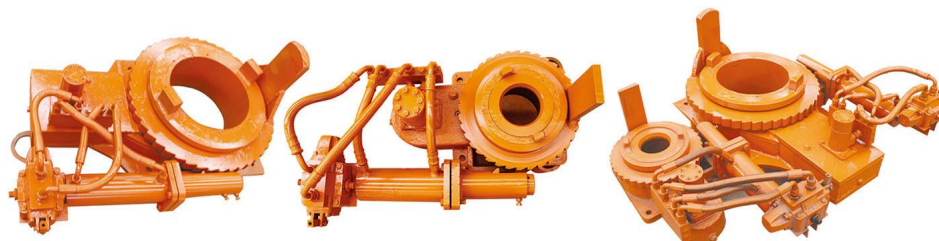
MAIN FEATURE

The hydraulic motor drives the gear transmission mechanism to realize the screwing and unscrewing, and the screwing speed is fast.

The high pressure pushes the piston rod and the pawl, and pushes the ratchet to rotate, so that the first thread is unloaded, the torque of unscrewing the thread get larger.

Simple in structure, small in volume, and flexible operation makes the device accurate and reliable.

This device greatly improves work efficiency and work cost.



WLD-5T

NY-3A

PARAMETER

	NY-3A	WLD-5T	Unit
Maximum torque (oil pressure 120kgf/cm ²)	60	100	kgf/cm ²
Working torque (oil pressure 80kgf/cm ²)	40	80	kgf/cm ²
Working speed	85	85	r/min
Cylinder piston max.thrust	6042	8040	kgf
Cylinder piston working thrust	3625	4039	kgf
Cylinder piston stroke	130	150	mm
Hole inner diameter	175	330	mm
Screw machine weight	180	360	kg

USAGE SCENARIOS



CORE TUBE/CASING

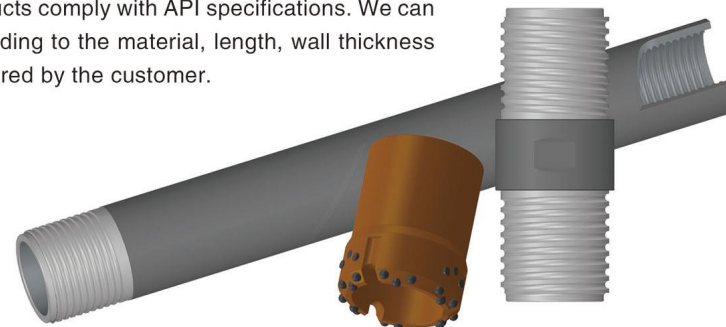


Specification	Main Dimensions		Casing connection main dimensions		Material
	Outer Diameter	Wall Thickness	Outer Diameter	Inner Diameter	
Φ73	Φ73	4	Φ73	Φ62.5	DZ40-DZ55
Φ89	Φ89	4.5	Φ89	Φ78.5	DZ40-DZ55
Φ108	Φ108	4.5	Φ108	Φ97.5	DZ40-DZ55
Φ127	Φ127	4.5	Φ127	Φ116.5	DZ40-DZ55
Φ146	Φ146	5	Φ146	Φ135.5	DZ40-DZ55
Φ168	Φ168	6	Φ168	Φ153	DZ40-DZ55

CASING

We can manufacture both Pin-Box casing and Box-Box casing with Pin-Pin nipple connection.

We also supply various sizes of inner rod, saver subs and casing. All products comply with API specifications. We can customize according to the material, length, wall thickness and thread required by the customer.



CASING OD mm	CASING ID mm	PIN JOINT ID mm	LENGTH mm	CONNECTION TYPE
133	115	106	1500	Pin-Box Left Hand
133	115	106	2000	Pin-Box Left Hand
146	128	122.5	1500	Pin-Box Left Hand
146	128	122.5	2000	Pin-Box Left Hand

CASING OD mm	CASING ID mm	PIN JOINT ID mm	LENGTH mm	CONNECTION TYPE
102	82	72	1500	Box-Box Left Hand
102	82	72	2000	Box-Box Left Hand
114	92	84	1500	Box-Box Left Hand
114	92	84	2000	Box-Box Left Hand
136	114	105	1500	Box-Box Left Hand
136	114	105	2000	Box-Box Left Hand
146	126	115	1500	Box-Box Left Hand
146	126	115	2000	Box-Box Left Hand
168	146	136	1500	Box-Box Left Hand
168	146	136	2000	Box-Box Left Hand

EXCHANGE AND COOPERATION



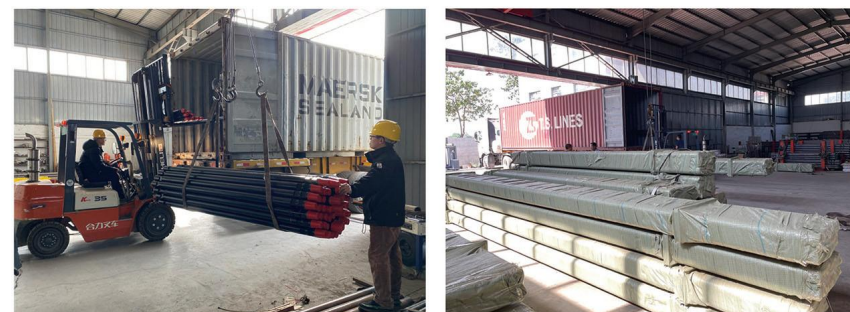
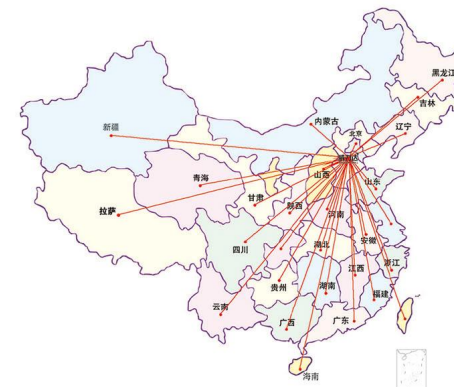
Weilida is willing to communicate extensively, integrate deeply, go hand in hand, and achieve win-win cooperation with friends in the same industry.

With sincere cooperation, reliable quality and excellent service, we will develop together with domestic and foreign customers and contribute to global energy construction.

REAL SHOTS OF THE EXHIBITION



SALES NETWORK



ENGINEERING CASE



1800m oil and gas drilling in Xinjiang Ili Kazakh Autonomous Prefecture



CNNC uranium mine exploration 900-1300m



1200-meter deep hole prospecting in Saudi Arabia



Blasting drilling in Ordos Coal Mine, Inner Mongolia



500 meters natural gas pipeline project in Weiyang Xi'an



1500m wire-line drill pipe exported to Angola



2000m water well drilling by Laos SINO-AGRI INTERNATIONAL



260m DTH drilling rig for irrigation in Philippine



Sinopec overseas oil and gas uses our products



Nigeria Unified mining uses our products