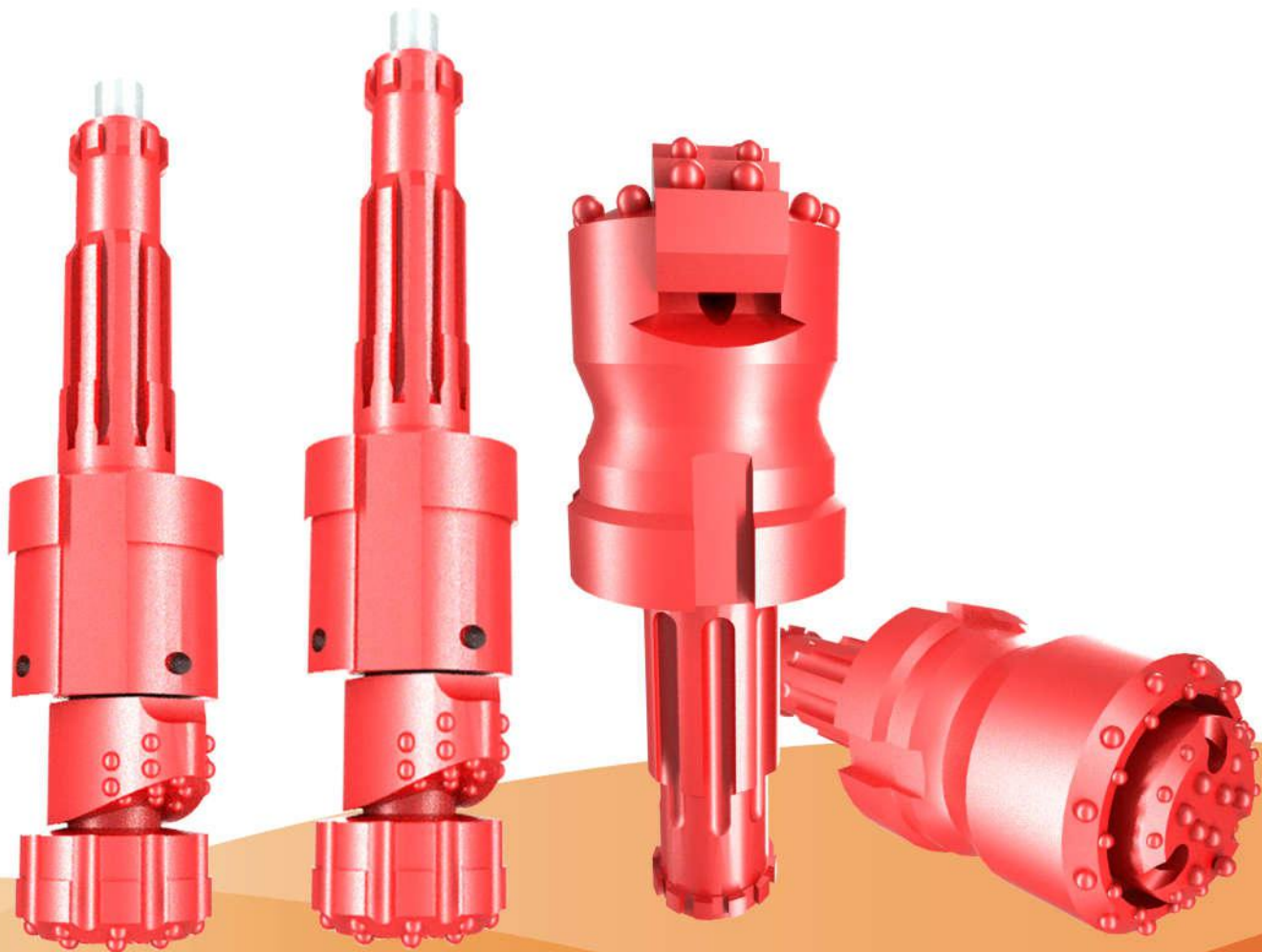




Overburden Drilling System

MAXDRILL ROCK TOOLS CO.,LTD



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Guide of Product Code

Eccentric System (i.e. MDEC108/7)

MD	EC	108	7
Maxdrill	Eccentric	O.D. Of Casing Tube	Thickness

Casing Tube (i.e. M108/7-15-S-01)

M	108	7	15	S	01
Maxdrill	O.D. Of Casing Tube	Thickness	Length	Thread: S-Square Thread C-Circular Thread	01-Casing Tube 02-Tool Joint

Casing Shoe (i.e. MST 114/6.5-S)

M	S	T	114	6.5	S
Maxdrill	Shoe	Type of Connection T-Threaded W-Welding	O.D. Of Casing Tube	Thickness	Thread S-Square Thread C-Circular Thread

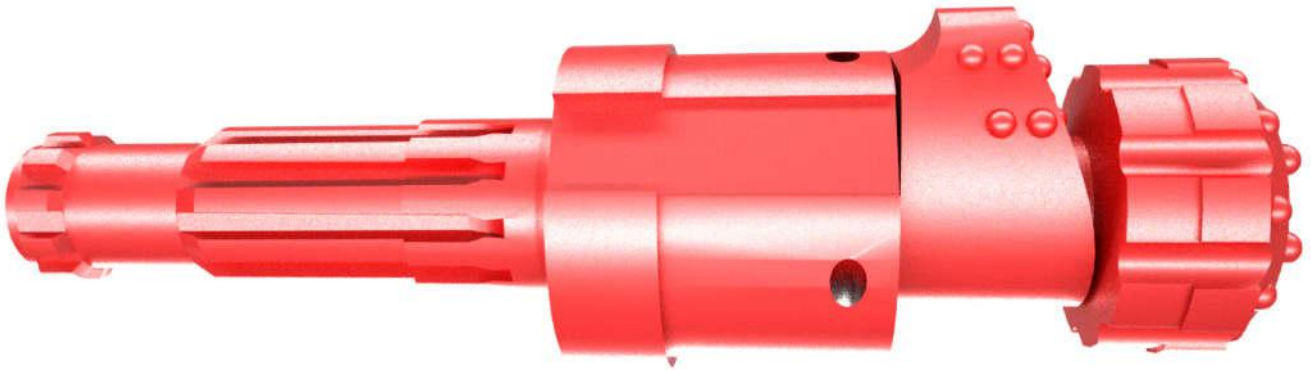
Drill Pipe (i.e. M76/6.5-30-01)

M	DW	76	6.5	30	01/02/03/04/05/06/07/08
Maxdrill	Double Wall Drill Pipe	Max. O.D. of Drill Pipe	Thickness	Length	Thread : 01-API 2 3/8 REG 02-API 3 1/2 REG 03-API 4 1/2 REG 04-NC26 05-NC31 06-NC35 07-NC38 08-NC50

Eccentric Casing System



With Three Pieces



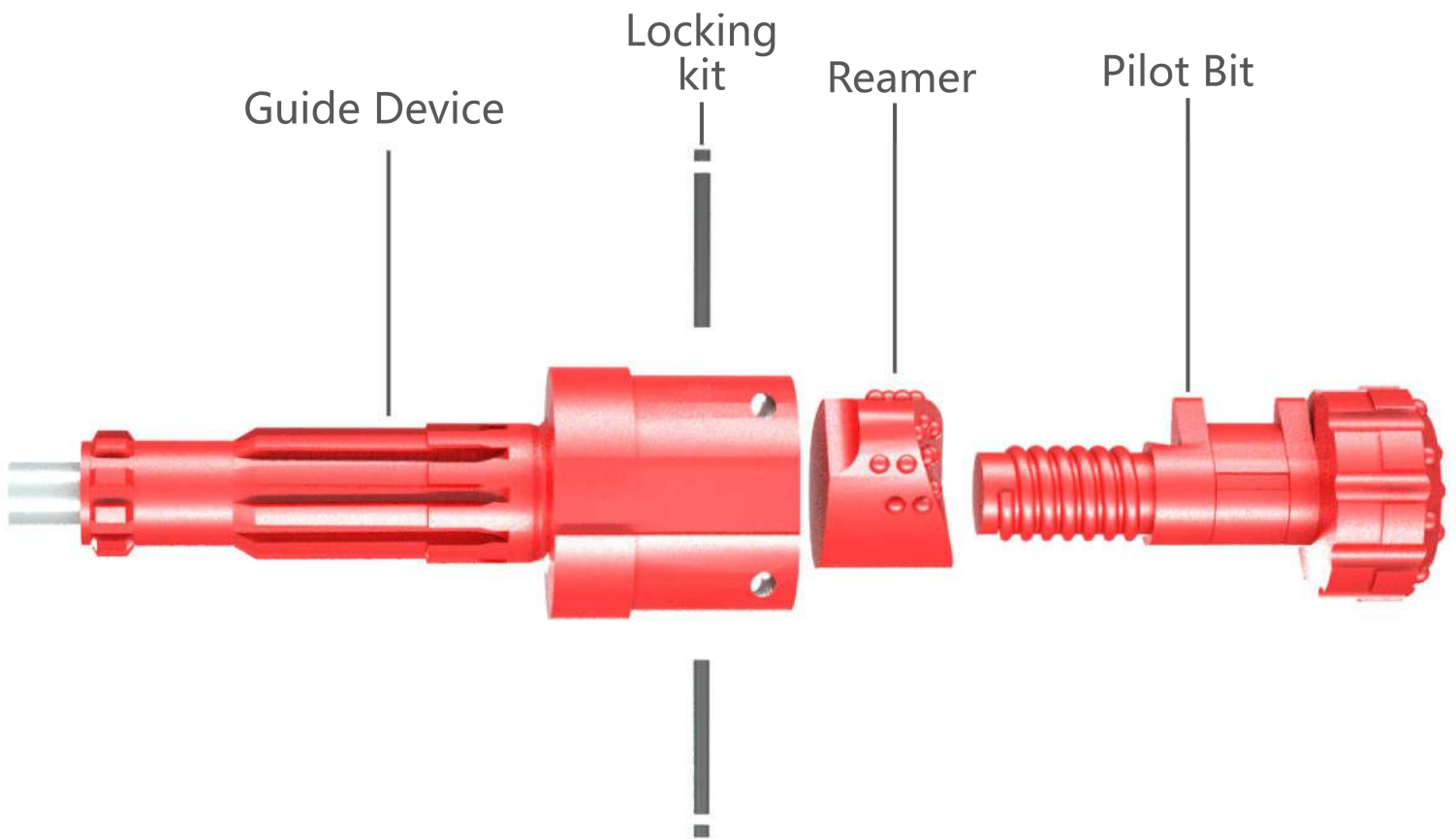
Drilling through formations with loose, unconsolidated material always comes with problems such as the bore hole caving in or collapsing. How to avoid these problems?

With years of field practice and research, Maxdrill has developed its Eccentric casing system applicable for strata with silt, sand or small-sized pebbles. With its simple structure, easy operation and reliable performance, this system can advance the casing easily for depth within 30 meters, and it is retrievable with long service life.

Applicable Overburden Formations

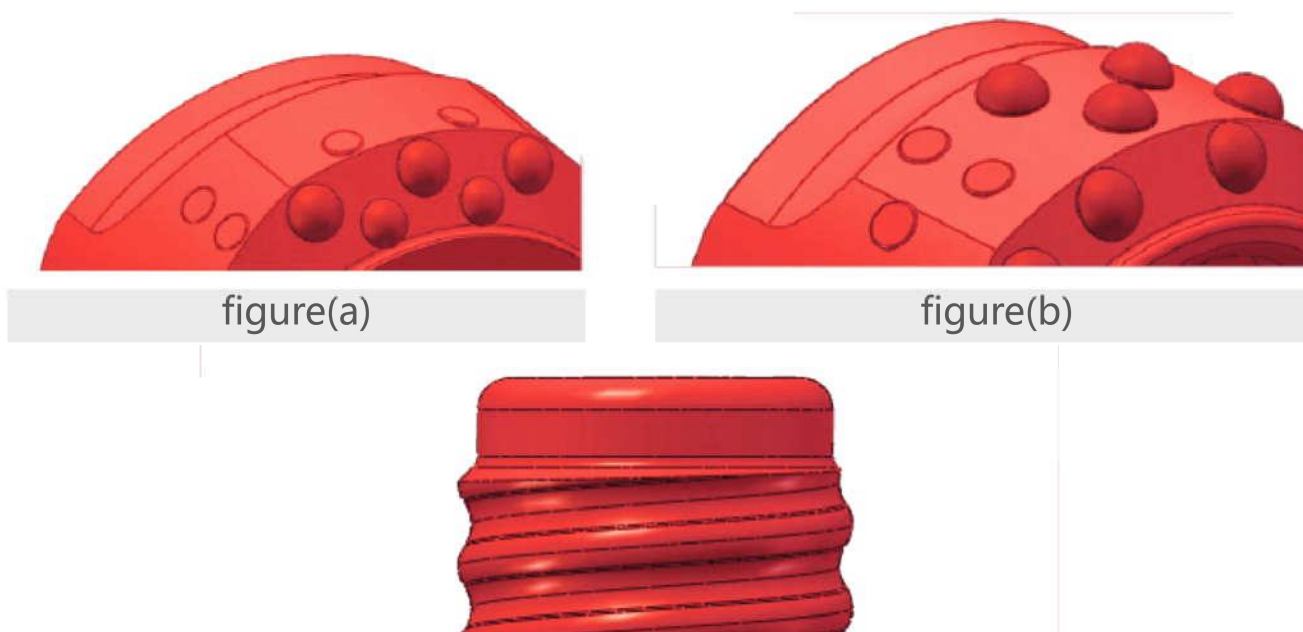
Land surface covered with loose, unconsolidated material such as soil, clay, silt, sand, gravel and boulders.

Structure of the Eccentric(ODEX) Casing Systems



Structure Features

The structure of the reamer is improved from (a) to (b), in order to strengthen the wearing resistance on the back, and extend the service life of the whole reamer.



Deformation concession at the thread end of the pilot bit for easy disassembly.

Operation Procedure



When drilling starts, the reamer opens.

When the drilling is finished, reverse the rotation to close the reamer.

Keep the casing tube left in the hole, or pull out and pour in grout sealing material.

Use conventional drilling tools to continue drilling.

Application Range



Water Well Drilling

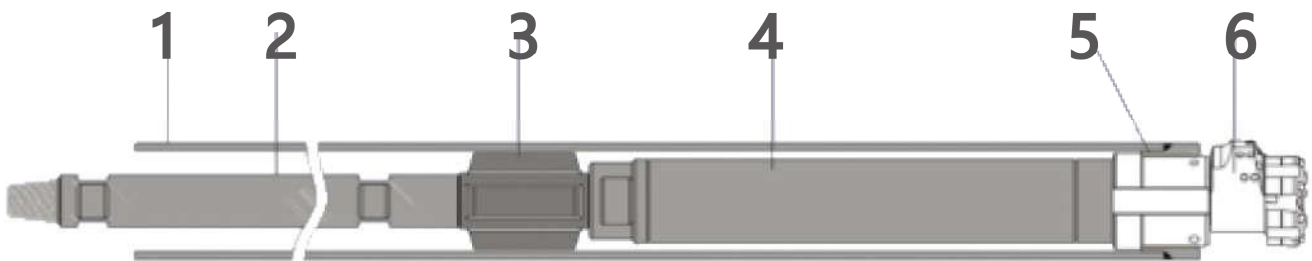
Eccentric system is the main drilling tool in water well projects, which can keep drilling the hole and protecting it from caving in at the same time, and it can significantly reduce the drilling time when drilling through the overburden.



Micro Piling

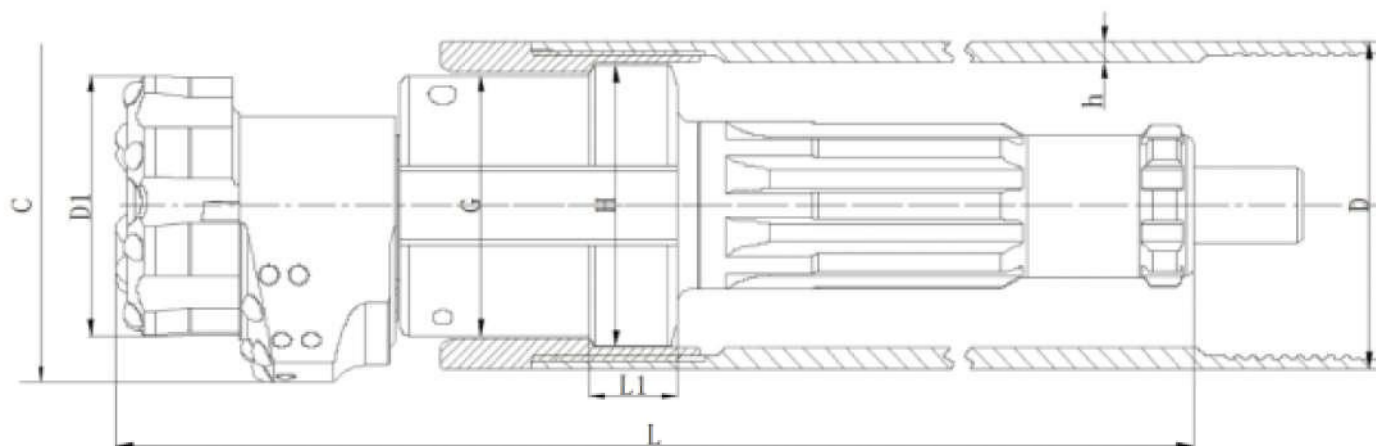
In soil, clay, and sand rock formations, eccentric system is the most economic and fastest in protecting the hole from collapsing with permanent or temporary casing tubes.

Related Parts List



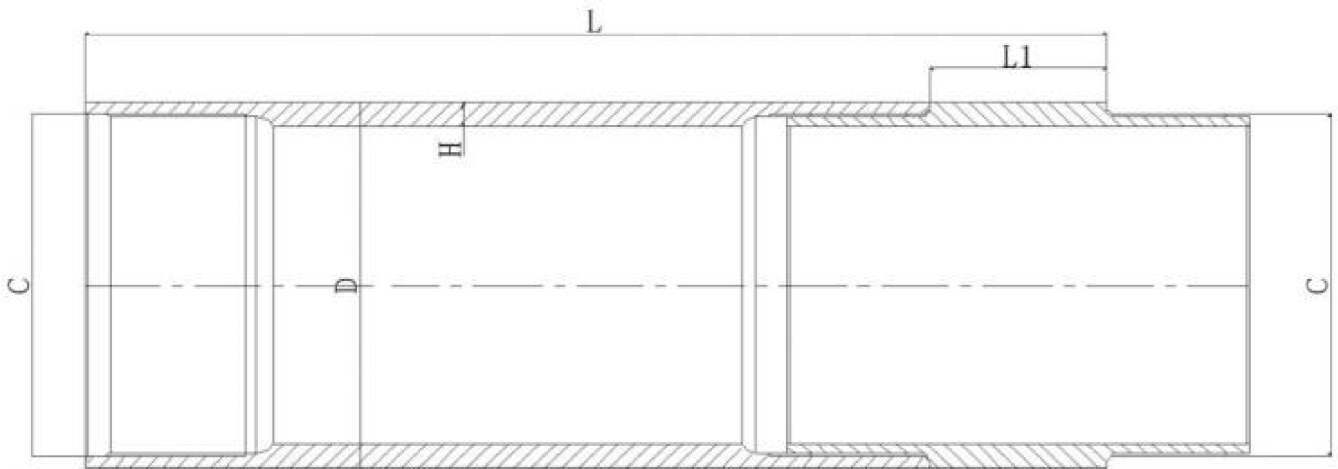
No	Items	Description
1	Casing Tube	a. Casing tube connected by left-hand threaded. b. Casing tube connected by welding
2	Drill Pipe	Thread: API(REG/IF)/NC
3	Stabilizer	Thread of stabilizer is with drilling rod
4	Hammer	Thread: API REG
5	Casing shoe	a. Thread casing shoe, left hand b. Welded casing shoe
6	Eccentric system	Regard the specification forms as below

Eccentric Casing System



Part No.	D		h	H	C		G	Hammer type	Weight (Kg)
	O.D of casing tube (mm)	I.D of casing tube (mm)	Wall thickness of casing (mm)	Guide device max diameter (mm)	Reamed Dia. (mm)	Min.I.D of casing shoe (mm)	O.D of normal bit (mm)		
MDEC108/7	108	94	7	92	117	86	85	COP34/DHD3.5	11.6/12.2
MDEC114/6.5	114	101	6.5	99	125	92	90	COP34/DHD3.5	13.4/14
MDEC127/9	127	109	9	107	138	100	98	COP34/DHD3.5	15.2/15.9
MDEC146/10	146	126	10	123.5	155	117	115	COP44/DHD340/SD4/QL40	25/27.9
MDEC168/10	168	148	10	146	180	138	136	COP54/DHD350/SD5/QL50	38/42
MDEC178/10	178	158	10	156	192	147	145	COP54/DHD350/SD5/QL50	44.1
MDEC183/10	183	163	10	161	196	153	151	COP54/DHD350/SD5/QL50	48
								COP64/DHD360/SD6/QL60	56
MDEC194/10	194	174	10	172	206	162	160	COP64/DHD360/SD6/QL60	61.7
MDEC219/10	219	199	10	196	234	187	185	COP64/DHD360/SD6/QL60	75.1
MDEC245/10	245	225	10	222	263	210	208	COP84/DHD380/SD8/QL80	113.3
MDEC273/10	273	253	10	251	305	241	240	COP84/DHD380/SD8/QL80	137.2
MDEC325/12.5	325	300	12.5	298	350	282	280	DHD112/DHD380	209.5/225.5

Casing Tube



C: thread of the casing tube L: length of the casing tube L1: length of the tool joint
 D: O.D of the casing tube H: Thickness of the casing tube

Casing tube with tool joint

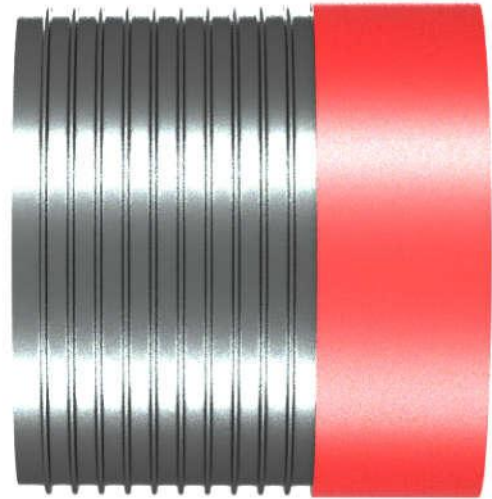
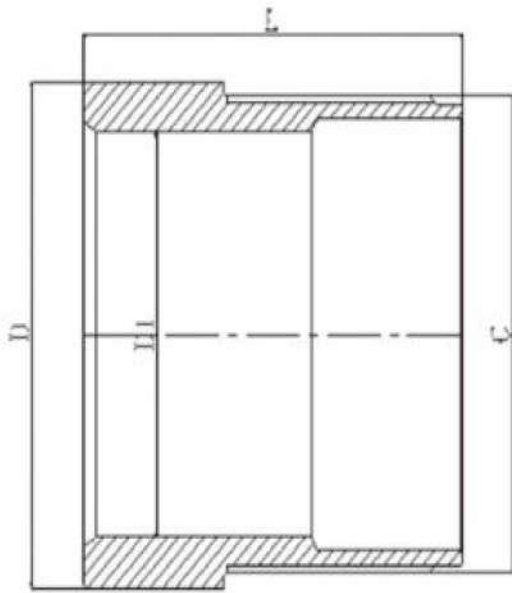
O.D. of casing shoe	Thickness (h)	Item	Thread(C)	Direction of rotation	Length (L)	Weight	Part No.
108	7	108 Casing Tube with tools joint	Square thread	Left	1500	27.1	M108/7-15-S
114	6.5	114Casing Tube with tools joint	Square thread	Left	1500	31	M114/6.5-15-S
127	9.5	127 Casing Tube with tools joint	Circular-arc Thread	Left	1500	43.7	M127/9.5-15-C
127	6.5	127 Casing Tube with tools joint	Circular-arc Thread	Left	1500	35	M127/6.5-15-C
146	10	146Casing tube with tools joint	Circular-arc Thread	Left	1500	53.7	M146/10-15-C
168	10	168Casing tube with tools joint	Circular-arc Thread	Left	1500	62.4	M168/10-15-C
178	9	178Casing tube with tools joint	Circular-arc Thread	Left	1500	61.8	M178/9-15-C
194	10	194Casing tube with tools joint	Circular-arc Thread	Left	1500	73	M194/10-15-C
219	10	219Casing tube with tools joint	Circular-arc Thread	Left	1500	85.7	M219/10-15-C
273	10	273Casing tube with tools joint	Circular-arc Thread	Left	1500	107.7	M273/10-15-C
325	12	325Casing tube with tools joint	Circular-arc Thread	Left	1500	154.7	M325/12-15-C

Casing tube					Tool Joint			
Model (D)	Thickness (h)	Item	Weight	Part No.	Item	Length (L)	Weight	Part No.
108	7	108Casing tube	24.6	M108/7-15-S-01	108 Tool joint	80	2.5	M108/7-15-S-02
127	9.5	127Casing tube	38.8	M127/9.5-15-C-01	127 Tool joint	90	4.9	M127/9.5-15-C-02
127	6.5	127Casing tube	30.1	M127/6.5-15-C-01	127 Tool joint	90	4.9	M127/6.5-15-C-02
146	10	146Casing tube	47.3	M146/10-15-C-01	146Tool joint	80	6.4	M146/10-15-C-02
168	10	168Casing tube	55	M168/10-15-C-01	168Tool joint	80	7.4	M168/10-15-C-02
178	9	178Casing tube	52.9	M178/9-15-C-01	178Tool joint	100	8.9	M178/9-15-C-02
194	10	194Casing tube	64	M194/10-15-C-01	194Tool joint	100	9	M194/10-15-C-02
219	10	219Casing tube	72.7	M219/10-15-C-01	219 Tool Joint	100	13	M219/10-15-C-02
273	10	273Casing tube	91.5	M273/10-15-C-01	273 Tool Joint	100	16.2	M273/10-15-C-02
325	12	194Casing tube	130.7	M325/12-15-C-01	325 Tool Joint	100	24	M325/12-15-C-02

Remark: Casing tubes above can be without tool joint.



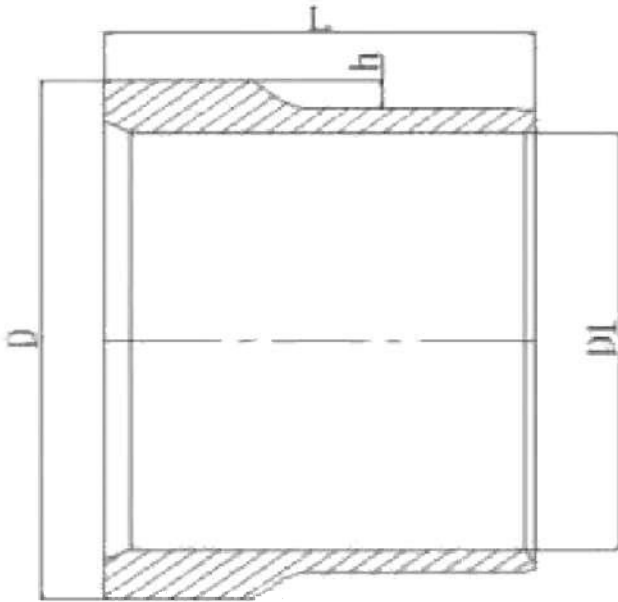
Casing Shoe Threaded Model



Part No.	D O.D of casing shoe (mm)	D1 Min.I.D of casing shoe (mm)	h Thickness (mm)	Thread type	Direction of rotation	Weight (kg)
MST114/6.5-S	114	91	6.5	Square thread	Left	3
MST127/9.5-C	127	100	9.5	Circular-arc Thread	Left	3.3
MST146/10-C	146	117	10	Circular-arc Thread	Left	4.4
MST168/10-C	168	138	10	Circular-arc Thread	Left	6.1
MST178/10-C	178	148	10	Circular-arc Thread	Left	7.5
MST194/10-C	194	162	10	Circular-arc Thread	Left	6.8
MST219/10-C	219	186	10	Circular-arc Thread	Left	12.8
MST273/10-C	273	241	10	Circular-arc Thread	Left	15
MST325/10-C	325	282	10	Circular-arc Thread	Left	18

Other casing shoes are available upon request

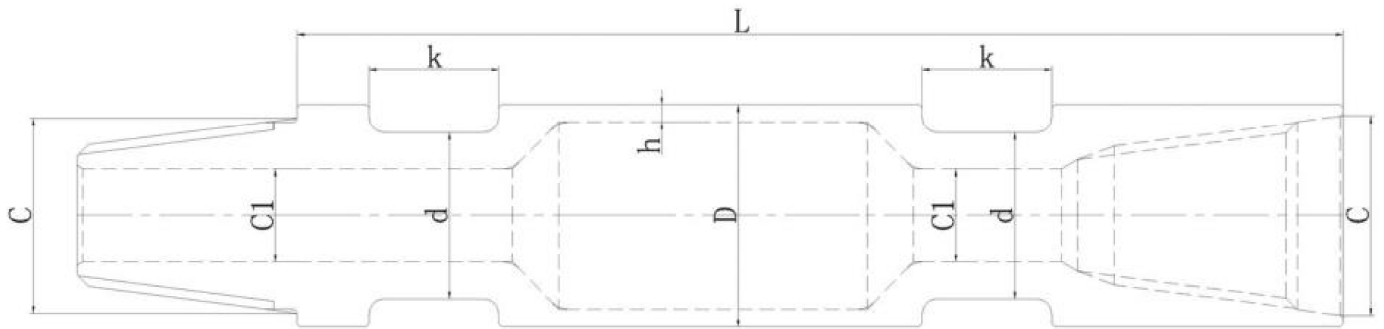
Casing Shoe Welding Model



	D	D1	h	
Part No.	O.D of casing shoe (mm)	Min.I.D of casing shoe (mm)	Thickness (mm)	Weight (kg)
MSW114/6.5	114	91	6.5	2.5
MSW127/9.5	127	100	9.5	3
MSW146/10	146	117	10	3.8
MSW168/10	168	138	10	5
MSW178/10	178	148	10	6
MSW194/10	194	162	10	5.8
MSW219/10	219	186	10	10
MSW273/10	273	241	10	13.5
MSW325/10	325	282	10	16

Other casing shoes are available upon request

Drill Pipe



Model(D)	Wall thickness (h)	Thread(C)	I.D./C1	Wrench d	Flat size k	Length/L	Weight	Part No.
76(3)	6.5	API 2 3/8REG	32	57	45	3000	40	M76/6.5-30-01
	8.5	API 2 3/8REG	32	57	45	3000	48	M76/8.5-30-01
89(3 1/2)	6.5	API 2 3/8REG	32	70	45	3000	48	M89/6.5-30-01
	8.5	API 2 3/8REG	32	70	45	3000	58	M89/8.5-30-01
	6.5	NC26	40	70	45	3000	48	M89/6.5-30-04
	8.5	NC26	40	70	45	3000	58	M89/8.5-30-04
102(4)	6.5	API 3 1/2REG	45	83	51	3000	56	M102/6.5-30-02
	8.5	API 3 1/2REG	45	83	51	3000	67	M102/8.5-30-02
	6.5	NC31	45	83	51	3000	56	M102/6.5-30-05
	8.5	NC31	45	83	51	3000	67	M102/8.5-30-05

Model(D)	Wall thickness (h)	Thread(C)	I.D./C1	Wrench d	Flat size k	Length/L	Weight	Part No.
114(4 1/2)	6.5	API 3 1/2REG	45	95	51	3000	63	M114/6.5-30-02
	8.5	API 3 1/2REG	45	95	51	3000	76	M114/8.5-30-02
	6.5	NC35	60	95	51	3000	63	M114/6.5-30-06
	8.5	NC35	60	95	51	3000	76	M114/8.5-30-06
127(5)	8.5	API3 1/2REG	45	108	51	3000	86	M127/8.5-30-02
127(5)	8.5	NC38	60	108	51	3000	86	M127/8.5-30-07
133 (5 1/4")	10	API3 1/2REG	45	114	51	3000	102	M133/10-30-02
140 (5 1/2")	9.2	API3 1/2REG	45	121	51	3000	101	M140/9.2-30-02
146 (5 3/4")	10	API4 1/2REG	60	127	55	3000	113	M146/10-30-03
152 (6")	8.5	API4 1/2REG	60	133	55	3000	105	M152/8.5-30-03
168 (6 5/8")	10	NC50	60	149	55	3000	132	M168/10-30-08
178 (7")	10	API4 1/2REG	60	159	55	3000	140	M178/10-30-03

The other specification can be produced according to your requirements




Double Wall Drill Pipe

Model	Adaptor	Length	Weight	Part No.
426	273 hex	4M	1070	MDW426/10-40
450	273 hex	4M	1093	MDW450/12-40
508	273 hex	4M	1146	MDW508/10-40
610	273 hex	4M	1241	MDW610/10-40
711	320 hex	6M	1943	MDW711/10-60
813	320 hex	6M	2087	MDW813/10-60
914	320 hex	6M	2230	MDW913/10-60



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