WOOKE
ROCK DRILLING TOOLS
五环欧科

Comprehensive Product Catalogue

2024

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Company introduction

Wooke Rock Drilling Tools Co., Ltd was founded in 1995 relying on the construction of the Three Gorges Project

After nearly thirty years of intensive cultivation and exploration, it has gradually developed and grown into a first-class High-air-pressure DTH rock drilling tool enterprise in China. It is a "National High-tech enterprise", a "National specialized and new small giant enterprise", and an executive member of the "China Rock-Drill Steel and Tools Association". It has nearly 100 invention and utility model patents and many original technologies. It has an annual production capacity of 50,000 sets of DTH hammers and 200,000 drill bits.

Product application areas

Products are widely used in:
· Rock blasting,
· Mining,
· Exploration,
· Geotechnical engineering,
· Water well drilling
· Geothermal and other industries

Product manufacturing factory

· Owns more than 400 sets of digital equipment
· Realize intelligent production and management
· Key equipment reaches the world’ s advanced level

Product inspection and testing

· Spare parts inspection

Features of the Medium & High air pressure DTH hammer

TND® Series

(XF90)

Innovative of the third generation

① Fast speed and low energy. consumption.

② Equipped with: latch type or snap ring drill bit.

③ Life span 8000-12000 meters.

Wooke Series 6 HIgh-frequency

(WOOKE)

Innovative of the third generation

(PATENTED)

① The speed is increased by 15% ~30% year-on-year, better for medium-soft rock.

② Light weight, energy and fuel saving.

③ Life span 5000-35000 meters.

TND® Series without foot valve

(TND®-N)

Innovative of the second generation

① Compared with the structure with valve type, the speed is increased by 15%.

② Eliminate tail pipe failure

③ Fuel saving

TND® Series withfoot valve

(TND®)

Innovative of the first generation

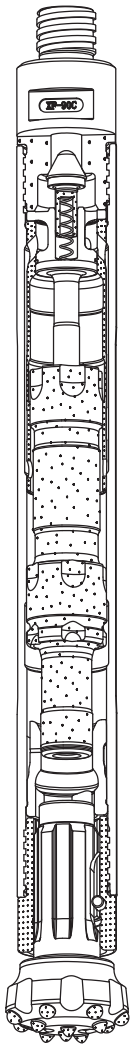
(With foot valve)

① Faster than traditional with foot valve structure.

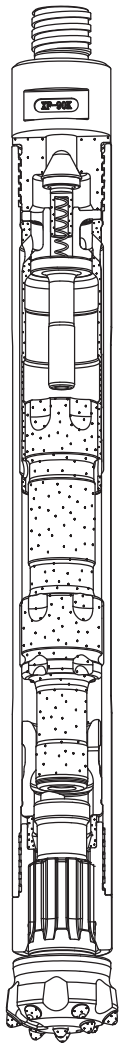
② Fuel saving.

3" Medium air pressure DTH Hammer

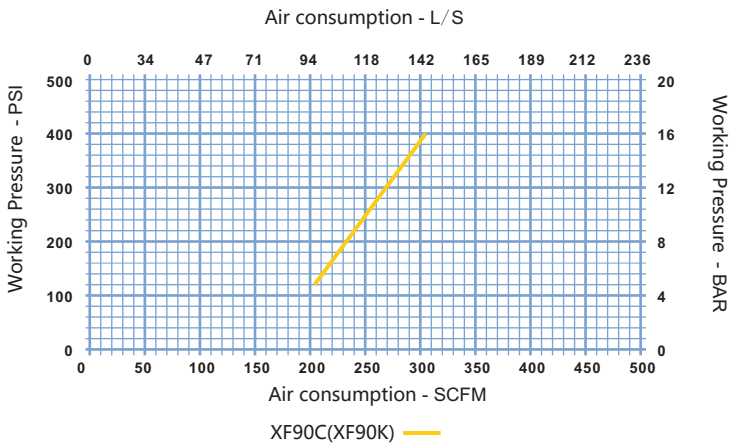
5~15 bar(71-215PSI) Working Pressure



TND® Series
XF90C



TND® Series
without footvalve
XF90K



NOTE:
1, Air consumption data is for reference only.
2, The above figure is based on normal temperature of 20℃ and atmospheric pressure of 101.3KPa.
3, As altitude increases, air consumption increases accordingly.

EXPLANATION:

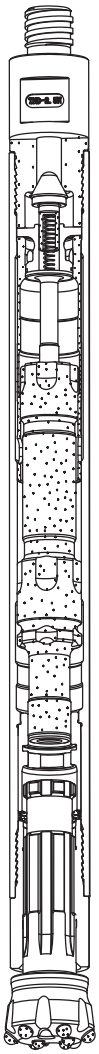
1,The connection thread of XF90 Driver sub: Rectangular single head.

2, Pin type and snap ring type drill bits are interchangeable by changing the Driver sub.

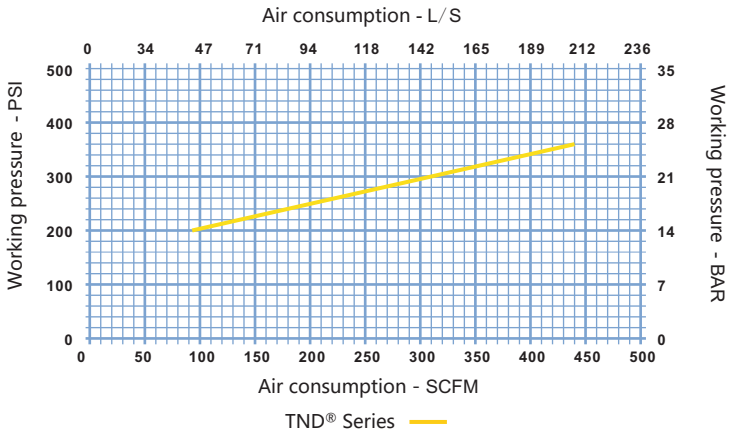
Model	Shank	Foot valve	Outside Dia. of Hammer (mm)	Hammer length without bit (mm)	Bit dia. (mm)		Weight (kg)
					Max.	Min.	
XF90C	CIR90(Pin type)	NO	80	725	90	110	19
XF90K	XF90K(Snap ring)						

2.5'' High air pressure DTH Hammer

10~20 bar(145-285PSI) working pressure



TND® Series
TND-N



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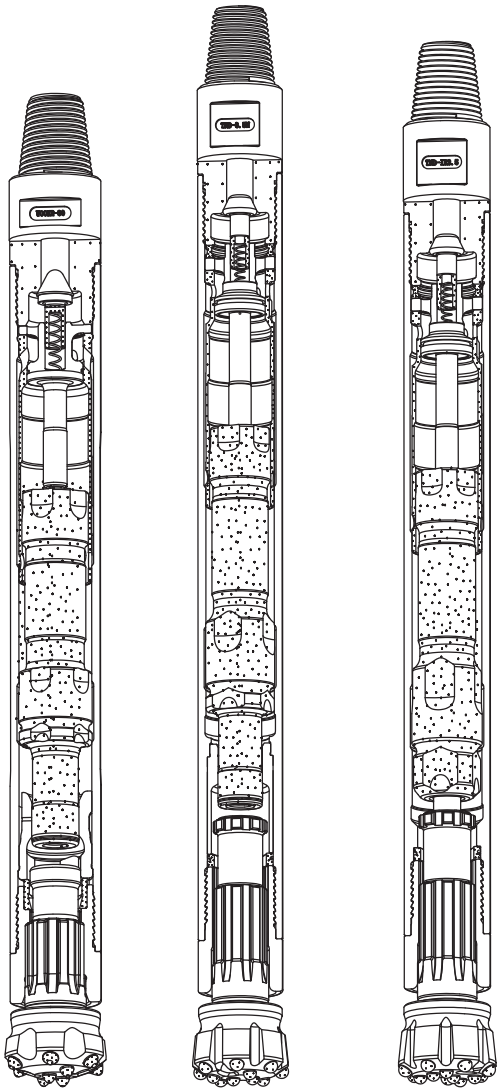
3, As altitude increases, air consumption increases accordingly.

EXPLANATION:
1,The connection thread of driver sub is classified into three-heads (standard), two-heads/single-heads (customized).
2,The three-head connecting thread is suitable for drilling homogeneous rocks and can be easily disassembled and disassembled manually or mechanically.
3,The two-head connecting thread is suitable for drilling cracks, holes and complex rocks that are easy to get stuck. It has better self-locking properties than the three-head thread. It is tighter to disassemble and assemble, and can be disassembled manually or mechanically.
4,The single-head connecting thread is suitable for deep hole foundations, water wells and other complex rock formations. It has good self-locking properties and is not easy to fall off and can be disassembled manually or mechanically.

Model	Shank	Foot valve	Outside diameter (mm)	Hammer length without bit (mm)	Bit dia. (mm)		Weight (kg)
					Min.	Max.	
TND-2.5N	CWG76N	NO	70	806	78	80	17.5

3"High air pressure DTH Hammer

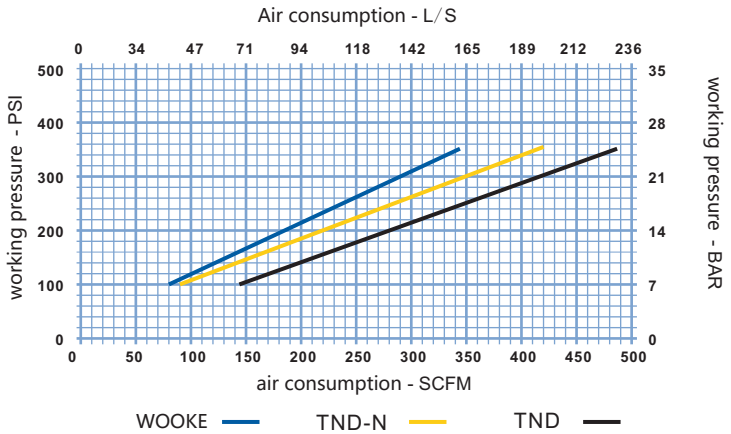
10~20 bar(145-285PSI) working pressure



Wooke Series 6 High-frequency
WOOKE

TND® Series without foot valve
TND-N

TND® Series withfoot valve
TND



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EXPLANATION:

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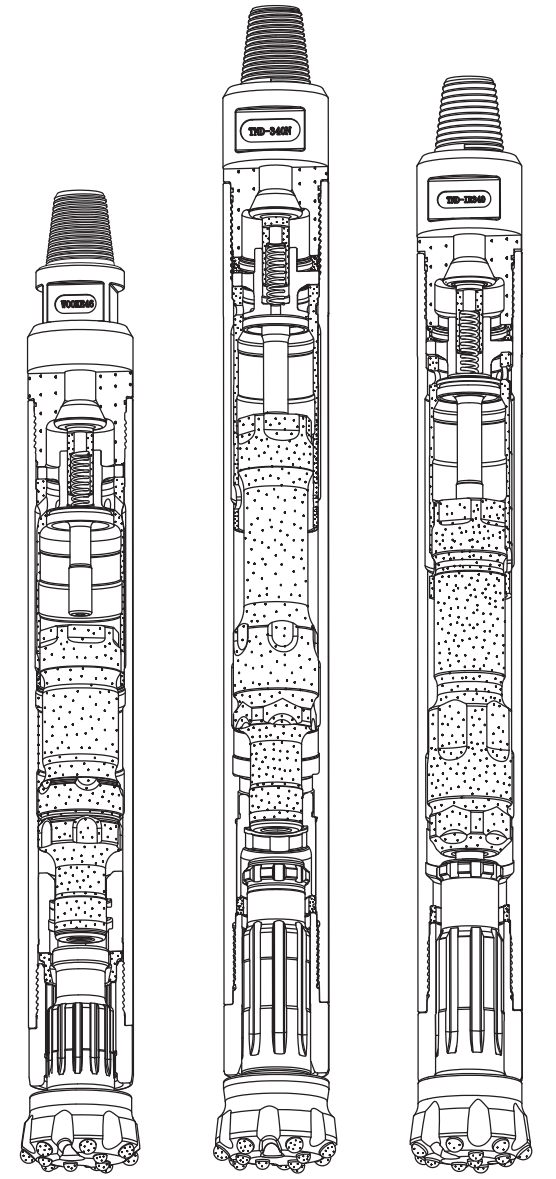
4,The single-head connecting thread is suitable for deep hole foundations, water wells and other complex rock formations. It has good self-locking properties and is not easy to fall off and can be disassembled manually or mechanically.

Model	Shank	Foot valve	Outside Diameter (mm)	Hammer length without bit (mm)	Bit diameter (mm)		Weight (kg)
					Min.	Max.	
WOOKE30	WOOKE30	No	80	725	90	105	19
TND-3.5N	DHD3.5N			862			24.5
TND-IR3.5	DHD3.5	Yes	80	807	90	105	22.5

4" High air pressure DTH Hammer

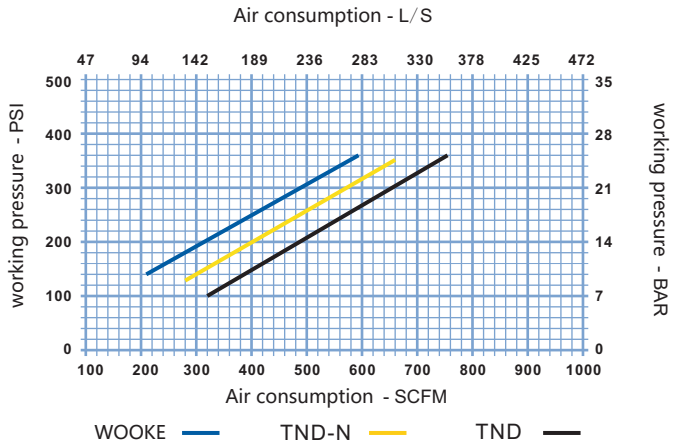
10~25 bar(145-362PSI) working pressure



Wooke Series 6 High-frequency
WOOKE

TND® Series without foot valve
TND-N

TND® Series with foot valve
TND



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EXPLANATION:
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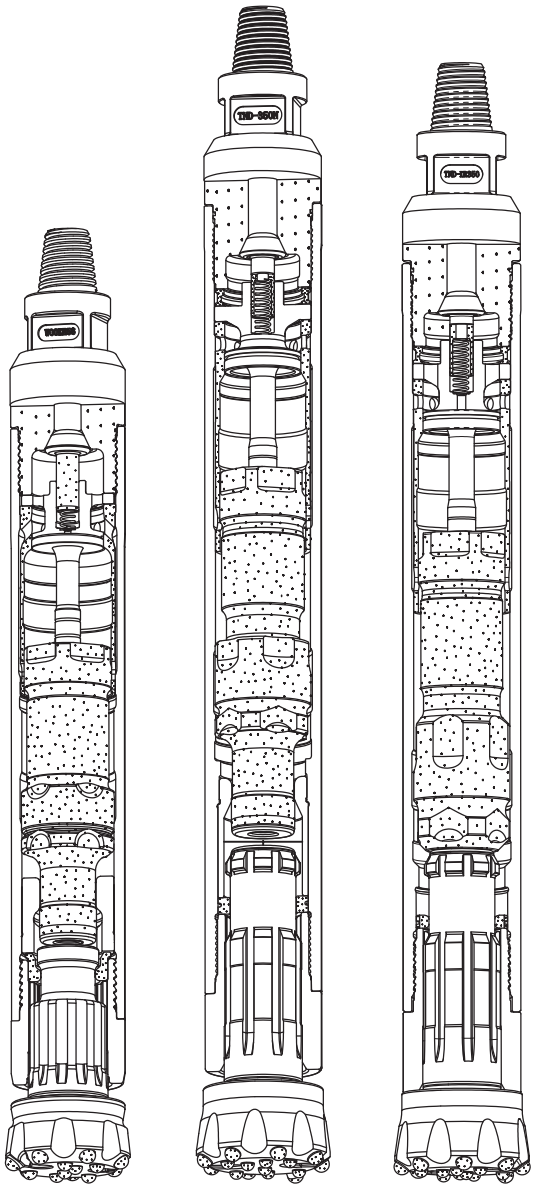
4,The single-head connecting thread is suitable for deep hole foundations, water wells and other complex rock formations. It has good self-locking properties and is not easy to fall off and can be disassembled manually or mechanically.

Model	Shank	Foot valve	Outside Diameter (mm)	Hammer length without bit (mm)	Bit Diameter (mm)		Weight (kg)	Piston Weight (kg)
					Min.	Max.		
WOOKE46	Standard: 8splines	NO	101	789	110	130	31.1	—
WOOKE46Q	Option: 12splines							Light
TND-340N	DHD340	NO	99	936			40.5	—
TND-TD40N	TD40N							
TND-M40	Mission40			955			41	
TND-IR340	DHD340A	YES	99	881	110	130	38	—
TND-TD40	TD40							
TND-QL40	QL40			952			39.5	



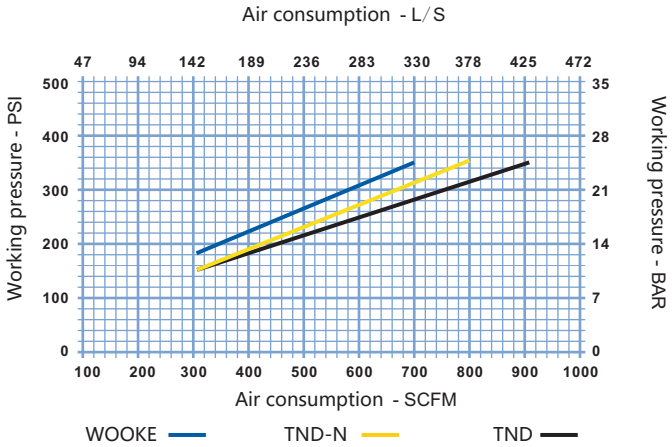
Wooke Series 6 High-frequency
WOOKE

TND® Series without foot valve
TND-N

TND® Series with foot valve
TND

4.5"-5" High air pressure DTH Hammer

10~30 bar(145-428PSI) working pressure



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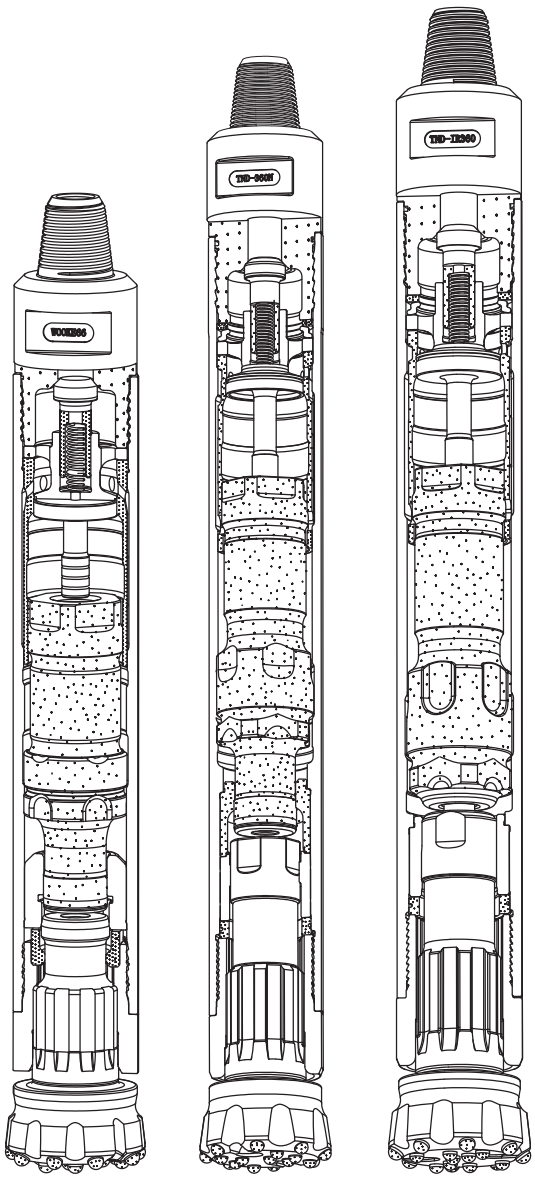
Model	Shank	Foot valve	Outside Diameter (mm)	Hammer length without bit (mm)	Bit Diameter (mm)		Weight (kg)	Piston Weight (kg)
					Min.	Max.		
WOOKE4.5	WOOKE56	NO	116	874	127	152	50	—
WOOKE56	Standard: 8splines	NO	127	877.7	138	152	56	—
WOOKE56Q	Option: 12splines	NO	127	877.7	138	152	56	Light
TND-350N	DHD350	NO	127	1082	138	152	74	—
TND-QL50N	QL50N	NO	127	1062	138	152	73	—
TND-M50	Mission50	NO	127	1080	138	152	74	—
TND-IR350	DHD350	YES	127	1029	138	152	74	—
TND-SD5	SD5	YES	127	1029	138	152	74	—
TND-QL50	QL50	YES	127	1009	138	152	74	—

6"-High air pressure DTH hammer

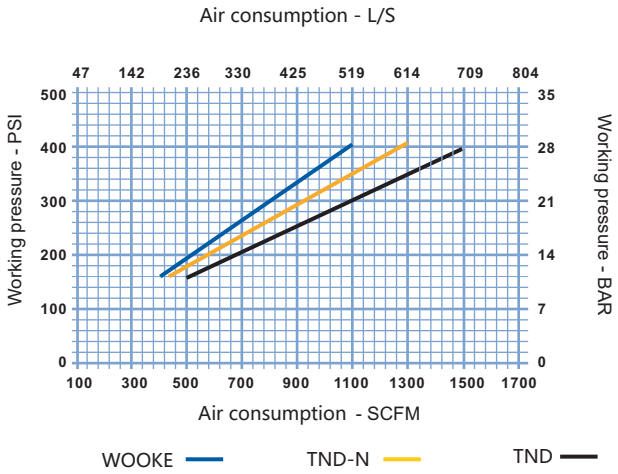
10~35 bar(145-507PSI) Working Pressure



Wooke Series 6 High-frequency WOOKE

TND® Series without foot valve TND-N

TND® Series with foot valve TND



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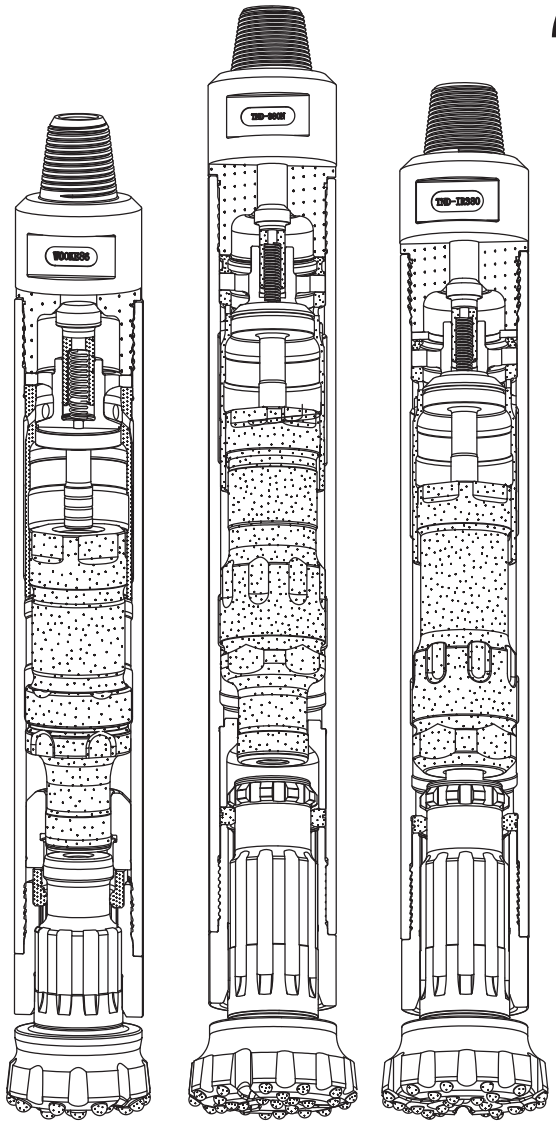
Model	Shank	Foot valve	Outside Diameter (mm)	Hammer length without bit (mm)	Bit Diameter (mm)		Weight (kg)
					Min.	Max.	
WOOKE66	WOOKE66	NO	148	945.5	159	178	79
TND-360N	DHD360N	NO	144	1335	152	254	106
TND-QL60N	QL60N			1131			108
TND-M60	Mission60			1108			105
TND-IR360	DHD360	YES	144	1335	152	254	112
TND-SD6	SD6			1150			113
TND-QL60	QL60			1080			110

7" - 8" High air pressure DTH Hammer

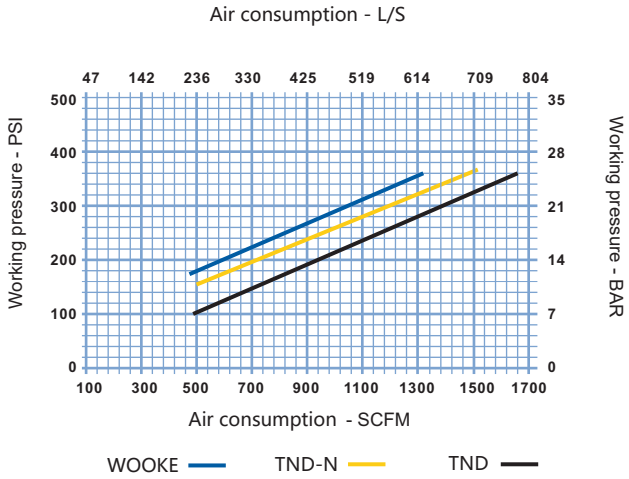
10~35 bar(145-507PSI) working pressure



Wooke Series 6 High-frequency WOOKE

TND® Series without foot valve TND-N

TND® Series with foot valve TND



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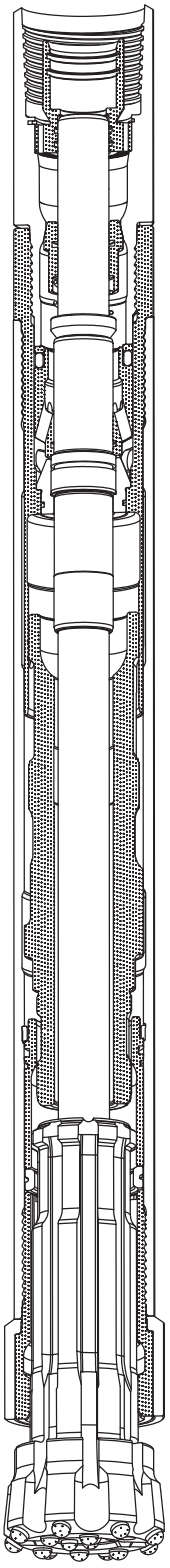
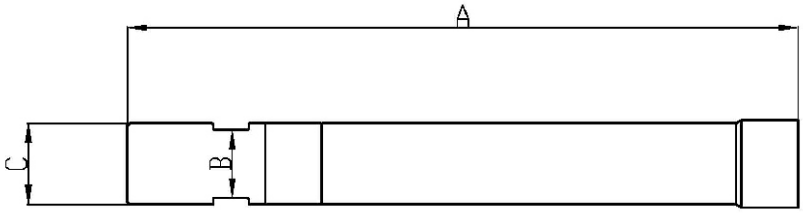
4,The single-head connecting thread is suitable for deep hole foundations, water wells and other complex rock formations. It has good self-locking properties and is not easy to fall off and can be disassembled manually or mechanically.

Model	Shank	Foot valve	Outside Diameter (mm)	Hammer length without bit (mm)	Bit Diameter (mm)		Weight (kg)
					Min.	Max.	
WOOKE76	WOOKE76	NO	175	1109	191	228	170
WOOKE86	WOOKE86		184	1132	203	254	170
TND-380N	DHD380N	NO	182	1318	194	254 (305)	195
TND-QL80N	QL80N			1300			193.5
TND-M80	Mission80			1298			193
TND-IR380	DHD380	YES	182	1228	194	254 (305)	180
TND-SD8	SD8			1199			182
TND-QL80	QL80			1211			182



3"-5 1/2" High air pressure DTH Hammer

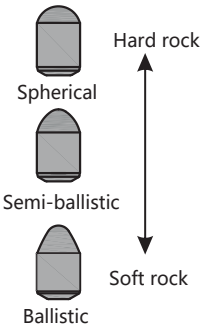
10~35 bar(145-500PSI) working pressure



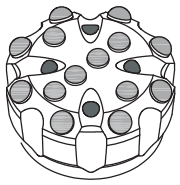
(mm)

Size	Model	Top Sub		Dimension			Weight (kg)	Bit	
		Thread	Part No.	A	B	C		Shank	Dia.
3"	RW531	3"Remet	R30	1085	75.5	81	29	RE531	86-102
4"	RW004	3.5"Remet 4"Remet 4"Metzke 4.5"Remet	R35 R40 M40 R45	1251.8	90	107	52	RE004	114-127
5"	RW543			1192	98	116	62	RE543	124-135
	RW53			1229	101.6	121	67	DR53	127-140
	RW040	4"Remet 4"Metzke 4.5"Remet 4.5"Metzke	R40 M40 R45 M45	1254	94	121	80.5	RE040	127-140
	RW052			1229	94	120.5	72	RE052	127-140
	RW545			1234	102	117	80.5	RE545	127-140
5 1/2"	RW054	4.5"Remet 4.5"Metzke	R45 M45	1298	100	130.2	84	RE054	140-146
	PRW54			1298			85	PR54	

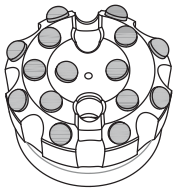
Bit shanks for DTH Hammer

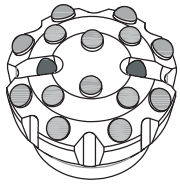


Hard rock ← Medium Hard rock → Soft rock

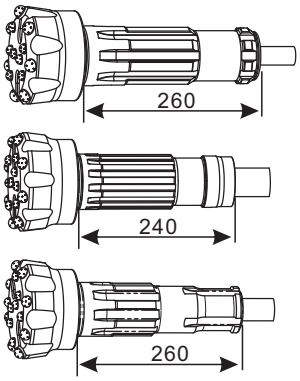
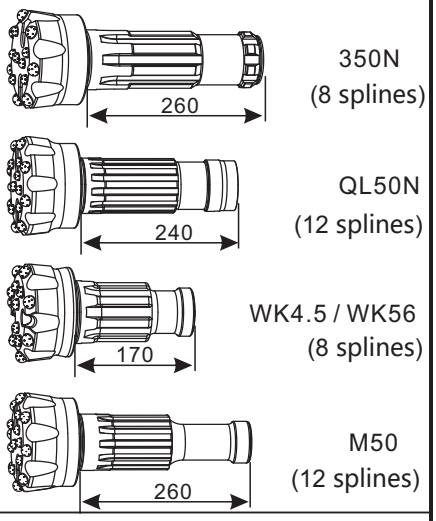
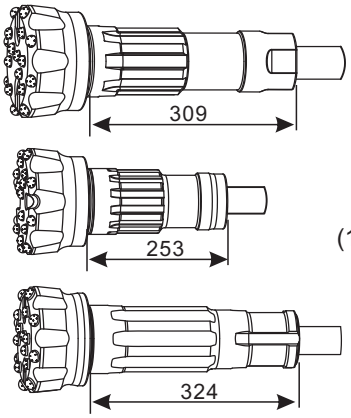
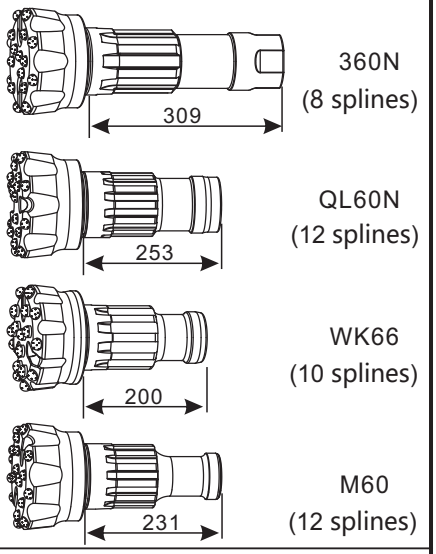
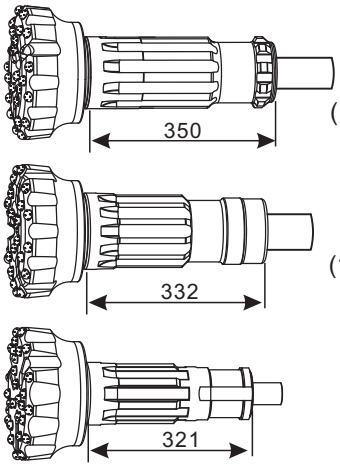
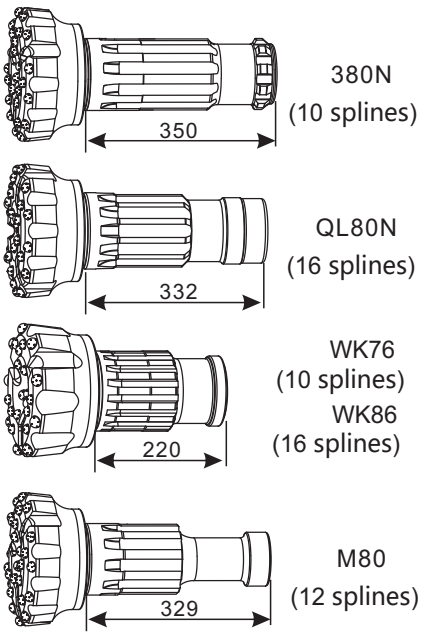

Flat (A)

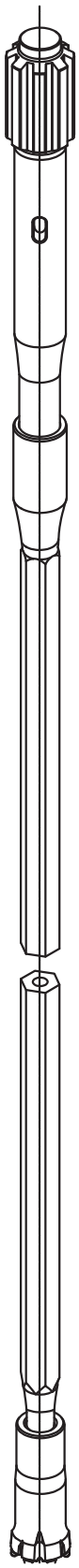

Drop-center (B)


Concave (B1)


Convex (C)

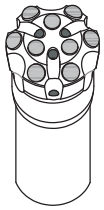
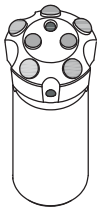
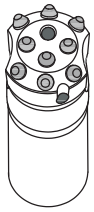
Size	Diameter	TND Series with foot valve	TND-N/WOOKE series
3"	90 95 100 110		90C(6 splines) 130 90K(8 splines) 130
2.5"	80 85		174 2.5N (6 splines)
3.5"	90 95 100 102	180 DHD3.5 (8 splines)	180 3.5N (8 splines) 130 WK30 (6 splines)
4"	110 115 120 127 130	209 DHD340 (8 splines) 280 QL40 (10 splines) 260 SD4 (8 splines) 209 TD40 (12splines)	209 340N (8 splines) 143 WK46 (8 splines) 228 M40 (12 splines) 209 TD40N (12 splines)

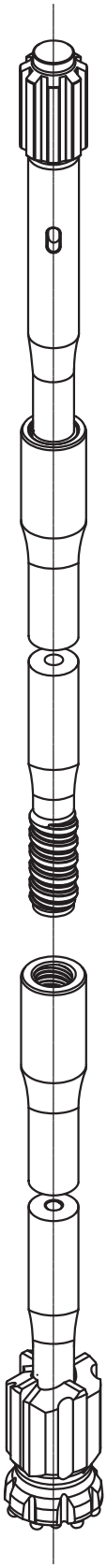
5"	140 146 152	 DHD350 (8 splines) QL50 (12 splines) SD5 (8 splines)	 350N (8 splines) QL50N (12 splines) WK4.5 / WK56 (8 splines) M50 (12 splines)
6"	155 165 171 178 191 200 203 216	 DHD360 (8 splines) QL60 (12 splines) SD6 (8 splines)	 360N (8 splines) QL60N (12 splines) WK66 (10 splines) M60 (12 splines)
8"	203 216 230 254 279 305	 DHD380 (10 splines) QL80 (16 splines) SD8 (8 splines)	 380N (10 splines) QL80N (16 splines) WK76 (10 splines) WK86 (16 splines) M80 (12 splines)



41～57 Top hammer rock drilling tools

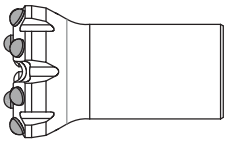
R28、R32 Connection thread

Spherical / Semi-ballistic / Ballistic (Hard rock ↑ Soft rock)		Hard rock ← Medium Hard rock → Soft rock								
										
Diameter mm	Diameter inch	Angle	Button	Flushing holes	Angle	Button	Flushing holes	Angle	Button	Flushing holes
41	1 5/8	30°	5-φ10 2-φ8	1+2	—	—	—	—	—	—
43	1 11/16		5-φ10 2-φ8							
45	1 3/4		5-φ11 2-φ9		30°	6-φ9 3-φ8		35°	6-φ9 2-φ8	1+2
48	1 7/8		5-φ11 2-φ9			6-φ9 3-φ9			6-φ9 2-φ9	
51	2		5-φ12 2-φ10			6-φ10 3-φ9			6-φ9 2-φ10	
57	2 1/4		5-φ13 2-φ11			6-φ11 3-φ10			6-φ10 2-φ10	

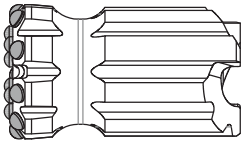


64~127 Top hammer drilling tools

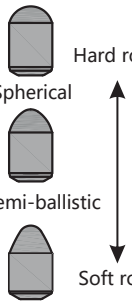
T38、T45、T51、EL60、GT60、ST58、ST68 Connection Thread



Standard



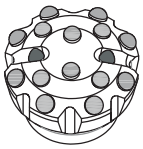
Retrac



Hard rock ← Medium Hard rock → Soft rock

Flat (A)

Drop center (B)

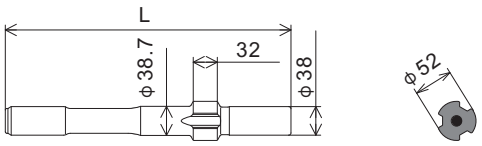
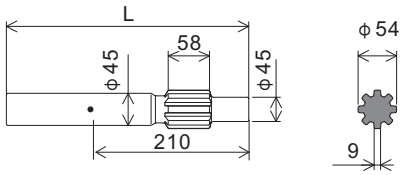
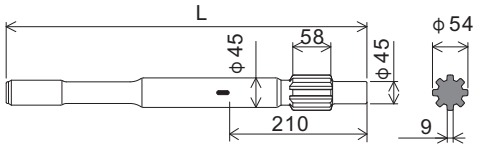
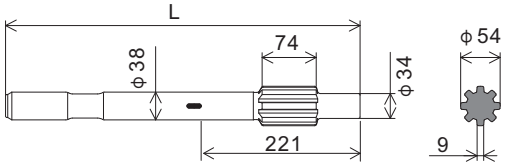
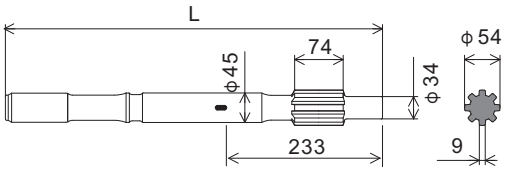


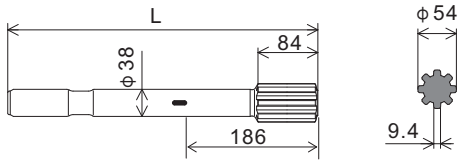
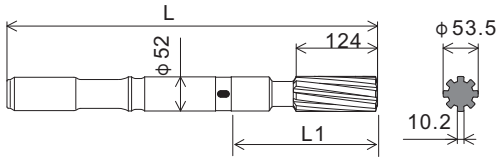
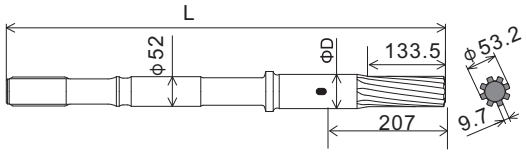
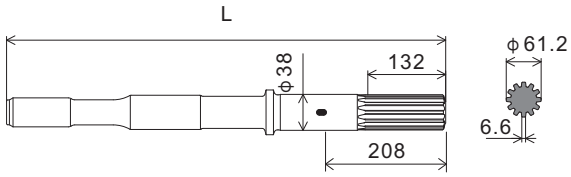
Convex (C)

Dia. mm	Dia. inch	Angle	Button	Flushing holes	Angle	Button	Flushing holes	Angle	Button	Flushing holes
64	2 1/2	35°	6-φ12 3-φ10	1+2	35°	6-φ10 4-φ10	3+0	40°	6-φ10 3-φ10 2-φ9	1+1
70	2 3/4		8-φ11 4-φ11			6-φ10 4-φ10			6-φ11 5-φ10	1+2
76	3		8-φ12 4-φ11			6-φ11 4-φ11			8-φ11 6-φ10	2+2
89	3 1/2		8-φ14 6-φ12			8-φ12 6-φ12	4+0		8-φ12 6-φ12	
102	4		8-φ14 6-φ12			8-φ14 6-φ12			8-φ12 7-φ12	2+0
115	4 1/2		8-φ14 8-φ12			8-φ14 8-φ12			8-φ14 8-φ12	
127	5		8-φ16 8-φ14			8-φ16 6-φ14 2-φ12			8-φ14 4-φ14 5-φ12	

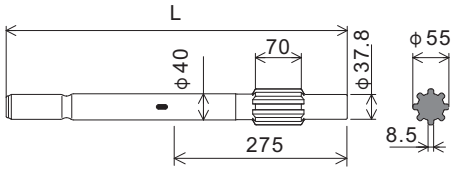
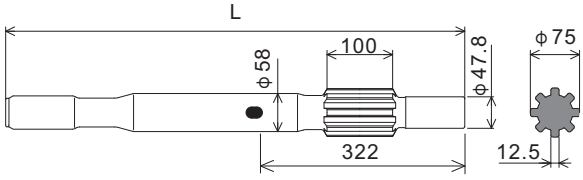
Top hammer Shank Adapter & Coupling Sleeve

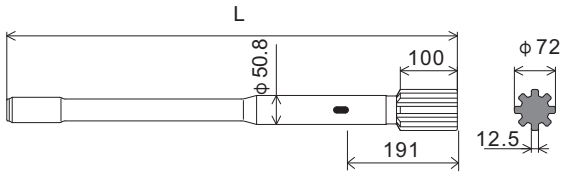
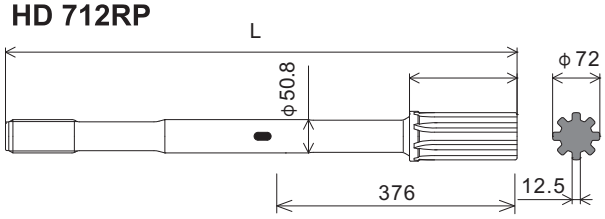
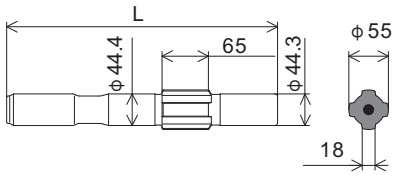
ATLAS COPCO Shank Adapter

Shank Adapter	Thread	Length (mm)	Flushing holes
COP 125, COP 130, COP 131 	R32 R38 T45	380 380 380	Center
COP 1032 Female thread 	R28F R32F	340 340	Side
COP 1032 	R28 R32 T38	550 550 550	Side
COP 1036, COP 1038, COP 1238 	R32 R38 T38 R32 T38 R32 R38 T32	485 485 485 500 500 575 575 575	Side
COP 1036, COP 1038, COP 1238 	R32 R38 T38 T45	575 575 575 575	Side

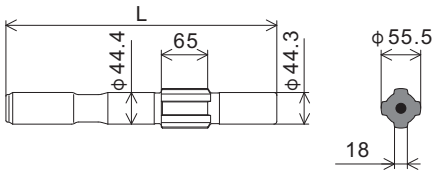
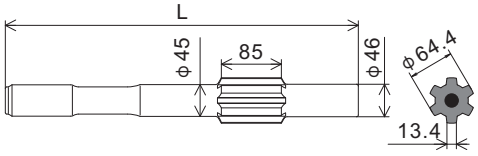
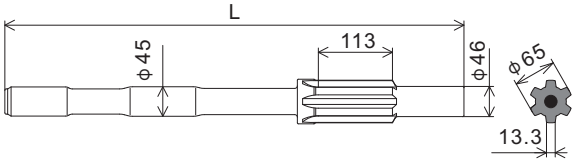
Shank Adapter	Thread	Length (mm)	Flushing hole
COP 1440, COP 1550, COP 1638, COP 1838, COP 2238 	R32 R38 T38 R32 R38 T38	435 435 435 525 525 525	Side
COP 1840 	T45 T51	565 565	Side
COP 1840 Extractor, 2150 Extractor, 2550 Extractor 	T45 T51	770 770	Side
COP 2160 Extractor, COP 2560 Extractor 	T45 T51	770 770	Side

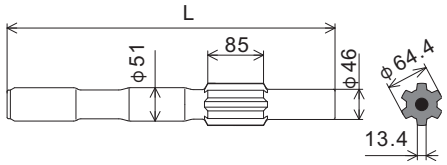
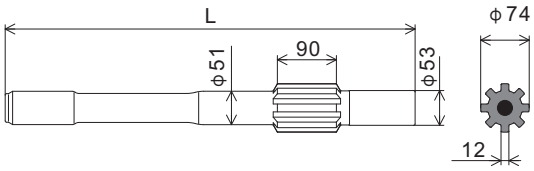
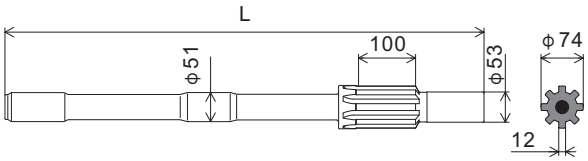
FURUKAWA Shank Adapter

HD 150 	R38 T38	520 520	Side
HD 615 	T45 T51	700 700	Side

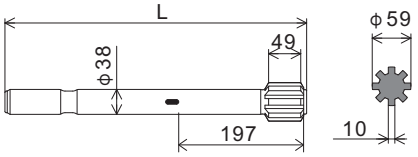
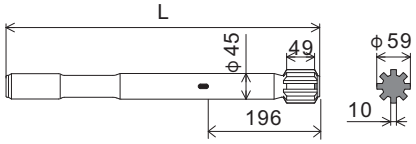
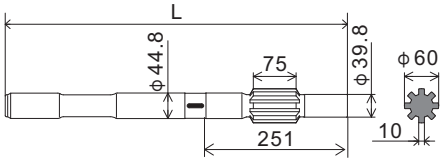
Shank Adapter	Thread	Length (mm)	Flushing holes
HD 712 	T45	790	Side
HD 712RP 	T45 T51	565 565	Side
M 120 and PD 200 	T38 T38	380 446	Center

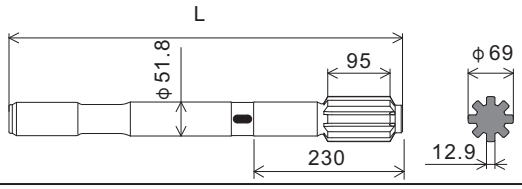
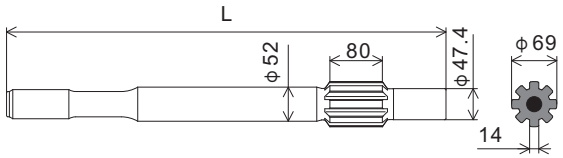
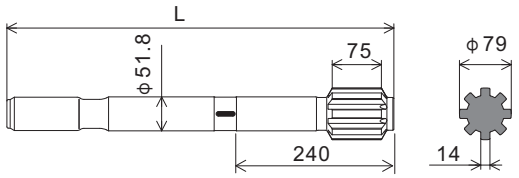
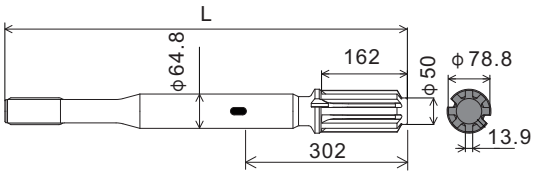
INGERSOLL RAND Shank Adapter

URD 475, URD 550, VL120, EVL 130, VL140, F16 	R32 R38 T38 T45 T38	380 380 380 380 446	Center
YH 65, YH 70, YH 80 	T38 T45 T38 T45	480 480 500 500	Center
YH 65 RP, YH 70 RP, YH 80 RP 	R32 R38 T38 R32 R38 T38	435 435 435 525 525 525	Center

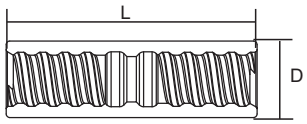
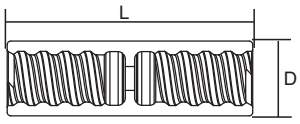
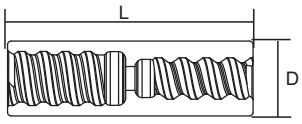
Shank Adapter	Thread	Length (mm)	Flushing holes
YH 80A 	T45 T51	565 565	Center
YH 95, YH 100 	T51	625	Center
YH 95 RP, YH 100 RP 	R32 R38 T38 T45 T38	380 380 380 380 446	Center

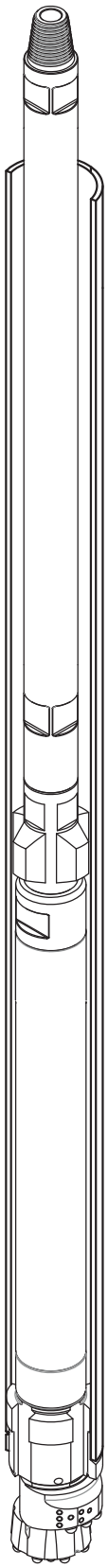
SANDVIK / TAMROCK Shank Adapter

HL 500-38,HL 510-38, HL 500S-38, HL 510S-38, HL 510B, HL 510LH 	R32 R38 T38 R38 R32 R38 T38	460 460 460 500 550 550 550	Side
HL 500-45,HL 510-45 	T38 T45	550 550	Side
HL 600-45, HL 600S-45 	T38 T45 R32 T38 T45	525 525 600 600 600 600	Side

Shank Adapter	Thread	Length (mm)	Flushing holes
HL 650-52, 700-52, PE-52, S-52, 710-52, SPE-52, 800T-52 	T38 T45 T51	600 600 600	Side
HL 850 	T45	670	Center
HL 1000-52, 1000 S-52 	T45 T51	590 590	Side
HL1500-PE 	T51	760	Side

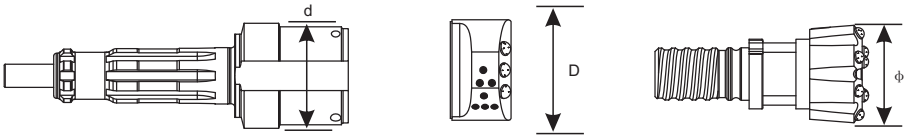
Coupling Sleeve

 Middle stop		 Full bridge		 Cross over coupling	
Thread	D * L (mm)	Thread	D * L (mm)	Thread	D * L (mm)
R38	55*170	R38	55*180	R38 / R32	55*180
T38	55*191	T38	55*201	R38 / T38	55*195
T45	63*210	T45	63*220	T45 / R38	63*220
T51	71*225	T51	71*235	T45 / T38	61*230
—		—		T51 / T45	71*228

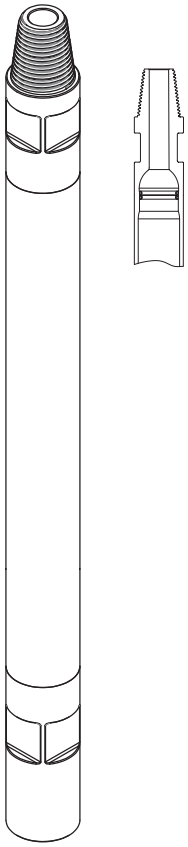


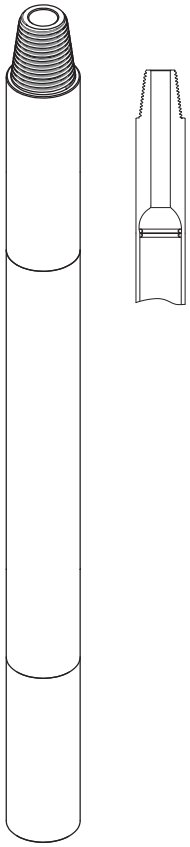
DTH Eccentric Casing Systmes

Casing tube **115~273mm**



Dimension	Shank	Casing tube OD x T (mm)	Pilot bit (mm) φ	Max. Hole Dia.(mm) D	Guide device (mm) d
Casing-115	DHD3.5	115x6.35	90	123	100
Casing-146	DHD340A COP34	146x6.6	115	155	126
Casing-168	DHD350R QL50	168x8	140	188	150
Casing-178		178x6.5	144	192	156
Casing-183		183x6.8	144	197	161
Casing-194	DHD360R QL60	194x6.5	166	211	179
Casing-219		219x7	190	236	203
		219x12.7	180	232	191
Casing-273	DHD380 QL80	273x6.4	240	308	257
		273x11.4	230	286	247

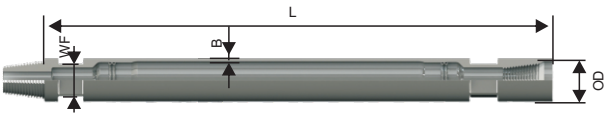




DTH Light-weight、Machining clamp Drill pipe

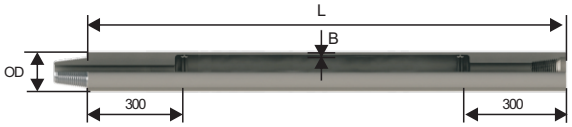
Diameter: OD=**64 ~140mm**

Light-weight Drill pipe



Outer diameter (mm) OD	Wall thickness (mm) B		Thread	Valid length(mm) L	Weight (KG)		Wrench Flat WF
64	5.0	6.0	RD 50-6	3000	23	25.5	40
76	4.0	6.0	2⅜"REG	1500 2000 3000 4000 4500	– 18 25 32 36	19 24 34 44 49	57x57 65x65
89	6.5		2⅜"REG	1000 1500 2000 3000 4000 5000	28 34 40 53 66 79		65x65

Machining clamp Drill pipe



76	6.5		2⅜"REG	3000 4000 4500 5000	47 58 64 70		No wrench flats
89	6.5	7.5	2⅜"REG 2⅜"IF	3000 4000 4500 5000 6000	60 73 80 87 100	62 75 82 89 107	No wrench flats
102	8.5		3½"REG 2⅞"IF	3000 4000 4500 5000 6000	83 103 113 123 143		No wrench flats
114	8.5		3½"REG 3½"IF	3000 4000 4500 5000 6000	99 120 130 140 160		No wrench flats