



**PILE  
CRITTER**

**DTH CATALOGUE**



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## COMPANY

Founded in 2022, PileCrittter is a swiftly growing company in the European drilling market. Our team, though small, is rich in diversity and expertise, encompassing a range of roles from strategic leadership to market-specific business development. Fluent in multiple languages, our team is well-equipped to cater to various European markets. Together, our mission is rooted in delivering value through reliable, high-performance tools essential for construction and civil engineering.

At PileCrittter, we're driven by a relentless dedication to our customers, aiming to be the cornerstone of Europe's drilling industry. Our vision encompasses not just supplying tools but fostering growth and progress in every project we touch. We're focused on enhancing our services by developing rapid response teams, further decreasing dispatch times, and expanding our product catalogue. Join us in redefining drilling industry standards with solutions that speak of quality, efficiency, and innovation!

## EU HUB

Focusing on local stock within Europe, PileCrittter has significantly reduced delivery times and improved service dependability for our European clients. This strategic move underscores our dedication to addressing the unique requirements of the European market and strengthening our position in the region.

## BESPOKE SERVICE

We are eager to take on special requests, ensuring clients receive precisely what they need for their projects. We specialize in understanding unique requirements and leveraging an extensive product range to fulfill even the most specific demands. With a focus on customization and adaptability, our team is committed to turning special requests into reality, offering solutions that are not just satisfactory, but perfectly aligned with each client's unique business needs.



## **HIGH PRESSURE DTH HAMMERS**

# HIGH PRESSURE DTH HAMMER

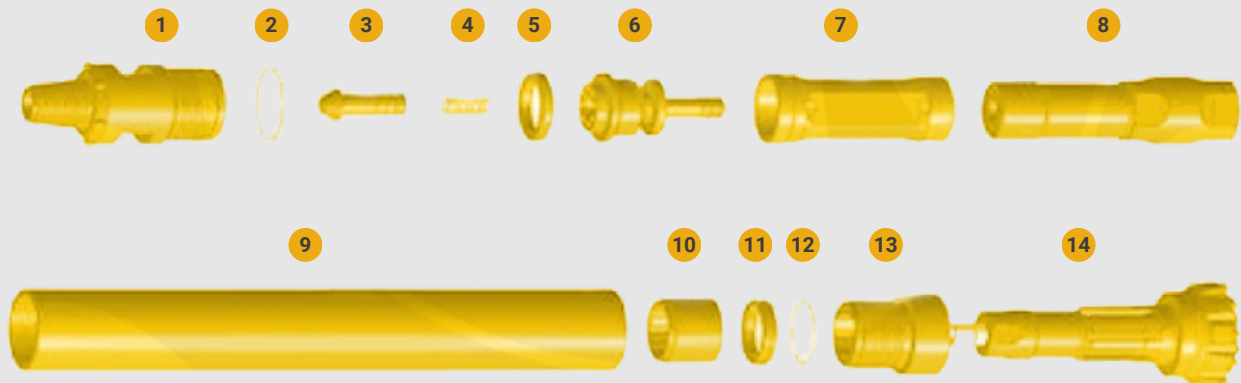


## WHAT IS DTH HAMMER?

DTH Hammer has a wide range of use in all kinds of hard and abrasive rocks, following features:

- New products designed based on mining condition, improved by advanced technology.
- International High-Standard materials with advanced process guaranteed quality.
- Faster drilling rate and good transmission of power.
- Enhanced hardness to expand the life of hammer, and lower the using cost.
- Low consumption of electricity with big impact force.
- The modern theory is adopted in the structural design, which makes the stress wave duration longer, the stress amplitude is lower, and the piston life is long.

## PARTS LIST



REF.	PARTS	WEIGHT	PART NO.	REF.	PARTS	WEIGHT	PART NO.
01	Top Sub	20.03 kg	01-DTH-01	08	Piston	23.5 kg	01-DTH-08
02	O Ring	0.02 kg	01-DTH-02	09	Piston Case	37.2 kg	01-DTH-09
03	Check Valve	0.8 kg	01-DTH-03	10	Guide Sleeve	2.5 kg	01-DTH-10
04	Spring	0.05 kg	01-DTH-04	11	Retainer Ring	0.86 kg	01-DTH-11
05	Rubber Buffer	0.3 kg	01-DTH-05	12	O Ring	0.02 kg	01-DTH-12
06	Valve Seat	5 kg	01-DTH-06	13	Drive Chuck	6 kg	01-DTH-13
07	Inner Cylinder	4 kg	01-DTH-07	14	Drill Bit		01-DTH-14

# SPECIFICATION



## DHD SERIES

TECHNICAL SPECIFICATION	DHD 3.5	DHD340	DHD350	DHD360	DHD380	DHD1120	N125
Length (without bit)	928 mm	1032 mm	1209 mm	1063 mm	1492 mm	1845 mm	1785 mm
Weight	25 kg	43 kg	78.5 kg	100.5 kg	190 kg	598 kg	25 kg
Outer diameter	Ø82 mm	Ø99 mm	Ø125 mm	Ø142 mm	Ø180 mm	Ø275 mm	Ø 305 mm
Connection Thread	API2 3/8"REG	API2 3/8"REG	API2 3/8"REG	API3 1/2"REG	API4 1/2"REG	API2 5/8"REG	API2 5/8"REG
Bit Shank	DHD3.5	DHD340	DHD350	DHD360	DHD380	DHD1120	NUMA125
Hole Range	Ø90 - Ø110 mm	Ø110 - Ø135 mm	Ø90 - Ø110 mm	Ø150 - Ø190 mm	Ø195 - Ø254 mm	Ø295 - Ø400 mm	Ø330 - Ø400 mm
Working Pressure	1.0 - 1.7 Mpa	1.0 - 2.2 Mpa	1.0 - 2.5 Mpa	1.0 - 2.5 Mpa	1.5 - 3.3 Mpa	1.5 - 3.3 Mpa	1.5 - 3.3 Mpa
Recommended rotation speed	30 - 60r/min	30 - 60r/min	30 - 60r/min	30 - 60r/min	30 - 60r/min	25 ~ 50r/min	25 ~ 45r/min
Air consumption	1.0 Mpa 1.5 Mpa	1.0 Mpa 1.8 Mpa	1.0 Mpa 1.8 Mpa	1.8 Mpa 2.4 Mpa	1.8 Mpa 2.4 Mpa	1.8 Mpa 2.4 Mpa	1.8 Mpa 2.4 Mpa
	4.5m3/min 8.5m3/min	5.5m3/min 10m3/min	9m3/min 15m3/min	20m3/min 28m3/min	26m3/min 34m3/min	50m3/min 70m3/min	46m3/min 58m3/min

## QL SERIES

TECHNICAL SPECIFICATION	QL40	QL50	QL60	QL80
Length (without bit)	1102 mm	1154 mm	1211 mm	1471 mm
Weight	43.7 kg	73.5 kh	105 kg	180 kg
Outer diameter	Ø99 mm	Ø126 mm	Ø148 mm	Ø180 mm
Connection Thread	API2 3/8"REG	API2 3/8"REG	API3 1/2"REG	API4 1/2"REG
Bit Shank	QL40	QL50	QL60	QL80
Hole Range	Ø110 - Ø135 mm	Ø135 - Ø155 mm	Ø158 - Ø190 mm	Ø195 - Ø254 mm
Working Pressure	1.0 - 2.2 Mpa	1.0 - 2.5 Mpa	1.0 - 2.5 Mpa	1.5 - 3.3 Mpa
Recommended rotation speed	30 - 60r/min	30 - 60r/min	30 - 60r/min	30 - 60r/min
Air consumption	1.0 Mpa 1.8 Mpa	1.0 Mpa 1.8 Mpa	1.0 Mpa 1.8 Mpa	1.0 Mpa 2.4 Mpa
	5.5m3/min 10m3/min	9m3/min 15m3/min	20m3/min 28m3/min	26m3/min 34m3/min



# SPECIFICATION



## M SERIES

TECHNICAL SPECIFICATION	M30	M40	M50	M60	M80	NM5C
Length (without bit)	931 mm	1004 mm	1080 mm	1122 mm	1129 mm	1333 mm
Weight	23 kg	40.5 kg	62 kg	70.5 kg	91.5 kg	160.5 kg
Outer diameter	Ø82 mm	Ø99 mm	Ø114 mm	Ø126 mm	Ø144 mm	Ø180 mm
Connection Thread	API2 3/8"REG	API2 3/8"REG	API2 3/8"REG	API2 3/8"REG	API3 1/2"REG	API4 1/2"REG
Bit Shank	M30	M40	M50	M60	M80	NM5C
Hole Range	Ø90 - Ø115 mm	Ø110 - Ø135 mm	Ø125 - Ø146 mm	Ø136 - Ø155 mm	Ø152 - Ø203 mm	Ø195 - Ø245 mm
Working Pressure	1.0 - 1.7 Mpa	1.0 - 2.2 Mpa	1.0 - 2.5 Mpa	1.0 - 2.5 Mpa	1.0 - 2.8 Mpa	1.5 - 3.3 Mpa
Recommended rotation speed	30 - 50r/min	30 - 60r/min	30 - 60r/min	30 - 60r/min	25~50r/min	25~45r/min
Air consumption	1.0 Mpa 1.5 Mpa	1.0 Mpa 1.8 Mpa	1.0 Mpa 1.8 Mpa	1.0 Mpa 1.8 Mpa	1.0 Mpa 1.8 Mpa	1.0 Mpa 2.4 Mpa
	4m3/min 6.5m3/min	5m3/min 9m3/min	6m3/min 12m3/min	7m3/min 13m3/min	18m3/min 25m3/min	26m3/min 35m3/min




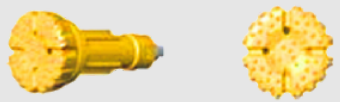
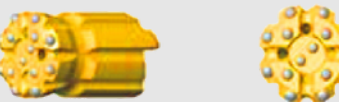


## SD SERIES

TECHNICAL SPECIFICATION	SD4	SD5	SD6	SD8	SD10	SD12
Length (without bit)	1082 mm	1178 mm	1277 mm	1463 mm	1413 mm	1825 mm
Weight	43 kg	73.6 kg	99 kg	194 kg	273 kg	589 kg
Outer diameter	Ø99 mm	Ø125 mm	Ø142 mm	Ø180 mm	Ø225 mm	Ø275 mm
Connection Thread	API2 3/8"REG	API2 3/8"REG	API3 1/2"REG	API4 1/2"REG	API5 1/2"REG	API6 5/8"REG
Bit Shank	SD4	SD5	SD6	SD8	SD10	SD12
Hole Range	Ø110 - Ø135 mm	Ø135 - Ø155 mm	Ø150 - Ø190 mm	Ø195 - Ø254 mm	Ø254 - Ø311 mm	Ø295 - Ø400 mm
Working Pressure	1.0 - 2.2 Mpa	1.0 - 2.5 Mpa	1.0 - 2.5 Mpa	1.5 - 3.3 Mpa	1.5 - 3.3 Mpa	1.5 - 3.3 Mpa
Recommended rotation speed	30 - 60r/min	30 - 60r/min	30 - 60r/min	30 - 60r/min	25~50r/min	25~50r/min
Air consumption	1.8 Mpa 2.4 Mpa	1.8 Mpa 2.4 Mpa	1.8 Mpa 2.4 Mpa	1.8 Mpa 2.4 Mpa	1.8 Mpa 1.4 Mpa	1.8 Mpa 2.4 Mpa
	5.5m3/min 10m3/min	9m3/min 15m3/min	20m3/min 28m3/min	26m3/min 34m3/min	40m3/min 60m3/min	50m3/min 70m3/min








## **HIGH PRESSURE DTH BITS**

## DRILL BIT DESIGN

<i>Flat Face Drill Bit</i>	<i>Convex Face Drill Bit</i>	<i>Convave Face Drill Bit</i>
		
<i>Convex-concave Face Drill Bit</i>	<i>Double Gauge Face Drill BIT</i>	<i>Drop-center Face Drill Bit</i>
		
<i>Protection Button Design</i>	<i>Back Button Design</i>	<i>Rocket Bit</i>
		


## CARBIDE BUTTON SHAPE SELECTION

<i>BUTTON SHAPE</i>	<i>PICTURE</i>	<i>APPLICATION</i>
Domed/Round Button		Domed/round buttons are usually used as gauge buttons of DTH bits, suitable for very abrasive and very hard formations.
Parabolic/Semi-Ballistic Button		Parabolic buttons are usually used as gauge buttons and front buttons of DTH bits, suitable for medium abrasive and hard formations.
Ballistic Button		Ballistic buttons are usually used as front buttons of dth bits, suitable for medium abrasive and medium hard formations. They can also be used as gauge buttons if the rock is soft.
Sharp Button		Sharp buttons are usually used as front buttons of DTH bits for soft formations, suitable for high rotation speed and low bit broken rate soft rock.
Flat Button		Flat buttons are usually used as protection buttons to reduce wear on rubbing surface of DTH bits.


# DHD SHANK DRILL BITS




## DHD 3.5

SPECIFICATION	HEAD SHAPE	HEAD DIAMETER	SHANK LENGTH	SPLINE	PORT HOLES	BUTTON QTY.PCS X DIA.MM			WEIGHT (KG)
						BUTTON TYPE (OPTIONAL)	GAUGE BUTTONS	FRONT BUTTONS	
	Flat Face	90	180	8	2	Spherical + Ballistic	6XØ14	4XØ12	4.7
	Flat Face	95	180	8	2	Spherical + Ballistic	6XØ14	4XØ12	4.8
	Flat Face	100	180	8	2	Spherical + Ballistic	6XØ14	4XØ12	4.9
	Flat Face	108	180	8	2	Spherical + Ballistic	6XØ13	4XØ12	5.4


## DHD 340

	Convex Face	108	209	8	2	Spherical + Ballistic	7XØ16	6XØ14	7.85
	Convex Face	115	209	8	2	Spherical + Ballistic	7XØ16	6XØ14	8.22
	Convex Face	127	209	8	2	Spherical + Ballistic	7XØ16	6XØ14+3XØ13	8.88
	Convex Face	130	209	8	2	Spherical + Ballistic	7XØ16	6XØ14+3XØ13	59.15


## DHD 350

	Convex Face	140	260	8	2	Spherical + Ballistic	7XØ18	4XØ15+3XØ14	15.8
	Flat Face	146	260	8	2	Spherical + Ballistic	8XØ18	8XØ14	16.5
	Flat Face	152	260	8	2	Spherical + Ballistic	8XØ18	8XØ14	17
	Convex Face	165	260	8	2	Spherical	8XØ18	4XØ16+4XØ14	18.9
	Convex Face	178	260	8	2	Spherical	8XØ18	6XØ16+5XØ14	20.4


## DHD 360

	Concave Face	154	308.5	8	2	Domed	8XØ18	4XØ16+4XØ15	22.5
	Flat Face	165	308.5	8	2	Domed	8XØ18	8XØ16	23.6
	Concave Face	171	308.5	8	2	Domed	8XØ18	6XØ16+4XØ15	25.2
	Concave Face	178	308.5	8	2	Domed	8XØ18	6XØ16+5XØ15	26.1
	Concave Face	190	308.5	8	2	Domed	9XØ18	6XØ16+5XØ15	29
	Concave Face	203	308.5	8	2	Domed	10XØ18	8XØ16+6XØ15	30.4

## DHD 380

	Concave Face	203	350	10	2	Domed	10XØ18	4XØ18+10XØ16	48.5
	Concave Face	216	350	10	2	Domed	10XØ18	4XØ18+10XØ16	52.1
	Concave Face	230	350	10	2	Domed	12XØ18	12XØ18+6XØ16	54.8
	Concave Face	235	350	10	2	Domed	12XØ18	12XØ18+6XØ16	55.5
	Concave Face	254	350	10	2	Domed	12XØ18	12XØ18+6XØ16	62.4
	Concave Face	275	350	10	2	Domed	12XØ18	27XØ16	69
	Concave Face	305	350	10	2	Domed	15XØ18	35XØ16	77.6


## DHD 1120

	Concave Face	305	490	8	3	Domed	15XØ20	27XØ18+8XØ16	141.3
	Concave Face	311	490	8	3	Domed	15XØ20	27XØ18+8XØ16	141.6
	Concave Face	325	490	8	3	Domed	15XØ20	27XØ18+9XØ16	164.3
	Concave Face	350	490	8	4	Domed	16XØ20	32XØ18+13XØ16	169.1
	Concave Face	381	490	8	4	Domed	16XØ20	36XØ18+18XØ16	183
	Concave Face	400	490	8	4	Domed	16XØ20	40XØ18+28XØ16	194
	Concave Face	445	490	8	4	Domed	20XØ20	48XØ18+25XØ16	225.7
	Concave Face	500	490	8	4	Domed	24XØ20	90XØ18	331.2

# QL SHANK DRILL BITS




## QL40

SPECIFICATION	HEAD SHAPE	HEAD DIAMETER	SHANK LENGTH	SPLINE	PORT HOLES	BUTTON QTY.PCS X DIA.MM			WEIGHT (KG)
						BUTTON TYPE (OPTIONAL)	GAUGE BUTTONS	FRONT BUTTONS	
	Convex Face	108	280	10	2	Domed + Ballistic	7XØ16	6XØ14	9.42
	Convex Face	115	280	10	2	Domed + Ballistic	7XØ16	6XØ14	9.5
	Convex Face	127	280	10	2	Domed + Ballistic	8XØ16	4XØ14+3XØ13	10.7
	Convex Face	130	280	10	2	Domed + Ballistic	8XØ16	4XØ14+3XØ13	10.9

## QL50

	Convex Face	140	240	12	2	Domed + Ballistic	7XØ18	4XØ15	15.3
	Flat Face	146	240	12	2	Domed + Ballistic	8XØ18	8XØ14	16
	Flat Face	152	240	12	2	Domed + Ballistic	8XØ18	8XØ14	16.5
	Concave Face	165	240	12	2	Domed	8XØ18	4XØ16+4XØ14	18.5
	Concave Face	178	240	12	2	Domed	8XØ18	6XØ16+5XØ14	20


## QL60

	Convex Face	154	253	12	2	Domed	8XØ18	4XØ16+4XØ15	22.5
	Flat Face	165	253	12	2	Domed	8XØ18	8XØ16	23
	Concave Face	171	253	12	2	Domed	8XØ18	6XØ16+4XØ15	24.4
	Concave Face	178	253	12	2	Domed	8XØ18	6XØ16+5XØ15	25.3
	Concave Face	190	253	12	2	Domed	9XØ18	6XØ16+5XØ15	26.5
	Concave Face	203	253	12	2	Domed	10XØ18	8XØ16+6XØ15	29.7


## QL680

	Convex Face	154	253	12	2	Domed	8XØ18	4XØ16+4XØ15	22.5
	Flat Face	165	253	12	2	Domed	8XØ18	8XØ16	23
	Concave Face	171	253	12	2	Domed	8XØ18	6XØ16+4XØ15	24.4
	Concave Face	178	253	12	2	Domed	8XØ18	6XØ16+5XØ15	25.3
	Concave Face	190	253	12	2	Domed	9XØ18	6XØ16+5XØ15	26.5
	Concave Face	203	253	12	2	Domed	10XØ18	8XØ16+6XØ15	29.7

## QL80

	Concave Face	203	331	16	2	Domed	10XØ18	4XØ18+10XØ16	48.2
	Concave Face	216	331	16	2	Domed	10XØ18	4XØ18+10XØ16	51.9
	Concave Face	230	331	16	2	Domed	12XØ18	12XØ18+6XØ16	54.7
	Concave Face	235	331	16	2	Domed	12XØ18	12XØ18+6XØ16	55.3
	Concave Face	254	331	16	2	Domed	12XØ18	12XØ18+8XØ16	62.2
	Concave Face	275	331	16	2	Domed	12XØ18	8XØ16+19XØ16	68.8
	Concave Face	305	331	16	2	Domed	15XØ18	12XØ16+23XØ16	77.3

## QL880

	Concave Face	203	331	16	2	Domed	10XØ18	4XØ18+10XØ16	48.2
	Concave Face	216	331	16	2	Domed	10XØ18	4XØ18+10XØ16	51.9
	Concave Face	230	331	16	2	Domed	12XØ18	12XØ18+6XØ16	54.7
	Concave Face	235	331	16	2	Domed	12XØ18	12XØ18+6XØ16	55.3
	Concave Face	254	331	16	2	Domed	12XØ18	12XØ18+8XØ16	62.2
	Concave Face	275	331	16	2	Domed	12XØ18	8XØ16+19XØ16	68.8
	Concave Face	305	331	16	2	Domed	15XØ18	12XØ16+23XØ16	77.3

# SD SHANK DRILL BITS



## SD4

SPECIFICATION	HEAD SHAPE	HEAD DIAMETER	SHANK LENGTH	SPLINE	PORT HOLES	BUTTON QTY.PCS X DIA.MM			WEIGHT (KG)
						BUTTON TYPE (OPTIONAL)	GAUGE BUTTONS	FRONT BUTTONS	
	Convex Face	108	260	8	2	Spherical + Ballistic	7XØ16	6XØ14	9
	Convex Face	115	260	8	2	Spherical + Ballistic	7XØ16	6XØ14	9.3
	Convex Face	127	260	8	2	Spherical + Ballistic	8XØ16	4XØ14+3XØ13	10.3
	Convex Face	130	260	8	2	Spherical + Ballistic	8XØ16	4XØ14+3XØ13	10.5

## SD5

	Convex Face	140	259	8	2	Spherical + Ballistic	7XØ18	4XØ15+3XØ14	15
	Flat Face	146	259	8	2	Spherical + Ballistic	8XØ18	8XØ14	15.8
	Flat Face	152	259	8	2	Spherical + Ballistic	8XØ18	8XØ14	16.1
	Concave Face	165	259	8	2	Spherical	8XØ18	4XØ16+4XØ14	18.2
	Concave Face	178	259	8	2	Spherical	8XØ18	6XØ16+5XØ14	19.6

## SD6

	Concave Face	154	322	8	2	Spherical	8XØ18	4XØ16+4XØ15	25
	Flat Face	165	322	8	2	Spherical	8XØ18	8XØ16	25.8
	Concave Face	171	322	8	2	Spherical	8XØ18	6XØ16+4XØ15	27.3
	Concave Face	178	322	8	2	Spherical	8XØ18	6XØ16+5XØ15	28.2
	Concave Face	190	322	8	2	Spherical	9XØ18	6XØ16+5XØ15	29.4
	Concave Face	203	322	8	2	Spherical	10XØ18	8XØ16+6XØ15	32.5

## SD8

	Concave Face	203	321	8	2	Spherical	10XØ18	4XØ18+10XØ16	41.3
	Concave Face	216	321	8	2	Spherical	10XØ18	4XØ18+10XØ16	45
	Concave Face	230	321	8	2	Spherical	12XØ18	12XØ18+6XØ16	47.8
	Concave Face	235	321	8	2	Spherical	12XØ18	12XØ18+6XØ16	48.4
	Concave Face	254	321	8	2	Spherical	12XØ18	12XØ18+8XØ16	55.3
	Concave Face	275	321	8	2	Spherical	12XØ18	27XØ16	62
	Concave Face	305	321	8	2	Spherical	15XØ18	35XØ16	70.5

## SD10

	Concave Face	254	356	8	2	Spherical	12XØ19	8XØ18+19XØ16	83.2
	Concave Face	275	356	8	2	Spherical	12XØ19	8XØ18+20XØ16	87.7
	Concave Face	305	356	8	3	Spherical	15XØ19	27XØ18+8XØ16	97.5
	Concave Face	325	356	8	3	Spherical	15XØ19	27XØ18+9XØ16	106
	Concave Face	350	356	8	4	Spherical	16XØ19	32XØ13+14XØ16	115.3
	Concave Face	400	356	8	4	Spherical	16XØ19	40XØ13+25XØ16	140.7

## SD12

	Concave Face	305	470	8	3	Spherical	15XØ20	27XØ18+8XØ16	146.5
	Concave Face	311	470	8	3	Spherical	15XØ20	27XØ18+8XØ16	147
	Concave Face	325	470	8	3	Spherical	15XØ20	27XØ18+9XØ16	156
	Concave Face	350	470	8	4	Spherical	16XØ20	32XØ18+13XØ16	166
	Concave Face	381	470	8	4	Spherical	16XØ20	36XØ18+18XØ16	184
	Concave Face	400	470	8	4	Spherical	16XØ20	40XØ18+28XØ16	199
	Concave Face	445	470	8	4	Spherical	20XØ20	48XØ18+25XØ16	237.5
	Concave Face	500	470	8	4	Spherical	24XØ20	90XØ189	293

# M SHANK DRILL BITS



## M30

SPECIFICATION	HEAD SHAPE	HEAD DIAMETER	SHANK LENGTH	SPLINE	PORT HOLES	BUTTON QTY.PCS X DIA.MM			WEIGHT (KG)
						BUTTON TYPE (OPTIONAL)	GAUGE BUTTONS	FRONT BUTTONS	
	Flat Face	90	225	8	2	Spherical + Ballistic	6XØ14	5XØ12	4.8
	Flat Face	95	225	8	2	Spherical + Ballistic	6XØ14	5XØ12	4.9
	Flat Face	100	225	8	2	Spherical + Ballistic	6XØ14	6XØ12	5.1
	Flat Face	108	225	8	2	Spherical + Ballistic	6XØ13	6XØ12	5.4

## M40

	Convex Face	108	228	12	2	Spherical + Ballistic	7XØ16	6XØ14	7.8
	Convex Face	115	228	12	2	Spherical + Ballistic	7XØ16	6XØ14	8.2
	Convex Face	127	228	12	2	Spherical + Ballistic	8XØ16	6XØ14+3XØ13	9.2
	Convex Face	130	228	12	2	Spherical + Ballistic	8XØ16	6XØ14+3XØ13	9.3

## M50

	Convex Face	140	260	12	2	Spherical + Ballistic	7XØ18	4XØ15+3XØ14	13.9
	Flat Face	146	260	12	2	Spherical	8XØ18	8XØ14	14.6
	Flat Face	152	260	12	2	Spherical + Ballistic	8XØ18	8XØ14	15
	Flat Face	165	260	12	2	Spherical + Ballistic	8XØ18	9XØ14	17
	Concave Face	178	260	12	2	Spherical	8XØ18	6XØ16+5XØ14	18.5

## M60

	Concave Face	154	231	12	2	Spherical	8XØ18	4XØ16+4XØ15	20.3
	Flat Face	165	231	12	2	Spherical	8XØ18	8XØ16	20.5
	Concave Face	171	231	12	2	Spherical	8XØ18	6XØ16+4XØ15	22
	Concave Face	178	231	12	2	Spherical	8XØ18	6XØ16+5XØ15	23
	Concave Face	190	231	12	2	Spherical	9XØ18	6XØ16+5XØ15	24
	Concave Face	203	231	12	2	Spherical	10XØ18	8XØ16+6XØ15	27.3

## M80

	Concave Face	203	329	12	2	Spherical	10XØ18	4XØ18+10XØ16	41.2
	Concave Face	216	329	12	2	Spherical	10XØ18	4XØ18+10XØ16	46
	Concave Face	230	329	12	2	Spherical	12XØ18	12XØ18+6XØ16	48.7
	Concave Face	235	329	12	2	Spherical	12XØ18	12XØ18+6XØ16	49.3
	Concave Face	254	329	12	2	Spherical	12XØ18	12XØ18+8XØ16	56.2
	Concave Face	275	329	12	2	Spherical	12XØ18	8XØ16+19XØ16	62.8
	Concave Face	305	329	12	2	Spherical	15XØ18	12XØ16+23XØ16	71.3

# N SHANK DRILL BITS & REAMING BIT



## N100

SPECIFICATION	HEAD SHAPE	HEAD DIAMETER	SHANK LENGTH	SPLINE	PORT HOLES	BUTTON QTY.PCS X DIA.MM			WEIGHT (KG)
						BUTTON TYPE (OPTIONAL)	GAUGE BUTTONS	FRONT BUTTONS	
	Concave Face	254	375	10	2	Domed	12XØ19	8XØ18+19XØ16	89
	Concave Face	275	375	10	2	Domed	12XØ19	8XØ18+20XØ16	93.5
	Concave Face	305	375	10	3	Domed	15XØ19	27XØ18+8XØ16	103.5
	Concave Face	325	375	10	3	Domed	15XØ19	27XØ18+9XØ16	112
	Concave Face	350	375	10	4	Domed	16XØ19	32XØ18+14XØ16	121
	Concave Face	400	375	10	4	Domed	16XØ19	40XØ18+25XØ16	146.5

## N125

	Concave Face	305	491	10	3	Domed	15XØ20	27XØ18+8XØ16	175.5
	Concave Face	311	491	10	3	Domed	15XØ20	27XØ18+8XØ16	176
	Concave Face	325	491	10	3	Domed	15XØ20	27XØ18+9XØ16	185
	Concave Face	350	491	10	4	Domed	16XØ20	32XØ18+13XØ16	200
	Concave Face	381	491	10	4	Domed	16XØ20	36XØ18+18XØ16	213
	Concave Face	400	491	10	4	Domed	16XØ20	40XØ18+28XØ16	228.5
	Concave Face	445	491	10	4	Domed	20XØ20	48XØ18+25XØ16	266.5
	Concave Face	500	491	10	4	Domed	24XØ20	90XØ18	322

## REAMING BIT

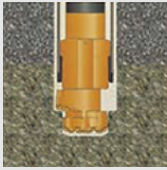
SPECIFICATION	SPECIFIC DETAILED SIZE												
		D (MM)	165	178	190	216	254	305	305	381	381	445	482
D1 (MM)		82	99	115	138	159	208	208	296	296	305	311	455
Gauge Button		16	16	18	18	18	18	20	20	20	20	22	22
Front Button		14	14	15	15	16	16	18	18	18	19	19	15
Shank		DHD340 QL40 M40 SD4		DHD350 QL50 M50 SD5		DHD360 QL60 M60 SD60		DHD380 QL80 M80 SD80		N100 SD10		DHD1120 N125 SD12	



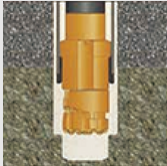


## CASING SYSTEMS

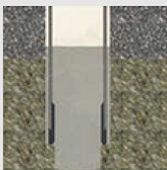
## ECCENTRIC CASING SYSTEM WORKING PRINCIPLE



1 Only PileCriter offers kelly bars with 930mm diameter, consisting from 5 sections, which are the largest kelly bars in the world.



2 When the required depth is reached, rotation is reversed carefully, where upon the reamer swings in. Allowing the drill bit assembly to be pulled up through the casing.



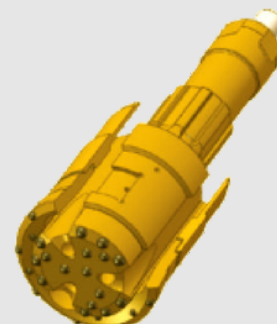
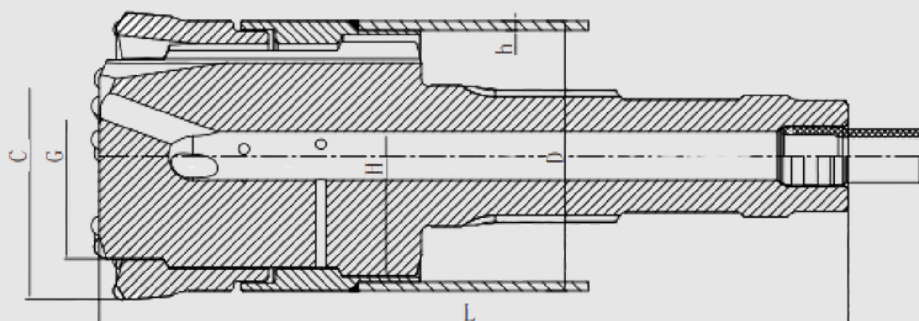
3 Casing tubes that are to be left in the drill hole should be sealed at the bottom of the hole by means of cement grout or some other sealing agent.



4 Drilling continues to the desired depth in the bedrock using a conventional drill string.


	MODEL	CASING TUBE O.D.	MAXIMUM O.D OF GUIDE DEVICE	BIT DIAMETER (BUTTONS INCLUDED)	CASING SHOE I.D.	MAXIMUM REAMING O.D.	HAMMER STYLE
	108	Ø108	Ø92	Ø84	Ø86	Ø118	3INCH
	114	Ø114	Ø100	Ø92	Ø94	Ø124	3INCH
	127	Ø127	Ø110	Ø100	Ø102	Ø136	3 4INCH
	146	Ø146	Ø124	Ø115	Ø117	Ø156	4INCH
	168	Ø168	Ø146	Ø134	Ø138	Ø178	5INCH
	178	Ø178	Ø156	Ø144	Ø148	Ø193	5INCH
	183	Ø183	Ø160	Ø144	Ø152	Ø193	5INCH
	194	Ø194	Ø178	Ø165	Ø167	Ø208	6INCH
	219	Ø219	Ø203	Ø189	Ø193	Ø237	6~7INCH
	245	Ø245	Ø220	Ø206	Ø210	Ø260	6~8INCH
	273	Ø273	Ø256	Ø238	Ø242	Ø308	8INCH
	325	Ø325	Ø297	Ø280	Ø285	Ø355	8~10INCH
377	Ø377	Ø351	Ø328	Ø333	Ø420	10~12INCH	

## CONCENTRIC CASING SYSTEM




SPECIFICATION								
	D		h	H	C	G		
MODEL	OD OF CASING TUBE (MM)	ID OF CASING TUBE (MM)	THICKNESS (MM)	MAX OD. OF PILOT BIT (MM)	RING BIT OD (MM)	MAX OD. OF NORMA BIT (MM)	MATCHED DTH HAMMER	WEIGHT (KG)
P108/7 - 7.5	108	94	7	92	118	75	DHD3.5	10.1
P114/6.5 - 82	114	101	6.5	99	126	82	DHD3.5	13.8
P127/9.5 - 86	127	108	9	106	138	86	DHD3.5	18
P140/9 - 101	140	118	10	120	151	101	DHD340/SD4/QL40	21
P146/10 - 105	146	126	10	124	156	105	DHD340/SD4/QL40	23.5
P168/10 - 125	168	148	10	146	184	125	DHD350/SD4/QL40	27.5
P178/10 - 140	178	158	10	156	192	140	DHD350/SD5/QL50/M50	42
P194/10 - 148	194	174	10.5	172	206	148	DHD360/SD6/QL60/M60	57.5
P219/10.5 - 170	219	198	12.7	196	234	170	DHD360/SD6/QL60/M60	75
P245/12.7 - 186	245	219.6	12.7	218	260	186	DHD380/SD8/QL80	105
P273/12.7 - 203	273	247.6	12.7	245	298	203	DHD380/SD8/QL80	122
P325/12.7 - 255	325	299.6	12.7	295	350	255	DHD380/N100	135
P406/12.7 - 340	406	380.6	12.7	378	438	340	DHD112/QL120/SD12/N120	420
P508/12.7 - 445	508	482.6	12.7	478	538	445	SD18/N180/TH18K	522
P560/12.7 - 495	560	534.6	12.7	521	580	495	SD18/N180/TH18K	608

## SLIDE BLOCK CASING SYSTEM

	MODEL	CASING OD (MM)	MAXIMUM OD OF CENTER BIT	CASING SHOE ID	MAXIMUM OD OF REAMING	HAMMER TYPE
	146	Ø146	Ø123	Ø115	Ø156	4INCH
	168	Ø168	Ø146	Ø140	Ø185	5INCH
	178	Ø178	Ø156	Ø150	Ø193	5INCH
	183	Ø183	Ø160	Ø154	Ø193	5INCH
	194	Ø194	Ø178	Ø166	Ø211	6INCH
	219	Ø219	Ø203	Ø193	Ø237	6~7INCH
	245	Ø245	Ø220	Ø210	Ø260	6~8INCH
	273	Ø273	Ø251	Ø241	Ø308	8INCH
	325	Ø325	Ø298	Ø281	Ø378	8~10INCH
	377	Ø377	Ø350	Ø335	Ø430	10~12INCH
	406	Ø406	Ø380	Ø363	Ø426	12INCH
	560	Ø560	Ø530	Ø511	Ø590	18INCH
610	Ø610	Ø582	Ø556	Ø640	18INCH	

## OVERBURDEN WING BIT

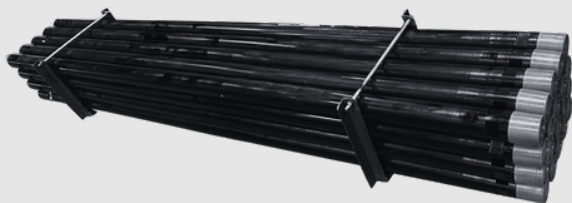
	MODEL	CASING OD (MM)	MAXIMUM OD OF CENTER BIT	CASING SHOE ID	MAXIMUM OD OF REAMING	HAMMER TYPE
	146	Ø146	Ø123	Ø115	Ø156	4INCH
	168	Ø168	Ø146	Ø140	Ø185	5INCH
	178	Ø178	Ø156	Ø150	Ø193	5INCH
	183	Ø183	Ø160	Ø154	Ø193	5INCH
	194	Ø194	Ø178	Ø166	Ø211	6INCH
	219	Ø219	Ø203	Ø193	Ø237	6~7INCH
	245	Ø245	Ø220	Ø210	Ø260	6~8INCH
	273	Ø273	Ø251	Ø241	Ø308	8INCH
	325	Ø325	Ø298	Ø281	Ø378	8~10INCH
	377	Ø377	Ø350	Ø335	Ø430	10~12INCH

**OTHER**

# DTH PIPE AND CASING TUBE




## DTH PIPE




DRILL PIPE DIAMETER		THREAD MODEL	STEEL PIPE GRADE	PIPE WALL THICKNESS (MM)	UPSET TYPE	PIPE LENGTH (MM)
inch	mm					
3	76	2 3/8 REG	R780, G105, S135	6, 8	IU	1000-5000
3 1/2	89	2 3/8 REG(IF)	R780, G105, S135	6.5, 8	IU	1000-5000
4	102	2 7/8 IF	R780, G105, S135	8, 9.19	IU	1000-5000
4 1/4	108	2 7/8 IF	R780, G105, S135	8, 9.19	IU	1000-5000
4 1/2	114	2 7/8 IF	R780, G105, S135	8, 10	IU	1000-6000
5	127	3 1/2 IF	R780, G105, S135	8, 10, 12	IU	1000-6000

## CASING TUBE

	MAIN DIMENSIONS			MATERIAL
	SPECIFICATION	OUTER DIAMETER	WALL THICKNESS	
	Ø73	Ø73	4	DZ40-DZ55
	Ø89	Ø89	4.5	DZ40-DZ55
	Ø108	Ø108	4.5	DZ40-DZ55
	Ø127	Ø127	4.5	DZ40-DZ55
	Ø146	Ø146	5	DZ40-DZ55
	Ø168	Ø168	6	DZ40-DZ55

# ADAPTERS

## PIN-BOX ADAPTERS

<i>PIN-BOX ADAPTERS</i>	<i>NUMBER</i>	<i>MODEL</i>	<i>SIZE A</i>	<i>SIZE B</i>	<i>SIZE C</i>	<i>WRENCH FLAT D (MM)</i>
	1	2-3/8M-2-3/8F	25	45	Ø78	57
	2	2-3/8IFM-2-3/8F	25	45	Ø89	70
	3	2-3/8IFM-2-3/8IFF	25	45	Ø89	70
	4	2-3/8M-2-7/8F	25	45	Ø102	70
	5	2-7/8IFM-2-7/8IFF	25	45	Ø108	85
	6	3-1/2M-3-1/2F	25	45	Ø114	95

## PIN-PIN ADAPTERS

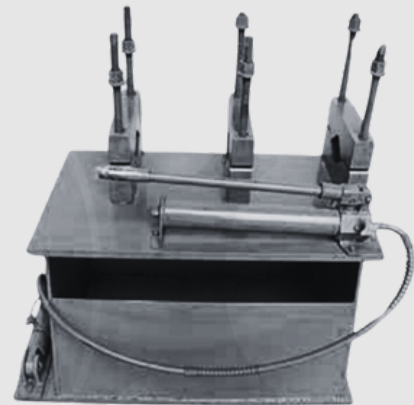
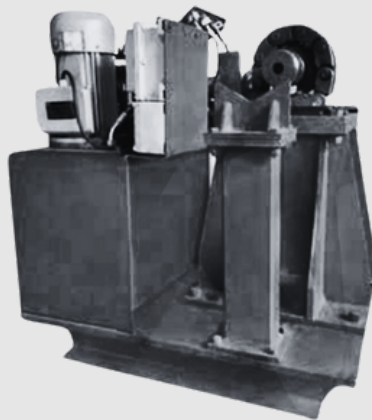
<i>PIN-PIN ADAPTERS</i>	<i>NUMBER</i>	<i>MODEL</i>	<i>SIZE A</i>	<i>SIZE B</i>	<i>SIZE C</i>	<i>WRENCH FLAT D (MM)</i>
	1	2-3/8M-2-3/8M	21	45	Ø89	70
	2	3-1/2M-3-1/2M	23	50	Ø114	95
	3	3-1/2M-4-1/2M	30	50	Ø140	102
	4	4-1/2M-4-1/2M	30	50	Ø140	102

## BOX-BOX ADAPTERS

<i>BOX-BOX ADAPTERS</i>	<i>NUMBER</i>	<i>MODEL</i>	<i>SIZE A</i>	<i>SIZE B</i>	<i>SIZE C</i>	<i>WRENCH FLAT D (MM)</i>
	1	2-3/8F-2-3/8F	97	45	Ø89	70
	2	2-3/8F-2-7/8F	115	50	Ø102	85
	3	2-3/8IFF-3-1/2F	102	50	Ø114	95
	4	2-7/8F-3-1/2F	122	50	Ø114	95

## SPECIFICATION

MODEL	LENGTH (WITHOUT BIT)	WEIGHT	OUTER DIAMETER	CONNECTION THREAD	WORKING PRESSURE
BH140	420 mm	34 kg	Ø155 mm	API 2 3/8"REG	0.8 - 1.7 Mpa
BH170	606 mm	64.5 kg	Ø190 mm	API 3 1/2"REG	0.8 - 2.5 Mpa
BH190	560 mm	84.5 kg	Ø220 mm	API 3 1/2"REG	0.8 - 3.0 Mpa
BH240	600 mm	123.5 kg	Ø240 mm	API 4 1/2"REG	0.8 - 3.5 Mpa



## BREAKOUT BENCH





- 1 Put hammer in the bench.
- 2 Adjust hammer and wrench to make wrench block at top sub; let wrench and jack be in the same plane.
- 3 Fix K-shaped base with nut.
- 4 Fix wrench with nuts.
- 5 Sway jack handle slowly to unlink hammer.
- 6 After top sub dismantled, grease jack, release nuts discharge K-shaped base and turn around hammer
- 7 Adjust hammer and wrench to make wrench block drive chuck; let wrench and jack be in the same plane.
- 8 Adjust hammer
- 9 Fix K-shaped base and wrench with nuts.
- 10 Sway jack handle slowly to unlink hammer.



## RC HAMMER

MODEL	RE004	RE542	PR52	PR542R
Length (without bit)	1252 mm	1192 mm	1208 mm	1294 mm
Weight	53 kg	55 kg	75.2 kg	81 kg
Outer diameter	Ø107 mm	Ø110 mm	Ø126 mm	Ø130 mm
Connection Thread	4"Remet	4"Remet	4 1/2"Remet	4 1/2"Remet Thread
Bit Shank	RE004	RE542	PR52	PR54R
Hole Range	Ø112 - Ø127 mm	Ø113 - Ø130 mm	Ø130 - Ø146 mm	Ø135 - Ø150 mm
Working Pressure	1.2 - 2.5 Mpa	1.2 - 2.5 Mpa	1.5 - 3.0 Mpa	1.5 - 3.0 Mpa
Recommended rotation speed	30 ~ 60r/min	30 ~ 60r/min	30 ~ 60r/min	30 ~ 60r/min
Air consumption	1.8 Mpa 2.4 Mpa	1.8 Mpa 2.4 Mpa	1.8 Mpa 2.4 Mpa	1.8 Mpa 2.4 Mpa
	8.5m3/min 12m3/min	12m3/min 18m3/min	16m3/min 22m3/min	16m3/min 22m3/min

## RC BIT

SPECIFICATION	HEAD SHAPE	HEAD DIAMETER	SHANK LENGTH	SPLINE	FLUSHING HOLE	BUTTON QTY.PCS X DIA.MM			WEIGHT (KG)
						BUTTON TYPE (OPTIONAL)	GAUGE BUTTONS	FRONT BUTTONS	
	<b>RE004</b>								
	Drop-center Face	115	271	8	2	Dommed Button	8XØ14	4XØ14+4XØ13	11.5
	Drop-center Face	121	271	8	2	Dommed Button	8XØ14	4XØ14+4XØ13	12.1
	Drop-center Face	124	271	8	2	Dommed Button	8XØ16	4XØ14+2XØ14	12.3
	<b>PR542</b>								
	Drop-center Face	121	225	8	2	Dommed Button	8XØ14	4XØ14+4XØ13	10.7
	Drop-center Face	124	225	8	2	Dommed Button	8XØ14	4XØ14+4XØ13	11
	Drop-center Face	127	225	8	2	Dommed Button	8XØ16	4XØ14+2XØ14	11.2
	<b>RE52</b>								
	Drop-center Face	133	282	8	2	Dommed Button	8XØ16	6XØ16+2XØ14	16.5
	Drop-center Face	136	282	8	2	Dommed Button	8XØ16	6XØ16+2XØ14	16.7
	Drop-center Face	140	282	8	2	Dommed Button	8XØ16	6XØ16+3XØ14	16.9
	<b>RE54R</b>								
	Drop-center Face	136	261	8	2	Dommed Button	8XØ16	6XØ16+2XØ14	18.3
	Drop-center Face	140	261	8	2	Dommed Button	8XØ16	6XØ16+3XØ14	18.5
	Drop-center Face	143	261	8	2	Dommed Button	8XØ16	6XØ16+3XØ14	18.7
	Drop-center Face	146	261	8	2	Dommed Button	8XØ16	6XØ16+3XØ14	18.9
	Drop-center Face	165	261	8	2	Dommed Button	8XØ18	6XØ16+4XØ16	20
Drop-center Face	178	261	8	2	Dommed Button	8XØ18	6XØ16+4XØ16	22.5	

## AIR-LIFT REVERSE CIRCULATION DOUBLE-WALL DRILL PIPE

TYPE	O.D. OF THE OUTER TUBE	I.D. OF THE INNER TUBE	OUTER DIAMETER OF JOINT	TYPE OF THREADS	EFFECTIVE LENGTH
PA114/65	114	65	156	41F	6
PA127/76	127	76	162/168	41/21F	6, 9.5
PA127/76	127	76	184	51, 2FH	9.5
PA140/88	139.7	88	184	51/2FH	6, 9.5
PA219/130	219	130	240		6, 9.5

## CSR DOUBLE WAL DRILL PIPE

TYPE	O.D. OF THE OUTER TUBE	I.D. OF THE INNER TUBE	OUTER DIAMETER OF JOINT	TYPE OF THREADS	EFFECTIVE LENGTH
PA76/32	76	32	78	3" Remet	3
PA102/41	102	41	103	4" Remet	3, 6
PA114/52	114.3	52	116	4 1/2" Remet	3, 6
PA114/38	114.3	38	114.3	4 1/2" Metzke	3, 6
PA114/50	114.3	50	114.3	4 1/2" Remet	3, 6

## DOUBLE WAL DRILL PIPE FOR COAL MINE

TYPE	O.D. OF THE OUTER TUBE	I.D. OF THE INNER TUBE	OUTER DIAMETER OF JOINT	EFFECTIVE LENGTH
PA50/20	50	20	50	1, 1.5
PA73/35	73	35	73	1, 1.5
PA89/40	89	40	89	1, 1.5



# LOW AND MIDDLE PRESSURE DTH TOOLS



## LOW PRESSURE DTH HAMMER

TYPE	LENGTH (MM)	TOP SUB THREAD	OUT DIA (MM)	WEIGHT (KG)	BIT DLA (MM)	WORKING PRESSURE (BAR)	AIR CONSUMPTION (M3/MIN)
CIR50	62B	F32*8PIN	44	5	50	4-10	4-8
CIR65	745	F42*10PIN	61	13	65	4-10	6-10
CIR76	811	F48*10PIN	66	13.5	76	4-10	6-10
CIR90	855	F48*10PIN	80	22	90-120	4-12	8-12
CIR110	871	API 2 3/8 REG BOX	98	33	110-150	6-10	8-12
CIR130	890	API 2 3/8 REG BOX	112	48.5	130-175	6-12	8-12
CIR150	904	F70*10PIN	136	70	150-200	6-12	10-16
CIR170	1030	F100*28PIN	156	96	170-250	8-14	12-18
CIR200	1058	F100*28PIN	182	130	200-250	8-14	16-20

## LOW PRESSURE DTH BIT

DIA (MM)	BUTTON			FLUSHING HOLE	SPLINE	WEIGHT (KG)	SUITABLE HAMMER
	GAUGE	GAUGE-FRONT	FRONT				
76	5-13	3-12		2	44*4	2.5	CIR76
90	6-14	4-12		3	54*6	3.5	CIR90
100	6-14	3-13	2-12	2	54*6	3.7	CIR90
110	6-14	2-13	3-12	2	65*6	6.3	CIR110
120	6-14	5-13	2-13	3	65*6	6.8	CIR110
130	6-14	7-13	2-13	3	65*6	7.5	CIR110
150	9-16	6-16	4-14	3	90*6	18	CIR150
175	9-16	6-14	9-14	3	98*6	22	CIR170
210	15-18	7-16	2-16	3	120*6	30	CIR200

## MIDDLE PRESSURE DTH HAMMER

DTH HAMMER TYPE	LENGTH (WITH OUTBIT) MM	WEIGHT (WITH OUTBIT) KG	EXTERNAL DIAMETER (MM)	HOLE RANGE (MM)	CONNECTION THREAD	WORKING PRESSURE	RECOMMENDED ROTATION SPEED
BR1	760	10	Ø54	Ø64-76	Rd40 Box	0.7 - 1.75 Mpa	25-40r/min
BR2	880	14.5	Ø62	Ø70-90	Rd50 Box	0.7 - 1.75 Mpa	25-40r/min
BR3	889	26	Ø82	Ø90-110	API2 3/8"REG	0.7 - 1.75 Mpa	25-40r/min

# GRINDING TOOLS



## BUTTON BIT GRINDER



Type	PAQ120B
Rotation speed	20000rpm
Motor power	1.5kW
Working air pressure	5-7 bar (100 psi)
Air consumption	2.0 m3min (80ft3/min)
Max. water pressure	4 bar (60 psi)
Air hose diameter	19 min
Water hose diameter	6 mm
Weight excl. packaging	3.5 kg
Weight incl. packaging	6 kg
Sound level	92dB(A)
Transport dimensions	320*280*150 mm

## GRINDING CUP

FOR REDRESSING	SPHERICA BUTTON	BALLISTIC BUTTON	STEEL REMOVAL	CHUCK NUT	SUITABLE FOR
8 mm King (shoulder) drive with 8 mm diameter shaft					Atlas copco LS machines Older CME machines Jasco, Dorey nad Greenx grinding machines
9 mm Sandvik wing (shoulder) drive (sanddrive), with 9 mm diameter shaft					All Sandvik grinding machines using grinding cup such as Sanbee SanconeMicra/Flexi/Mni n/Multi grinders
Atlas (55 Drive)					Most of Atlas Copco grinder
CME drive (premium super diaroc HD)					CME machines

## **We will cater our service to the needs of your company.**

We are committed to catering to each client's specific needs, offering the flexibility to discuss and arrange dedicated stock on a case-by-case basis.

Our team excels in tailoring solutions to meet unique project requirements, ensuring that every client receives exactly what they need.

With a focus on personalised service and adaptability, we are dedicated to providing customised solutions that align precisely with your unique business and project demands.



## Connect with us for a personalised service.

Reach out to be assigned your dedicated account manager, ready to assist with all your project needs:

Tel: +371 200 20 375

E-mail: [info@pilecritter.com](mailto:info@pilecritter.com)

[www.pilecritter.com](http://www.pilecritter.com)

