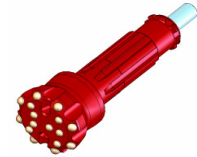




ROCKMORE INTERNATIONAL
Rock Drilling Tools



3-1/2" API IF Pin
Top Sub With Back Reaming Buttons
Heavy Duty Diameter
Lower Air Consumption

DTH HAMMER **ROK 650M-002**

Blast Hole / Mining Applications

Recommended Bit Diameter
165 - 178mm [6.5" - 7.0"]

Suited for in-hole Bit / Driver Sub disassembly



Features:

- Suited for in-hole Bit / Driver Sub disassembly
- Double-lead Top Sub Thread Design
- Triple-lead Driver Sub Thread Design
- Ultra High Performance Design
- Lower Air Consumption
- Higher Efficiency
- Integrated SonicFlow Technology
- Patented Innovations
- Superior Penetration Rates
- Reduced Number of Components
- Easy Assembly / Maintenance
- Advanced Materials / Heat-Treatment
- Extended Service Life

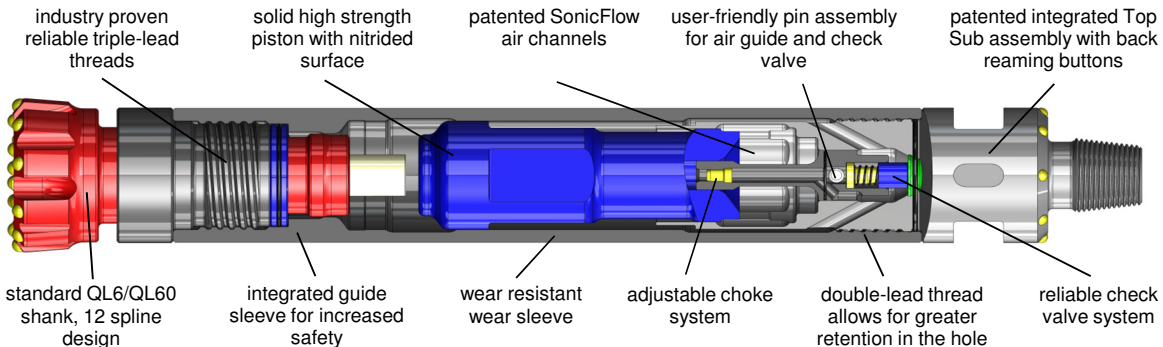
SonicFlow Technology greatly improves the air flow characteristics within the ROK hammer and ensures that the high pressure air paths are optimized to deliver greater energy to the piston. This is achieved by incorporating scientific air flow concepts in the design of the hammer and its various components such as the Top Sub, Piston, and Wear Sleeve. This technology results in more impact energy to the bit and produces higher penetration rates and better overall hammer performance.



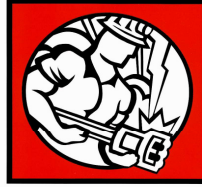
Applications:

- Blast Hole / Mining
- Construction / Quarry

Innovative Design Features



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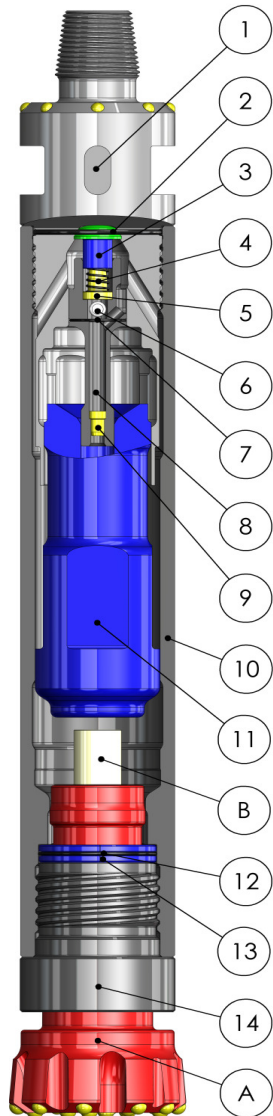


**Integrated SonicFlow
Technology**

ROK 650M-002

Suited for in-hole Bit / Driver Sub
disassembly

Parts List



Patented

Item	Part Number	Description
	ROK 650M-002	DTH Hammer, 650M, QL6/QL60, 3-1/2" API IF Pin
1	650TS-002	Top Sub, 3-1/2" API IF Pin with Back Reaming Buttons
2	R2-349	O-Ring, 4.475" X 0.210"
3	CV-001	Check Valve
4	SP-001	Spring
5	SR-002	Spring Rest
6	PN-001	Pin, 0.625" Dia, 4.5" L
7	R2-135	O-Ring, 1.925" X 0.103"
8	AG-001	Air Guide
9	CH-005	Choke, Nylon
10	650AWS-002	Wear Sleeve
11	PT-014	Piston
B	BTQL6-1014	QL6/QL60 Blow Tube
12	R2-236	O-Ring, 3.234" X 0.139"
13	BR-001	Bit Retainer Ring
14	650DS-002	Driver Sub
A	DTH Bit	QL6/QL60 Shank
	CHSET-002	Choke Set, Nylon, 1 each of CH-006 - 1/16" (2mm), CH-007 - 1/8" (3mm), CH-008 - 3/16" (5mm)

Operating Parameters

Air Pressure	Air Consumption
10.4 Bar [150 PSI]	7.4 m ³ /min [269 SCFM]
17.2 Bar [250 PSI]	16.7 m ³ /min [606 SCFM]
24.1 Bar [350 PSI]	26.5 m ³ /min [962 SCFM]
Oil consumption at 24.1 Bar (350 PSI):	0.7 l/hr [0.2 gallon/hr]
Recommended rotation speed:	15 r/min to 60 r/min
Minimum diameter difference between wear sleeve and bit:	12 mm [0.47"]

Technical Specifications

Standard Top Sub	3-1/2" API IF Pin
Bit shank type	QL6/QL60
Recommended bit diameter, mm [in]	165 to 178 [6.5 to 7.0]
Outside diameter, mm [in]	149 [5.9]
Wear sleeve discard diameter, mm [in]	129 [5.1]
Wrench flat size on Top Sub, mm [in]	95 [3.74]
Length without drill bit, mm [in]	1038 [40.9]
Weight without drill bit, kg [lbs]	88 [194.0]

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