





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

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

DTH HAMMER

ROK 650A-005



Features:

- 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

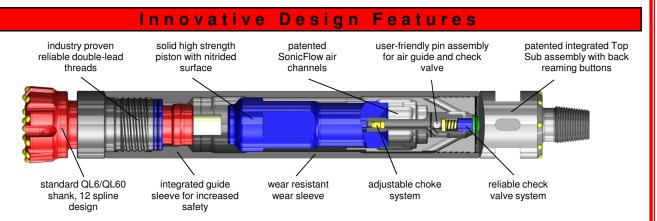
SonicFlow Technology greatly improves the air flow characteristics within the ROK hammer and ensures that the high pressure air paths are optimized to deliver greater energy to the

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 better and overall hammer performance.



Applications:

- Mining / Blast Hole
- Geothermal
- Construction / Quarry
- Water-Well



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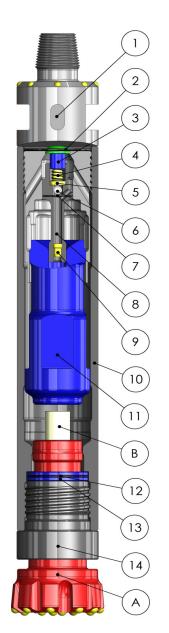
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Integrated SonicFlow Technology

ROK 650A-005



Patented

Parts List					
Item	Part Number	Description			
	ROK 650A-005	DTH Hammer, 650A, 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-001	Wear Sleeve			
11	PT-014	Piston			
В	BTQL6-1014	QL6/QL60 Blow Tube			
12	R2-236	O-Ring, 3.234" X 0.139"			
13	BR-001	Bit Retainer Ring			
14	650DS-001	Driver Sub			
Α	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 Consu	mption		
1	0.4 Bar [150 PSI]	7.4 m3/min [269	SCFM]		
1	7.2 Bar [250 PSI]	16.7 m3/min [60	06 SCFM]		
2	4.1 Bar [350 PSI]	26.5 m3/min [96	62 SCFM]		
Oil consumption a	t 24.1 Bar (350 PSI):		0.7 l/hr [0.2 gallon/hr]		
Recommended rot	ation 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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