



TriTornado Multi-Stage Hole Opener Drilling Tools

Features

- Maximum body weight
- Smooth transition on body OD
- Spiral skirt blades and pilot blades
- Offset Cutters
- Unitized saddles
- Upward facing nozzles
- Reinforced hardfacing on vulnerable areas

Benefits

- Solid integral body and skirt area ensures stability and optimum weight on bit
- Maintaining smooth OD along the length of the body reduces chances of cutting build up and packing off
- Spiral skirt blades encourage directional flow and removal of cuttings
- Spiral pilot blades promote turbulent flow and hole cleaning
- Cutters positioned in an offset manner ensuring a more aggressive cutting effect
- Unitized saddles provide for easy replacement and can accommodate various cutter types
- Strategically placed upward nozzles encourage flow and ensure cutters stay free of debris
- Vulnerable areas are protected by Hunting proprietary wear resistant hardfacing (HHF001)
- Hunting proprietary design, manufactured in house

Hunting's proprietary designed TriTornado Hole Opener is specifically designed to optimize surface hole drilling performance. Efficiently crushing rocks, the solid integral body and skirt ensures maximum stability and weight on bit.

The smooth transition on the body OD reduces the chances of debris build up and packing off. The spiral body blades and pilot blades encourage directional/turbulent flow, removal of cuttings/debris and excellent hole cleaning.

This unique hole opener has offset positioned cutters to allow a more aggressive cutting effect and strategically placed upward facing nozzles to encourage flow and ensure the cutters stay free of debris. The nozzles are held in retainers and are not machined as part of the integral body, enabling easy replacement and preventing body damage from washing.

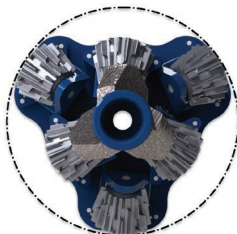
All vulnerable areas are protected by Hunting proprietary durable hardfacing, HHF001, minimizing damage.

→ **For technical information please see overleaf.**



TriTornado Multi-Stage Hole Opener

Technical Information



Specifications / Dimensions

Approx. Weight (Incl. Cutters)	4.5 Tonnes
Pilot Hole Diameter	17 1/2"
Stage 1 Hole Opener Diameter	26"
Stage 2 Hole Opener Diameter	36"
Pin Connection	7 5/8" Regular
Box Connection	7 5/8" Regular
Fishing Neck Diameter	9 1/2"
Tong Neck Diameter	9 1/2"
Inside Diameter	3"
Fishing Neck Length (at new)	72"
Tong Neck Length (at new)	19"
Overall Length (at new)	191"
Pilot Hole Upset Length	14"
Stage 1 Upset Length	8"
Stage 2 Upset Length	14"
Stage 1 Cutter Quantity	3
Stage 2 Cutter Quantity	3
Cutter Type (other types available)	Milled Tooth
Bearing Type (other types available)	Sealed Roller
Nozzle Quantity	6
Nozzle Direction	Upwards
Saddle Type (replaceable)	Security

Recommended Operating Parameters

Maximum Flow Rate	2,500 GPM
Minimum Flow Rate	250 GPM
Rotary Speed	50-150 RPM
Weight on Hole Opener	12,000 to 30,000 lbs

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