

# **MINCON HDD Drilling Range**

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**MINCON HDD Pullreamer Range** 





The Driller's Choice



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#### **The Mincon HDD Story**

In 2002 Mincon, in collaboration with leading industry profession-als, started design and manufacturing of a range of pneumatically powered horizontal directional drilling systems to service the trenchless utility industry. Since then the tools have become the benchmark for steerable drilling systems in medium to hard rock where conventional directional drilling systems struggle.

The Mincon Hard Rock Range offers the most complete line of steerable hammer systems on the market, covering pilot holes from 3 ½" (89mm) to 9 ¼" (235mm) the tools can be used on mini class HDD machines to large Pipeline Class machines. With the Mincon Hard Rock Support Station and hosing any conventional HDD machine can be converted for rock drilling. The sonde carriage can be easily adapted to your existing locating equipment.

Utilizing "High Frequency Cycle" technology Mincon hammer systems provide many benefits to the contractor. Small chip produc-tion and faster material removal from the bit face keeps the bore hole cleaner and reduces the possibility of getting stuck. With less vibration to the drill string you ensure less wear and tear to the rig ensure less wear and tear to the rig and locating sonde. Steering capa-bilities are greatly improved and in head to head tests against other competitor manufacturers the Mincon Hard Rock systems out steered in dirt, cobble and solid rock

Mincon offers the revolutionary Pull Reamer system. Once the pilot hole has been drilled, the pilot hammer and sonde is removed and the Mincon Pull Reamer is attached to the drill string. The Pull Reamer is then drawn back towards the drill machine and the system is capable of hammer reaming from 7" (178mm) to a maximum of 14" (356mm). This innovative reaming method is the fastest way to ream a rock bore and is vastly superior to conven-tional methods in all rock conditions.

The philosophy at Mincon is to provide world-class products, training, service and support. We like to think that we are with you from beginning to end. The Mincon Hard Rock Horizontal Directional Drilling Range are the only systems available that can offer the contractor the peace of mind that comes with superior mind that comes with superior performance, reliability, innova-tion and complete support. Be wary of imitators that promise the world but just can't deliver.

#### Mincon HDD Pull Reamer Features

The Mincon range of HDD Pull Reamer Hammers is the only pneumatic hammers being employed in the HDD industry and is designed around proven technology and redefines the performance scale when compared to other conventional HDD reaming tools on the market. While providing the most complete range of pilot hammers, Mincon also provides their world class design and technology including:

- Patented reverse air flow hammer cycle allows for pull reaming of a pilot bore of 3-1/2" (89mm) out to 7-8" (178-203mm) and 4-1/4" (108mm) out to 9" (229mm) and pull reaming of a pilot bore of 5 1/4" (133mm) out to 10-12" (254-305mm) and 6 1/4" (159mm) out to 14" (356mm) on the HDD80PR.
- A range of bits are offered with different grades of standard carbide and diamond enhanced carbide to maximize bit life in every drilling condition.
- High pressure/high volume compressed air powers reaming operations and requires minimal torgue and feed pressure loads on drill machine increasing overall life of drill.
- Attachments can be used to pull utilities as the hole is reamed.
- Water injection system delivers compressed air mixed with a water/polymer/foam (0-5 gal/min) and rock drill oil (2-4 pints/min) to operate the drilling cycle. This results in minimal, environmentally friendly cleanup. This solution can be used in environmentally sensitive locations using Mincon's Envirosafe RDO, a biodegradeable rock drilling oil.

## P E C I F I C A T I O N

Mincon HDD Hammer Model		Mincon HDD70PR			Mincon HDD80PR				
Drill Bit Shank Type		HDD70PR			HDD80PR				
Hammer Outside	Metric	165mm			230mm				
Diameter	Imperial	6.5"			9.06"				
Hammer Length	Metric	1301mm			1550mm				
(Less Drill Bit)	Imperial	51.2"			61"				
Backhead Spanner	Metric	150mm			171.5mm				
(Flat Size)	Imperial	5.91"			6.75"				
Pilot Bit Size	Metric	89mm	108mm	133mm	133mm	159mm	184mm	235mm	305mm
	Imperial	3.5"	4.25"	5.25"	5.25"	6.25"	7.25"	9.25"	12"
Remaer Bit Size	Metric	178-203	178-229	178-229	254-305	254-356	254-356	356-406	406mm
	Imperial	7"-8"	7"-9"	7"-9"	10"-12"	10"-14"	10"-14"	12"-16"	16"
Rod Adapter OD	Metric	83mm	102mm	127mm	127mm	127mm	153mm	222mm	273mm
	Imperial	3.25"	4"	5"	5"	5"	6"	8.75"	10.75"
Rod AdapterThread	API Reg Pin	2 3/8"API R.P	2 7/8"API R.P	3 1/2"AP IR.P	3 1/2"API R.P	3 1/2"API R.P	3 1/2"API R.P	3 1/2"API R.P	3 1/2"API R.P
Backhead Thread	API Reg Pin	3 1/2"API Reg Pin			3 1/2"API Reg Pin				
Hammer Weight	Metric	130kg			184.5kg				
Less Bit	Imperial	301 lbs			406 lbs				
Piston Weight	Metric	15.9kg			26.3kg				
	Imperial	35 lbs			58 lbs				
Recommended Min	Metric	1529m³ @ 24.1 bar			1529m³ @ 24.1 bar				
Air Less 250ft	Imperial	900cfm @ 350psi			900cfm @ 350psi				
Recommended Min	Metric	2125m³ @ 24.1 bar			2125m³ @ 24.1 bar				
Over 250ft	Imperial	1250cfm @ 350psi			1250cfm @ 350psi				

<sup>1</sup> Drilling conditions and project specifications may require larger air package to be used. Maximum operating pressure of 500 psi

### ROD ADAPTOR SIZING







