

## HERRENKNECHT MINING TECHNOLOGY: POWERFUL SHAFT BORING WITH THE RAISE BORING RIG RBR900VF.

- The largest Raise Boring Rig in the world.
- For long raises and large reaming diameters for ventilation & haulage shafts.
- Robust, powerful design.
- Mechanized wrench system and rod handling for improved safety.
- Highly efficient and variable frequency drive.
- Vertical shafts possible with proven vertical drilling systems technology.
- Thrust and torque enables cutters to be utilized at full capacity thus providing maximum performance.
- Improved productivity.



Shaft collar for a 6.3m diameter raise bored shaft.



Breakthrough of a 6.3m diameter reamer into the shaft collar.



Reamer removal showing the use of a "false floor" providing safe working procedures.

## RAISE BORING RIG RBR900VF. TECHNICAL SPECIFICATIONS.

### RAISE BORING RIG

Installed power:	720kW (965hp)
Reaming torque:	900kNm (663,800ft-lbs)
Makeup/Breakout torque:	1,125kNm (829,760ft-lbs)
Thrust force:	22,000kN (4,945,800lbf)
Drive:	electric variable frequency (VF)
Number of motors:	4
Pilot drilling RPM:	0 - 50
Reaming RPM:	0 - 10

### DIMENSIONS

Height (retracted/extended):	6.7m/8.7m (268"/342,5")
Width:	3.2m (126")
Depth:	3.3m (130")
Stroke:	3.15m (124")
Rig weight:	107t (235,900lbs)
Wrench system:	hydraulic operated wrench
Cooling:	water cooled (closed circuit)

### DRILL ROD

Diameter:	381mm (15")
Length, s/s:	2,100mm (82.7")

### HYDRAULIC POWER UNIT

#### THRUST SYSTEM AND AUXILIARIES

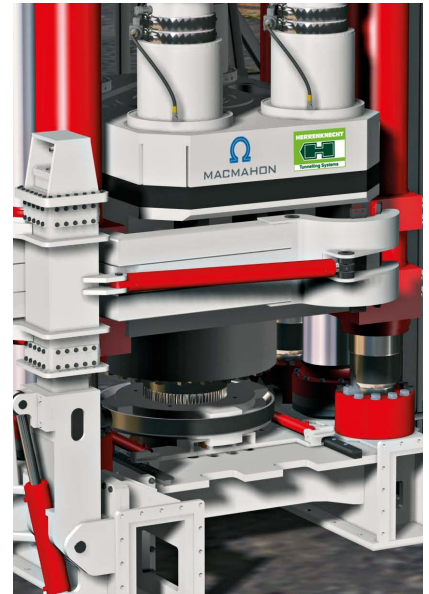
Power:	340kW (456hp)
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### TRANSPORT SYSTEM

System:	crawler and transport frame
Drive:	diesel powered hydraulic drive
Power:	243kW (326hp)
Upgrade:	max. 20%

### ADDITIONAL EQUIPMENT

- Control Cabin
- Electrical Power Unit
- Electrical Distribution Board for pumps and jobsite
- Transformer
- Pipe Feeder
- Pipe Handler
- Chiller Unit



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Macmahon is a leading international mining and construction contractor based in Australia. It's raise drilling division operates 13 raise drills across the range from small box hole to large deep raises. The RBR900VF, utilizing 15" diameter drill rods will complement this fleet and provide the ability to drill large diameter, deep shafts in a single pass with improved safety and cutter performance.

**Building the future together.** Herrenknecht AG is a technology and market leader in mechanized tunnelling. Herrenknecht is the only company in the world to supply high-tech boring machines for all ground conditions and in all diameters.

