



RB-T 90 Universal-Rotary-Bohrgerät Rotary Drilling Rig





RB-T 90 The new generation of Multipurpose drilling rigs

THE RB-T 90 is a hydraulic driven, fast moving, trailer-based, super single range III deep drilling unit and is designed and manufactured on the key principles

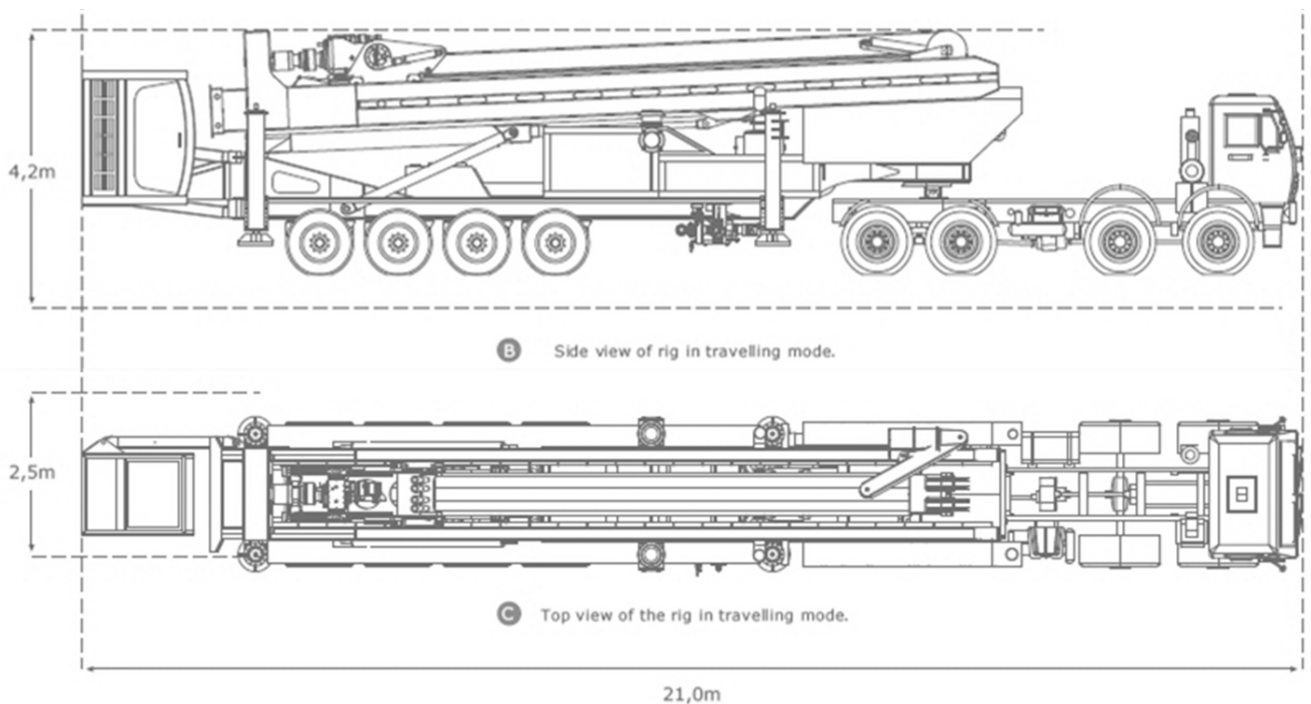
- Safety
- Environmental protection
- Efficiency
- Reliability
- Quality

Enhanced rig availability and highest service and maintenance comfort increase the efficiency and performance of the rig and the drilling operation.

Eliminating work in dangerous heights (e.g. self erecting systems; no monkey-board), providing hands-off operations, installation of anti-collision systems and the necessity of reduced man power ensure the highest possible safety level

Additional equipment and service

- Customized mud handling systems
- Centrifugal mud pumps
- Triplex mud pumps
- DTH Equipment (foam pump, line oiler)
- Auxiliary winch
- Coring winch
- Power slips or pipe forks for spanner flats
- BAUER Training Center and at PRAKLA-Peine for customer's personnel





RB-T90

Technical specifications

Mast		Telescopic mast	
Max. hook load	900 kN	198,400 lbs	
Stroke length	16,2 m	53.1 ft	
Total height	23,8 m	78 ft	
Substructure			
Clear height below drill floor	0,3 to 2,6 m	1.0 to 8.5 ft	
Hoisting system		Cylinder system	
Pulling capacity	900 kN	198,400 lbs	
Pull down capacity	200 kN	44,100 lbs	
Working clearance to table (incl. floating sub)	15,9 m	52.17 ft	
Top drive		SD 150 HD hydraulically driven	
Load capacity	900 kN	198,400 lbs	
Pull down capacity	200 kN	44,100 lbs	
Max. drilling torque *	36.000 Nm	26,500 ft-lbs	
Max. break-out torque *	43.220 Nm	31.870 ft-lbs	
Variable speed (stepless)	0 - 325 rpm	0 - 325 rpm	
Rated power *	201 kW	273 HP	
Top drive shaft (ID)	150 mm	5.7/8"	
<i>* nominal value</i>			
Engine		Caterpillar C 27 ACERT	
Rated power	708 kW	962 HP	
Diesel tank capacity	2.000 l	530 Gal US	
Cooling system	1 x horizontal cooler combined water, aftercooler and diesel overflow -20 to 50°C design temp.		
Hydraulic system		Full variable flow system with load sensing	
Hydraulic tank	2000 l	530 Gal US	
Filter systems	On suction and pressure lines		
Cooling system	3 x horizontal coolers		
Pipe handling system			
Tilting angle	0° (parallel to mast) - 130°		
Max. drill pipe length	Range III	Range III	
Max. casing length	Range III	Range III	
Max. diameter	up to 610 mm	up to 24"	
Transport dimensions			
Total weight (excl. truck)	60 t	132,270lbs	
Length (excl. truck)	17,0 m	52.2 ft	
Height	4,2 m	13.8 ft	
Width	2,75 m	9.0 ft	



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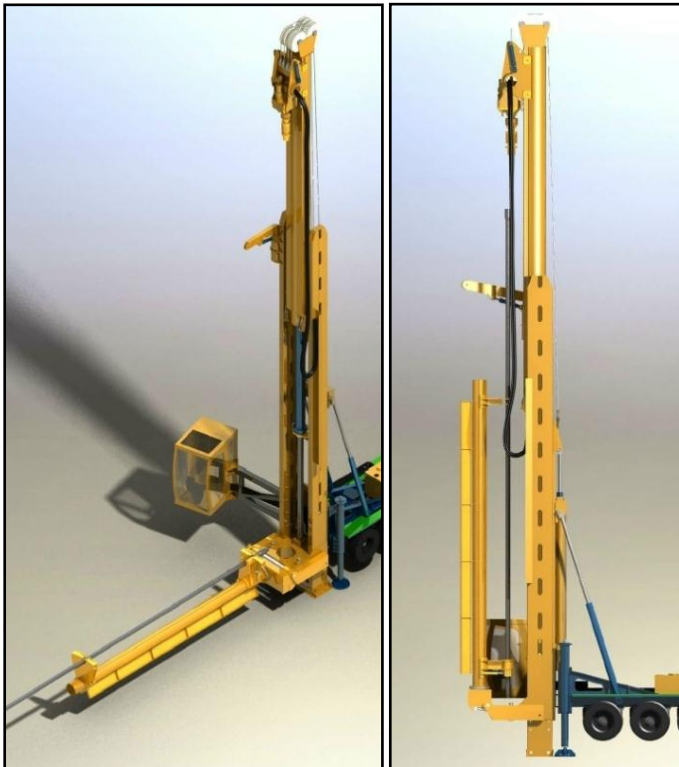
Mast

The self-standing, telescopic mast consists of two independent sections with box-type profiles. The outer mast section is connected to the trailer frame and is equipped with guides for the inner mast section. This sliding inner mast section is lifted by a central feed cylinder system and allows lifting and pull-down operations. Two integrated backstay cylinders raise the mast system into the working position. The alignment of the mast is done by an integrated levelling system. The telescopic mast system is designed to handle drill pipes and casings up to **Range III**.

No external guy lines are necessary



Semi-trailer with pipe handling system



Hoisting system

The hoisting system consists of a central, double stroke single cylinder with enhanced buckling resistance. The central cylinder is integrated inside the inner moving mast section directly below the main rope top sheaves.

The double reeved, twin-wire rope system allows the top drive to move at twice the lifting stroke and speed of the cylinder. The hoisting system enables pull back and push down operations.

Pipe handling system

This innovative pipe handling system is directly mounted to the clamping device. The automated handling system with hands-off technology allows drill pipe and casing operation without the necessity of a monkey-board and increases personal safety.

Pipe handling sequence

For redundancy reasons the pipes can also be handled by using the utility winch.