

## RG19T #255 with MR150AVM with ACS system

ITEM	DESCRIPTION
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1.1	RTG - PILE DRIVING SYSTEM RG 19 T WITH TELESCOPIC LEADER
<b>3</b>	<b>Upgrade</b>
<b>3.1</b>	<b>Upgrade RG</b>
3.1.2	Auxiliary winch
3.1.11	Installation of a centralized lubrication including sledge lubrication
3.1.17	Vertical mast support
<b>3.2</b>	<b>Upgrade base carrier</b>
<b>3.2.1</b>	<b>Upper carriage</b>
3.2.1.3	Toolbox in front of the operator's cabin
<b>3.2.2</b>	<b>Health safety and environment</b>
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4.1.2.3	VIBRATOR MR 150AVM
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4.10.1 **attachments**  
Quick connection system ACS-2 for equipment attachments

**5. Miscellaneous**

5.1 ACS-Adaptor

5.1.1 ACS-Adaptor to enable use of existing equipment on machines with ACS-System

**1 RTG Pile driving and Drilling System**

**1.1 RTG - PILE DRIVING SYSTEM RG 19 T WITH TELESCOPIC LEADER**

**ASSEMBLY RG 19 T**

**- TELESCOPIC LEADER:**

- \* Leader with internally mounted hydraulic cylinder
- \* Hoses tensioning device
- \* Sledge with hydraulic quick release device

**- LEADER SUBFRAME:**

- \* Leader guide frame with vertical displacement cylinder
- \* Longitudinal inclination frame with backstay cylinder
- \* Lateral tilt frame with two lateral tilt cylinders
- \* Leader slew drive with hydraulic mast lock in 45°-steps

**- KINEMATIKSYSTEM:**

- \* Parallelogram kinematic triangle
- \* Boom with two hydraulic cylinders and boom support

**RTG - BASE CARRIER BS 65 RS, UW 70 R**

**- UPPER CARRIAGE:**

- \* Special upper frame with twin beams as longitudinal members
- \* Integrated noise insulation by fully automatic retractable ventilation flaps and temperature-controlled fan control
- \* Revolving signal light at rear of cab and four spotlights
- \* Electrically operated fuel pump and two fire extinguishers
- \* Catwalk (on side of operators cab)
- \* Toolbox incl. tools



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- ENGINE:

- \* CAT diesel-engine C 18 (water-cooled)
- \* Complies with Emission Standard EU Stage III B / US Tier 4i

- HYDRAULIC SYSTEM:

- \* Integrated vibrator cooling system
- \* Diagnostic panel for hydraulic functions

- ROTARY DRIVE:

- \* Axial piston motor, with brake valves
- \* Planetary gears running in oil bath with oil-cooled and lubricated multiple disc parking brake
- \* Strengthened slewing ring with external teeth

- SYSTEM CONTROLS AND ACCESSORIES:

- \* SPS microprocessor control
- \* Automatic front-end equipment recognition
- \* Automatic full throttle control for vibrator operation
- \* Automatic leader adjustment facility
- \* Automatic control for crowd system incl. drilling automatic system
- \* Equipment for vibrators with fully adjustable eccentrics
- \* Preparation for predrilling with MB 20 Z, MB 50 M
- \* Hydraulic cylinders with safety device against pipe burst

- OPERATOR'S CAB:

- \* BAUER high-comfort operator cab with tinted side windows and sliding entry door with integrated sliding window
- \* Touchscreen with color display
- \* Cab heating and air conditioning system
- \* Radio with CD player

- COUNTERWEIGHT:

- \* Removable for transport
- \* Stackable and extendible

- UNDERCARRIAGE:

- \* Undercarriage UW 70 R (Crawler unit B 6)
- \* Telescopic and hydraulic lockable



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## TECHNICAL DATA RG 19 T, BS 65 RS, UW 70 R

- \* Stroke of sledge on leader: 16,38 m / 53.7 ft
- \* Add. stroke through displacement cylinder: 3 m / 9.8 ft
- \* Total stroke of sledge: 19,38 m / 63.6 ft
- \* Max. torque of leader: 80 kNm / 59,005 lbf-ft
- \* Swing range of leader: +/- 100°

- \* Rated output of diesel engine: 563 kW / 755 HP
- \* Rotation Speed of diesel engine: 1.800 min<sup>-1</sup> / 1,800 rpm
- \* Diesel tank capacity: approx. 730 l / 193 gal

- \* Max. oil flow for f/e-equipment: 2x425 l/min / 2x112 gal/min
- \* Max. working pressure: 350 bar / 5,076 PSI
- \* Main hydraulic oil coolers: 2x100 kW / 2x134 HP
- \* Hydraulic tank capacity: approx. 980 l / 243 gal

- \* Max. swing torque upper carriage: 75 kNm / 55,317 lbf-ft
- \* Max. holding torque upper carriage: 130 kNm / 95,882 lbf-ft

- \* Support bracket for counterweight blocks: 0,8 t / 1,764 lb
- \* Counterweight blocks: 4x1,8 t / 4x3,968 lb

- \* Triple-bar track shoes: 700 mm / 2.3 ft
- \* Towing force: approx. 504 kN / 113,304 lbf
- \* Crawler speed: 0-1,46 km/h / 0-0.91 mph

## MISCELLANEOUS

### - PAINT FINISH:

- \* RTG-Design, alternative finish on request

### - DOCUMENTATION:

- \* Spare parts books, user's manual, service manual, hydraulic and electrical drawings (1 set printed, 2 on CD)
- \* Certification mark certificate (CE-mark)

## **3 Upgrade**

### **3.1 Upgrade RG**

#### 3.1.2 Auxiliary winch

- hydraulically slewable by +/- 90° to each side under load
- Line-pull 55 kN / 12,364 lbf on first layer



3.1.11 Installation of a centralized lubrication including sledge lubrication

3.1.17 Vertical mast support

- Vertical mast support with ball joint
- Incl. circular support plate, diameter 700 mm / 2.3 ft

## **3.2 Upgrade base carrier**

### **3.2.1 Upper carriage**

3.2.1.3 Toolbox in front of the operator's cabin

### **3.2.2 Health safety and environment**

3.2.2.1 ECO mode (Use for applications requiring lower engine power)

- Mode for fuel saving
- Reduction of engine rotation to approx. 1,600 rpm
- Reduction of engine power

#### **3.2.2.4 Hydraulic Oils**

Standard hydraulic oil filling with Castrol Hyspin dhv 46 high-performance hydraulic oil. For higher environmentally friendliness and/or lower temperature conditions, the hydraulic-oils below can be filled in. Please note that the oil type has to be fixed 4 month ahead of scheduled completion date.

3.2.2.4.2 Supplied with biodegradable Hydraulic-Oil AVIA PEB 30 (also appropriate for low-temperature conditions down to -40°C / -40°F)

### **3.2.3 Motor / Hydraulic system**

3.2.3.4 Quick Coupling System ACS-1 for RG

Mounting machine-sided

- Multi coupling block female part
- Mounting frame for fixing multi coupling block

### **3.2.4 Operators cabin**

3.2.4.1 Protective Roof grating FOPS



3.2.4.7 Automatic air-conditioning system (BAUER Climatronic)

3.2.4.10 Premium high-comfort operator seat

- Air cushioned, horizontal moveable
- Weight and height adjustable, inclination adjustment
- Head cushion, pneumatic lumbar spine backing
- Seat and backrest heating

### 3.2.5 Counterweight

- max. counterweight for UW 70 R: 2 x 4,9 t und 2 x 1,8 t

3.2.5.3 Counterweight handling system with rope/chain suspension and remote control via auxiliary winch, tiltable to the back side

## 3.4 Pre-installation

### 3.4.3 Pre-equipped for MP

3.4.3.1 Adapter upgrade kit for operating a sheet pile press  
Hydraulic and electric adapter kit

### 3.4.4 Pre-equipped for MB

3.4.4.2 Adapter upgrade kit for operating a MB80, MB130 rotary head  
Hydraulic and electric adapter kit  
Without slurry volume measurement

## 3.14 BAUER B - Tronic

### 3.14.5 BAUER B - Tronic RG - Module

3.14.5.1 RG top vibrator basic module

- Depth measuring compl. incl. sensors
- B-Report Evaluation Software
- Process Data- Recording and -Storage
- USB-Stick

Recording of:

- Depth (m / ft)

3.14.5.2 B-Tronic ART module c/w data logger:

- Vibrator frequency (rpm)
- Static moment (%)
- Vibrator hydraulic pressure (bar)

- Clamp hydraulic pressure (bar)
- Crowd pressure Pull / Down
- Slurry volume (l)
- Slurry pressure (bar)
- Slurry flow (l/min)
- Mast inclination

### 3.14.5.3 B-Tronic CFA / VDW / FDP module c/w data logger:

- Concrete volume (cbm)
- Concrete pressure (bar)
- KDK rotary speed (rpm)
- Crowd speed /m/min)
- Torque at CFA / FDP application (%)
- KDK hydraulic pressure (bar)
- Crowd pressure Pull / Down
- Mast inclination

## 4.1 Vibrators

### Vibrators

- Sheet steel housing for gearbox c/w lubrication ducts
- Gearbox with infinitely variable imbalances
- Resonance-free start up and run down of vibrator
- Special cylindrical roller bearings for increased service life of bearings
  - \* forced lubrication of bearings
- Oil supply through special rotating unions
- Dry sump lubrication
  - \* with hydraulic oil of base carrier (biodegradable oil optional)
  - \* high gearbox efficiency without splash losses
  - \* no separate oil changes required
  - \* low operating temperature in gearbox
- Monitoring of lubrication oil temperature, lubrication oil pressure, clamping and leak oil pressure

### 4.1.2 Vibrators AVM-Series

#### Vibrators AVM-Series

- Preparation of base carrier for vibrators of AVM-series included
- Adaptation of vibrator to varying soil conditions by pre-selection of 3 operating programs: standard, high amplitude and high speed modes

#### 4.1.2.3 VIBRATOR MR 150AVM

- Max. centrifugal force
 

* Standard mode	1250 kN
* High amplitude mode	1500 kN
* High speed mode	1250 kN

- Max. rotation speed	
* Standard mode	2300 rpm
* High amplitude mode	2200 rpm
* High speed mode	2500 rpm
- Statics momentum	
* Standard mode	21.6 kgm
* High amplitude mode	28.4 kgm
* High speed mode	18.2 kgm

- Hydraulic power consumption at vibrator	480 kW
- Clamp model	MRZ 150
- Recommended base carrier	BS 65 RS / BS 90 RS

#### 4.10 Quick connection system ACS-2 for equipment attachments

##### 4.10.1 Quick connection system ACS-2 for equipment attachments

- (mounted an attachment equipment), comprising:
- Multi-connector block - male section
  - Mounting bracket for attachment of multi-connector block
  - Spring assemblies for self-adjustment

## 5. Miscellaneous

### 5.1 ACS-Adaptor

#### 5.1.1 ACS-Adaptor to enable use of existing equipment on machines with ACS-System