BANUT Machines at Work





Applications

BANUT made at ABI

BANUT concept

ABI has brought the proven technology from Sweden to Germany and continues with design improvement and development. The BANUT system is characterised by compact transport dimensions, large usable length, high stability, firmness as well as high winch pulling forces and rope speed.

Due to the good stability (depending on model) inclinations up to 18 degrees laterally, 45 degrees to the rear and 18 degrees forward are possible during pile driving. Winches are built in to the carrier.

The combination of fixed leader mast and hydraulic impact hammer is particularly well suitable for impacting prefabricated concrete piles, whereby also DELMAG diesel pile hammers can be used as attachment.

The modern CanBus control provides easy and safe handling and operator comfort. Operating data can be recorded and stored with the data logger.



BANUT 555 inclined sideways - max. laterally inclination 14 degrees



BANUT 555 with DELMAG diesel pile hammer D25 driving concrete piles in Turkmenistan



BANUT 655 with SuperRAM 8000XL installing steel pipes in Kazakhstan



Fixed leader mast BANUT with Power Pack installing stone columns

Fixed Leader Mast



Field of application

- Impact pile driving, also driven cast-in-situ
- CFA Augering
- Vibroflot with power pack for stone column installation



Pile guiding of BANUT with clamped concrete pile, positioning of the tip

Ergonomic CanBus control system

- Menu guided control with touch screen
- · Contrast image enhancement
- Trouble description in clear language
- Less wiring needed by CanBus technology
 Optional:
- Built in data recording computer
- Automatic tool identification
- System diagnostic via mobile phone
- Theft prevention and global positioning as tracing feature



Pile connector, first pile section is already in the ground and will be connected with the next section



Connected piles





Fixed leader mast BANUT 655 in transport position on low-loader truck

Transport

- Fast folding down of the leader mast without auxiliary devices in the transport position and setting up of the leader mast into the working position with the auxilliary cylinder or auxilliary raking device
- Transport with attachment possible (depending on model)
- Leader mast transport support

Carrier

- BANUT specific carriers
- High engine power
- Environmentally CAT engines emission according to the latest requirements
- Telescopic undercarriage

Optional:

- · 2-Point support rear
- Biological degradable hydraulic oil



BANUT 555 folding down, auxilliary cylinder extended



BANUT 555, fixed counter weight with integrated auxilliary cylinder



BANUT 655 with counter weight, 2-point support and auxilliary raking device

Fixed Leader Mast



Pitching the pile in guiding with pile winch



BANUT driving concrete piles with hydraulic impact hammer

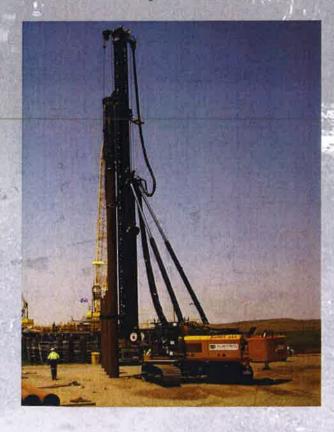


BANUT fixed leader mast with auger drive for pre-boring in difficult soil condintions



Using pile follower to achieve below grade pile installation

BANUT 655 with SuperRAM 8000XL driving steel pipes with a diameter of 600 mm for bridge foundation in Australia



Inclined pile driving with SuperRAM 6000 with a special insert for H-beams in the pile cap and guiding for the pile, side mounted preboring unit



Hydraulic Impact Hammer

Hydraulic Impact Hammer SuperRAM

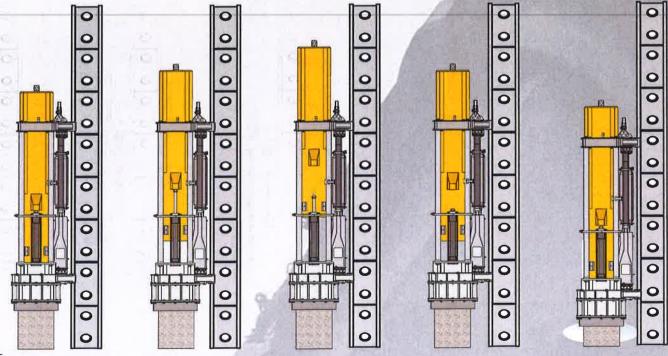
- High efficiency
- Flexible and easy to handle design
- Powered by the engine in the base machine
- Energy monitoring and data logging available
- Different striking mass material available: steel or steel/lead depending on pile elements
- Drop height and impact frequency steplessly adjustable



SuperRAM 6000 with standard pile cap for pile diameter 510 mm

Functioning of SuperRAM

- Piston rods of the two accelerations cylinders move the drop weight upwards.
- Large quantities of oil coming from the accumulators throw the drop weight straight up.
- A preset acceleration time ends and the valves close. The cylinders retract, while the drop weight accelerates to a given height.
- The piston rods are back in the starting position and the drop weight is falling downwards.
- The drop weight strikes the helmet to transfer the energy to the pile. The next cycle repeats automatically.



Hydraulic Impact Hammer



BANUT Machines

- Harmonised concept
- Better economy and profitability
- Does not destroy concrete piles
- Does not splay or bend sheet piles
- Operator comfort



Foundation works with BANUT fixed leader mast and SuperRAM 6000 by Wasovo, Polen

SuperRAM 10000XL in Switzerland mounted on fixed lead driving sectional span-piles with diameter of 800 mm, depth up to 50 m $\,$

Driving wooden piles with SuperRAM 6000





