ABI MOBILRAM-System

ABI MOBILRAM-System is an ideal machine for all common civil engineering works such as piling, extracting, augering, drilling and vibration-free piling. The heart of this system is a slewable and in all directions inclinable telescopic or alternatively fixed leader mast mounted to a special carrier. The leader mast serves as a guidance for the attachments and is available with a usable length up to 25 m.

The ABI MOBILRAM-System is characterised by compact transport dimensions and small working space requirements on building sites. Quick and safe set up from the transport position to the working position and back takes place unassisted in one step. The ABI attachments can be mounted fast and safe through the rapid change device or the state of the art Docking-System.

High driving efficiency is reached using pre-stressing and extracting forces. These forces can be adapted optimally to the existing soil conditions. Guidings with minimal clearance provide high stability and precision, good noise and vibration insulation as well as reduced wear and tear.

Among further advantages the system offers:

- good stability and high usable loads
- self-propelled carrier with high engine power
- low manpower requirements
- variety of attachments
Applications

- Driving and extracting of steel profiles, sheet piles, beams, full displacement mandrels/probes
- Augering and drilling, CFA, part and full displacement auger, kelly drilling, drilling with or without casing, soil mixing applications
- Vibration free piling - static pressing and extracting of steel sheet piles
- Impacting of full displacement profiles, casings, pre-fab concrete piles

Ergonomic control system

- Menu guided control via touch screen
- Contrast image enhancement
- Trouble description in clear language

Optional:

- Built in data recording computer
- Data logging
- Data storage and transfer via USB stick and job site print out
- System diagnostic via mobile phone
- Theft prevention and global positioning as tracing feature
MOBILRAM-System

Carrier

- Specific carrier
- High engine power
- Engine emissions according to the latest requirements
- Heavy duty turntable

Optional:

- Telescopic undercarriage
- Detachable counterweight
- Biological degradable hydraulic oil

Transport

- Compact transport dimensions
- Fast folding down of the telescopic leader mast in the transport position and setting up into the working position unassisted
- Transport weight reduction due to the detachable counterweight

Telescopic and fixed leader masts

- Tubular or box mast design
- Compact robust structure
- Rugged kinematics
- High reach and torque absorption
- Usable length up to 25 m
Attachments

- Pile driving and extracting vibrator MRZV-S
- Variable moment vibrator MRZV-V and MRZV-VV
- Auger drives and rotaries MDBA and VDW
- Hydro-Press-System
- DELMAG diesel pile hammers

Typical pile types:
- Cold formed steel sheet piles
- Hot rolled steel sheet piles
- H+I beams and pipes/tubes

Change of attachments:
- Quick and safe attachment change through the rapid change device or the Docking-System
- Simple low risk procedure
- Environmentally friendly

Advantages of Docking-System:
- No crossed lines
- Optional identification of attachments
- Easier monitoring of maintenance works
ABI pile driving and extracting vibrators

- Vibrators MRZV-S with fixed static moment
- MRZV-V vibrators with a variable static moment for resonance-free starting and stopping
- Vibrators MRZV-VV with a variable static moment and variable displacement hydraulic motors

Field of application

- Driving and extracting of all common steel sheet piles, H+I-beams and casings
- Vibropile installation, a driven cast-in-situ foundation pile
- Soil improvement
- Geotextil columns installation
- Wick drain installation
- Soft gel horizontal diaphragm installation
ABI auger drives MDBA

- Vibration-free
- Low noise emissions
- Equipped with high pressure swivel
- High production rates
- Twinmix or Triplemix design

Field of application

- Ground release drilling
- Soil mixing wet (WSM) and dry (DSM) method
- Cased drilling with casing turn device
- Part and full displacement augering
- Rock drilling with rock tools or DTH hammers
MOBILRAM-System

ABI double auger head system VDW

- Vibration-free pile installation
- Noise reduced
- Economical
- Easy set up due to cardanic joint
- Suitable in most soil formations

Field of application

- VDW-method is well suited for the installation of single, contiguous and secant pile walls
- Soil removal and replacement
- Displacement augering

ABI MOBILRAM-System setting up casing and auger tool

In front of the wall procedure VDW installing secant pile wall

Drilling VDW piles to secure an excavation

Circular cover dam done with VDW-method

Finished wall exposed mirroring the drill through brick wall

Straight wall with H-beam reinforcement
**ABI Hydro-Press-System**

- For vibration-free and low noise installation and removal of steel sheet piles
- Application in sensitive areas as near hospitals, historical buildings etc.
- High productive due to panel operation of 3 or 4 sheets at a time
- HPS-Press for cold rolled U sheet piles
  - HPU-Press for hot rolled U sheet piles
  - HPZ-Press for hot rolled Z sheet piles

**Pressing U-sheet piles panel with the HPU press direct onto an existing building**

**Threading Z-shaped sheet piles in interlock of previous pressed sheet panel**

**Pitching the profiles with the HPZ press**

**HPZ during pressing**
Add-on vibrators HVR and add-on auger drives BA/DBA

- Excavator stick boom mounted
- Controlled and fed by the excavator’s hydraulic system
- High frequency and revolution
- Low weight
- Compact design

Driving sheets in sandy soils

Limited headroom application

Pitching the sheet with the vibrator, safe and fast

ABI auger drive with casing twister for foundation piles along rail way

Auger drive DBA with continuous flight auger
Besides standard machines and equipment ABI has made in the past custom tailored machines. We have the means to design and manufacture to special needs.
For further informations please contact your ABI sales assistant.
Or you visit us on the Internet at www.abi-gmbh.de.
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