



# DELMAG Drilling Rigs at Work



## DELMAG Drilling Rigs

Since the middle of the 1960's DELMAG has been developing and producing drilling rigs for the installation of shoring and foundation piles. A great deal of attention has been paid to an optimal performance with greatest possible reliability and long-live cycle. The existing models are continuously developed and adapted to frequently changing requirements.

The current drilling rigs of the RH design are characterised by high performance with relatively small weight and compact transport dimensions. The parallelogram kinematics allow for short set up times with a high flexibility. Due to the rugged design a maximum of stability is reached.

Further characteristics are:

- the use of special carriers with telescopic under carriages,
- the use of a reversable winch for the crowd function ,
- optimized working cycles through the modern hydraulic and electronic control system,
- perfect positioning of the winches at the leader mast to reduce wear on the cables during the drilling procedure.



Drilling with dual rotary head (DDK)



Kelly drilling without casing



CFA drilling with a hollow auger and kelly extension

## Applications

Installation of foundation piles and pile walls with different methods as:

- Kelly drilling (with or without casing)
- CFA drilling with continuous flight auger
- Part and full displacement drilling
- Drilling with dual rotary head (DDK)

### Further applications:

- Well drilling
- Soil mixing procedures (WSM und DSM)

## Ergonomical control system

- Menu guided control with touch screen
- Contrast image enhancement
- Trouble description in clear language
- Less wiring needed through CanBus technology

### Optional:

- Built in data recording computer
- Interactive service interval supervision
- Automatic tool identification
- System diagnostic via mobile phone
- Theft prevention and global positioning as tracing feature



Control panel



Secant pile wall with reinforcement



Single pile wall combined with a beam/wooden lagging wall



Installation of a secant pile wall using a drilling pattern

## Transport

- Quick folding down of the mast into the transport position and setting up into the working position, both unassisted
- Transport with attachments possible (depending on type)
- Counter weight detachable with on board means (option)



Transport of RH 10 with rotary head and kelly bar on the rig

## Carrier

- Specific carrier
- High engine power
- Engine emissions according to latest requirements
- Telescopic undercarriage
- Heavy duty turntable
- Enlarged hydraulic tank
- 3-circuit hydraulic system
- Connections for casing oscillators available



Transport without counter weight, with transport support for the leader mast



Drilling rig with folded down leader mast including rotary head, kelly bar and drilling tool for fast transfer on site



Casing oscillator for installation and extraction of casings



Telescopic undercarriage with connections for a casing oscillator

## Leader mast

- High torque absorption
- High lateral inclination for batter piles
- Hydraulically hinged sheave head
- Winches at the back of leader mast in sight range of the operator

## Option:

- Leader mast extension (depending on type)
- Kelly extension for continuous flight auger (depending on type)
- Short mast foot for working with big diameters
- Mast foot cylinder



Mast foot cylinder and hydraulic auger guide



Drilling with continuous flight auger (CFA) and kelly extension



Lateral inclination of leader mast



Drilling rig with short mast foot for drilling tools with large diameter



Kelly extension for maximum drilling depth with continuous flight auger

## Kelly drilling



Auger filled with spoil is pulled out of the casing



Spinning off



Installation of double wall casing



Drilling with support fluid



Drilling bucket for working in water saturated soils



Drilling without casing in rock formation



Cleaning the drilling bucket

## Alternative drilling procedures



Full displacement drilling



Installation of foundation piles with the DDK system (dual rotary head)



Part displacement drilling



Soil mixing application WSM (Wet Speed-Mixing)



For further informations please contact your DELMAG dealer. Or you visit us on the Internet at [www.delmag.de](http://www.delmag.de). Design subject to modifications. The details in this leaflet have to be regarded as approximate. The illustrations also can contain special outfits which are not part of the standard scope of supply.



ABI GmbH  
Am Knüchel 4  
D-63843 Niedernberg  
Germany

Telefon: +49 (0) 6028 123-101, -102  
Telefax: +49 (0) 6028 123-109  
eMail: [info@delmag.de](mailto:info@delmag.de)  
Web: [www.delmag.de](http://www.delmag.de)

Member of

[www.abi-group.com](http://www.abi-group.com)