

Handy Maxidrill is a hydraulic drilling mobile unit, totally independent, and suitable for vertical drilling on any inclined and in any type of rock.

Handy Maxidrill is made up by a drilling unit placed on the boom of a four wheels driver vehicle, is equipped with two hydraulic drifters, models Doofor DF40 o Doofor DF50, fitted out with an anti jamming device and mounted on two independent chain feed slides.

Hydraulic unit can rotate $\pm 90^\circ$ vertically, a $\pm 20^\circ$ vertical inclination and a $\pm 25^\circ$ horizontal inclination and it can have a 0,30 Mts. extension from the ground support without moving the boom.

The holes produced are vertically lined up by an indicator angle settled on the unit base and they can have a diameter between 22 to 45 mm. by the use of Integral drill steels - 22 mm. (7/8").

Drilling unit has a telescopic boom shift with extension of 9,7 m. The presence of this boom gives the possibility of squaring the blocks situated over 9 m. respect to the place self-moving is situated. In order to make completely exploitable the sliding track of the drilling unit the half moving is equipped, in the front part, of two pistons that allow a ± 250 mm. lateral translations The self moving shifting is made easier by the hydrostatic drive, four wheels driver in any conditions of the ground.

All the drilling and boom shifting operations can be effected by a remote control panel (wire or by radio) operating on proportional controls of directional valves. Our module, constituted by oil filters, the heat exchanger and hydraulic compressor, is mounted on the back part of the self-moving in order to limit the encumbrance. Operator safety, as the environment protection, is guaranteed by the presence of a hydraulic suction system of the emitted dusts that are poured and collected in suitable plastic bag.

Drilling unit has been planned a built respecting all the structures fitted to preserve the environment and quarry working safety. Environment protection occurs by lower consumption and exhaust gas emission. Then, thanks to the presence of a hydraulic suction system, the issued dusts are immediately overturned and collected in suitable plastic bags.

Hydraulic drifters present acoustics emission values very low and this factor, allowed by technological innovations that constantly give improvements, has characterized our drifters, among the drilling equipment circulating up today with the lower noise emission. Finally the presence of a remote control panel allows to the operator in the quarry to work and check the machine at the proper distance guaranteeing an higher working safety, a minor exposition to the dangers, the accidents and the acoustic pollution.

Drilling Unit::

- 4 Mts. translation track
- Four independent hydraulic stabilizer legs
- Two independent columns equipped with an approaching device to the ground +/- 0,30 m
- Two chain feed slides for drifters
- Sliding block and truck made in self-lubricating composite material
- Fast system steel retainer
- Anti jamming device
- Hydraulic device for inclinations regulator
- Cable or Radio remote control panel
- Water or air drain drilling
- Vertical rotation +/- 90°
- Horizontal track inclination +/- 25°
- Vertical track inclination +/- 20°
- Track translation for alignment 0,30 m
- Lateral translation +/-250 mm

Self moving Unit:

- Telescopic boom shift up to 7 m
- Drilling coverage area 29 m²
- Vertical straddle 9,5 m
- Base inclination +40° / -25°
- Boom tilting
- Four wheels driver
- Hydrostatic drive
- Three mode steering
- Heat exchanger supplementary air and oil

Engine:

- Perkins Mod. "1004 -40 4TW"
- Direct injection, turbo
- Cylinders 4
- Power 130 Hp

Dust collectors:

- Mod. "Bermuda Chiocciola 500"
- Filtering surface 8 m²
- Suction capacity 500 m³/H
- Automatic cleaning system of the filters
- Number of filters 4

Drifters:

- *Doofor DF420:*

| | | |
|--------------------------|--------------------------|-----------|
| <input type="checkbox"/> | Weight Kg | 41 |
| <input type="checkbox"/> | Working pressure Bar | 110/140 |
| <input type="checkbox"/> | Percussion rate | 6500/7000 |
| <input type="checkbox"/> | Lit./Min rotation | 11/20 |
| <input type="checkbox"/> | Lit/Min percussion | 40/60 |
| <input type="checkbox"/> | Rotation speed torque Nm | 97 |

- *Doofor DF522:*

| | | |
|--------------------------|--------------------------|-----------|
| <input type="checkbox"/> | Weight Kg | 55 |
| <input type="checkbox"/> | Working pressure Bar | 100/130 |
| <input type="checkbox"/> | Percussion rate | 2700/4200 |
| <input type="checkbox"/> | Lit./Min rotation | 9/18.5 |
| <input type="checkbox"/> | Lit/Min percussion | 46/80 |
| <input type="checkbox"/> | Rotation speed torque Nm | 107 |

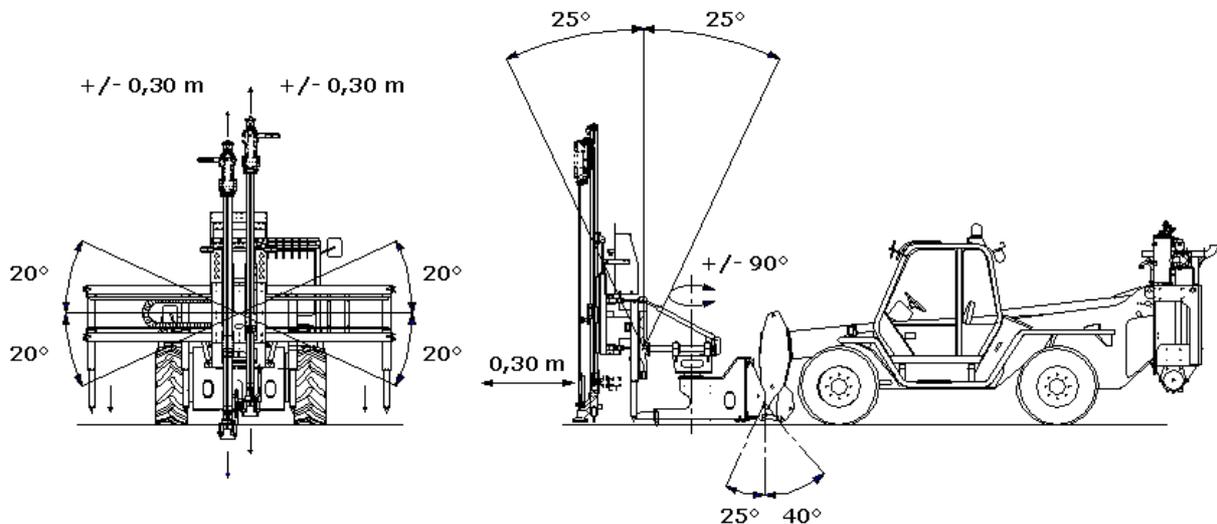
Compressor for drilling drain and lubricating:

- Mod. "R 186 DM"
- Air volume 2,5 m³/min

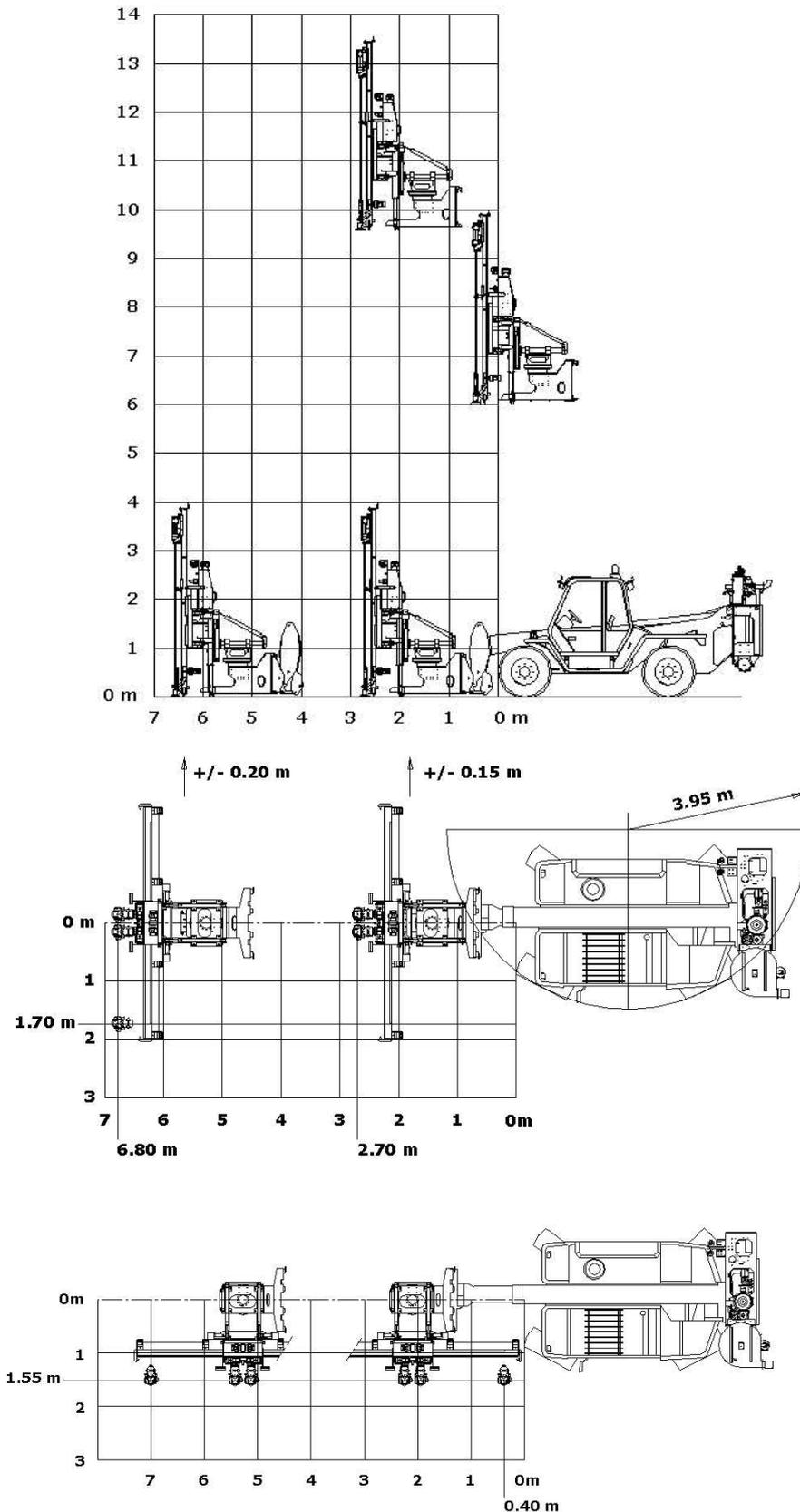
Technical specifications:

- Start drilling with 3,20 Mts. Integral Drill Steel
- Holes diameter 22-45 mm
- 4 Mts. translation track with 3,30 Mts. working translation

Drilling unit movements:



Drilling geometry:



Indicative performances:

- *Drilling speed with button bit (diameter 32):*
 - Granite tipo Porriño: from 1,4 to 1,8 m/min.
 - "Gneiss" Luserna: from 1,3 to 1,6 m/min.
 - Limestone "Trani": from 1.5 to 1.9 m/min.
 - Marble "Botticino": from 1,5 to 1,9 m/min.

- *Production:*
 - Granite Porriño:
 - Blocks squaring: from 450 to 550 m
 - Whole block: from 550 to 650 m
 - Limestone "Trani":
 - Blocks squaring: from 500 to 600 m
 - Whole block: from 550 to 700 m
 - Marble "Botticino":
 - Blocks squaring: from 450 to 600 m
 - Whole block: from 550 to 650 m

Average consumption:

- 10÷12 l/hour

Freight dimensions:

- Total length: 9,40 m
- Total width: 2,45 m
- Height: 2,95 m
- Weight: 13.900 kg

