

BM 500 DATA SHEET

BM500 COST EFFECTIVE SOLUTION FOR LARGER DIAMETER PIPES RANGING FROM Ø 419 mm TO Ø 980 mm

The BM 500 is the right choice if you need a powerful solution for accurate installation of 419 mm OD to 980 mm OD product pipes. Large diameter pipe jacking with respect to the forces involved requires an adequate guidance system. The BM 500 solution is an auger / steel casing combination with a patented pilot-auger. While conventional pilot pipes require displaceable soil, the BM 500 excavates material by means of an auger during the pilot-bore. The advantages are that same sets of augers and steel casings are used for the complete diameter range. Changing the diameter of the product pipes requires only the replacement of the reamer-head.



METHOD OF OPERATION

1 The machine is set up to the correct direction and gradient of the drive. A separate sub-frame simplifies this step: The sub-frame is adjusted and secured in place and then the BM500 is simply lowered onto the locating points on the sub-frame.

2 The theodolite with the special CCD-camera must be precisely adjusted to the pre-set boring axis.

3 Controlled auger drilling is carried out using steel casings, augers with optical path and a patented pilot auger head. The hollow augers allow a continuous observation of the target installed in the auger boring head.

4 When the guided auger bore is completed, an expansion head with a direct drive engine is coupled to the steel casings. This engine reverses the rotation of the augers allowing the excavated material to travel to the reception

shaft whilst the product pipes are jacked in from the launch shaft.

FEATURES

- One set of equipment (steel casings and augers) can accommodate a full range of pipe sizes from Ø 419 mm OD to Ø 980 mm OD.
- The installation process is effective - it requires only two steps!
- Recovery of all equipment - nothing left in the ground except the product pipes.

- Short set-up time, no disruption of major highways or footpaths.
- Using steel casings with control auger instead of

conventional pilot rods allows accurate drives for bigger pipe diameters.

BM 500	TECHNICAL DATA
JACKING FORCE	1600 kN
FORCE ON RETRACT	800 kN
TORQUE	24000 Nm
SPEED	up to 60 rpm
HYDRAULIC PRESSURE	up to 300 bar
STROKE	750 mm each
WEIGHT	3500 kg
DIMENSIONS (l/w)	3,20 / 2,00
LAUNCH SHAFT	
CIRCULAR	Ø 3,20 m
RECTANGULAR	3,2m x 2,0 m
PIPE AXIS / BOTTOM	1000 mm
TARGET HOLE	2000 mm
DRIVE LENGTH	up to 60 m
MAX. PIPE Ø (OD)	980 mm
PIPE Ø (OD)	419 mm 560 mm 660 mm
STANDARD UNIT LENGTH	2,0 m