

Tunnel Boring Machine EPB FOR SALE



Description

For sale TBM EPB
Boring Diameter 9330 mm

Main Technical Specification

Manufacturer:	Herrenknecht AG, Germany
Type:	EPB
Year of Manufacturer:	2004
Total Length:	125 mtr
Diameter:	9330 mm
Max. Thrust Force:	73200 kN
Cutter Head Power:	3200 kw
Cutter Head Power:	0-3 RPM
Max. Torque Main Drive:	22.610 kNm
Total Power:	5000 kw
Primary Voltage:	20 kv
Capacity:	5000 kw
Along with five complete set of segment moulds from CBE	

Tunnel Specification

Tunnel Internal Diameter:	8.430 mm
Tunnel External Diameter:	9.070 mm
Length of the Slabs:	1.500 mm
Number of Slots	6 + 1

Advanced Instulation

Max. Working Pressure:	4 bar
Total Length INCL. Support Train:	APROX. 125 m
Max. Advance Rate:	80 mm/min

Intermediate Shield

External diameter:	9.320 mm
Length of the intermediate shield	Approx. 2.465 mm

Tail Shield

External diameter:	9.310 mm
Length:	Approx. 4.360 mm

Man Luck

Number of people:	3
Security Valve:	4 bar
Max. Pressure Test:	6 bar

Propulsion Cylinders

Number of propulsion cylinders:	26 pz
Number of cylinders with displacement measuring system:	4 pz
Cylinders:	320/260 mm
Cylinder stroke:	2.200 mm
Total thrust power at 350 bar:	73.200 kn
Max feedrate :	80 mm/min

Cutting Wheel Displacement

Cylinder:	300/200 mm
Cylinder stroke (limited):	200 mm
Total force at 280 bar:	12.000 kn

Articulation Cylinders

Cylinder:	180/80 mm
Cylinder stroke:	150 mm
Number of cylinders:	22 pz

Cutter Head

Diameter:	9.360 mm
Length:	1.710 mm
Weight:	aprox 115 ton
Opening rate:	0.31
Steel quality steel structure	s355j2g3
Protective Ring:	hardox 400

Copy Cutter

Number:	2 pz
Overcut:	20 / 30 / 40 mm

Cutting Wheel Drive

Variable displacement hydraulic motor:	19 pz
Installed electrical power (8×400 kw):	3.200 kw
Two stage planetary gearboxes:	19 pz
Peed control i:	0-1.5 min-1
Revolutions ii:	0-3 min-1
Max torque i nominal to 240 bar:	22.610 knm
Max torque ii nominal to 240 bar:	11.082 knm
Locking out torque 280 bar:	26.385 knm

Erector

Clamping system:	vaccum
Number of degrees of freedom:	6
Rotation of erector (rotating frame):	(+/-) 200

Screw Conveyor

Installed power:	400 kw
Total length:	ca. 16.175 mm
Nominal width auger:	1.000 mm
Propeller pitch:	630 mm
Max. r.p.m	0-24.6 min1
Rated torque to 325 bar:	235 knm
Working pressure permissible closing gate:	4

Telescope of screw

Number of cylinders:	2 pz
Cylinders:	160/90 mm
Cylinder stroke:	1.500 mm

Front Geutin Gates

Number of cylinders:	2 pz
Cylinders:	130/70 mm
Cylinder stroke:	400 mm

Machine Belt

Installed power:	55 kw
Total length:	ca. 75 m
Transport capacity:	1.100 t/h

Mortar Injection

Number of injection openings:	2x6 pz
Number of mortar injection pumps:	3 pz
Max capacity of pumps:	30 m3 / h

Industrial Air / Compressor

Installed power:	2x 55 kw
Air pressure:	8 bar
Compressor capacity:	9.25 m³ / h

Secondary Ventilation

Installed power	37 kw
Cross section of pipe	1.600 mm

Electricity

Voltage control:	24 / 230 v
Transformer power installed:	2x 2.500 kva
Primary voltage:	20 kv
Total installed power:	aprox. 5.000 kw