

Double Shield TBM (SBU-DS)

Technical Description

The Double Shield TBM (SBU-DS) is ideal for long tunnels (over 1,000 m) without intermediate access. The SBU-DS is a manned-entry, hard rock tunnel boring machine. The machine is used in conjunction with a single-track back-up system for auxiliary functions. In unstable ground, the SBU-DS can erect liner within the tail skin, while in stable ground the machine can be used without lining. Muck is removed using muck trains with conveyor-loading muck skips.

Tunnelling with No Limitations

Not just for utility crossings, the SBU-DS can bore entire tunnels in much harder rock than other SBU Division products. A ring bearing and bull gear drive allow for larger diameter 17 inch disc cutters to be used, with greater thrust and higher torque. The machine is capable of boring in rock of 300 MPa UCS or higher over long distances.

Guided Boring

The SBU-DS can be steered throughout the drive using hydraulic stabilizer pads and articulation cylinders. Line and grade accuracy is continuously monitored with a laser targeting system.



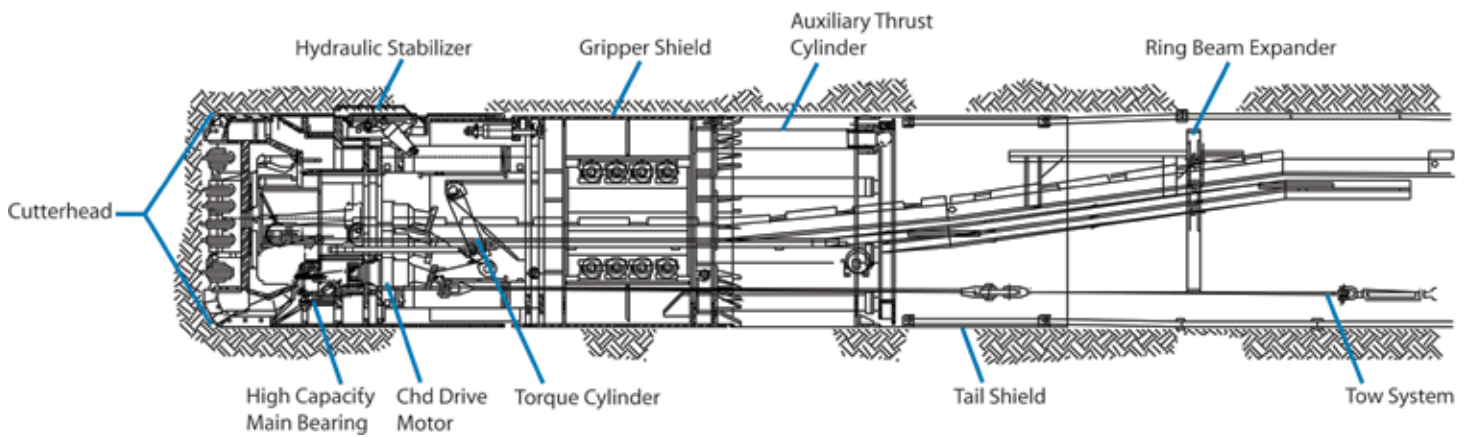
SBU-DS APPLICATIONS

- Long tunnels with no intermediate access
- Line- and grade-sensitive tunnelling
- Bore lengths from 500 to over 6,000 m

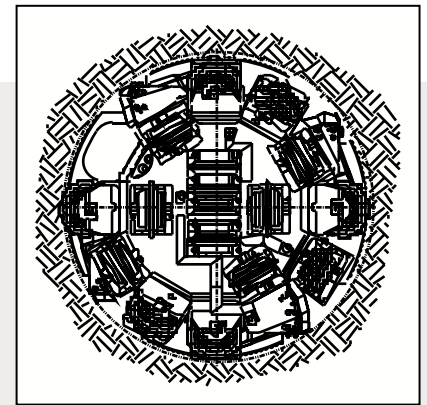
AVAILABLE FOR PURCHASE OR LEASE



Side View



Front View



SPECIFICATIONS

MACHINE DIAMETERS	2.0 to 3.0 m (larger sizes available)
ROCK STRENGTHS	25 to over 250 MPa UCS
GROUND CONDITIONS	Medium to very hard rock, or mixed ground
CUTTERHEADS	Both hard rock and mixed ground cutterheads are available
CUTTERS	All machines can be equipped with 14 inch or 17 inch discs

SBU-DS 88

Bore Diameter	2.2 m
Boring Stroke	762 mm
Main Bearing	Tapered Roller
Machine Thrust	4,025 kN
Cutterhead Drive	5 x hydraulic motors
Drive Motors	2 x 260 kW water-cooled
Max. Torque	198,000 N-m
Max. System Press.	35 MPa
Conveyor	460 mm troughed belt

SBU-DS 97

Bore Diameter	2.5 m
Boring Stroke	762 mm
Main Bearing	Tapered Roller
Machine Thrust	6,290 kN
Cutterhead Drive	5 x hydraulic motors
Drive Motors	2 x 260 kW water-cooled
Max. Torque	198,000 N-m
Max. System Press.	35 MPa
Conveyor	460 mm troughed belt

The Robbins Company
29100 Hall Street
Solon, Ohio 44139
USA

Corporate Headquarters:
Phone: +1 440 248 3303
Fax: +1 440 248 1702
Email: sbusales@robbinstbm.com



Visit www.TheRobbinsCompany.com for more information.

© Copyright 2009 The Robbins Company
Metric Version