

ROBBINS SBU DIVISION

Metric Version



DOUBLE SHIELD TBM (SBU-DS)

The Double Shield TBM (SBU-DS) is ideal for long tunnels (up to 3 km) 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.

SBU-DS APPLICATIONS

- Long tunnels with no intermediate access
- Line- and grade-sensitive tunnelling
- Bore lengths up to 3,000+ m

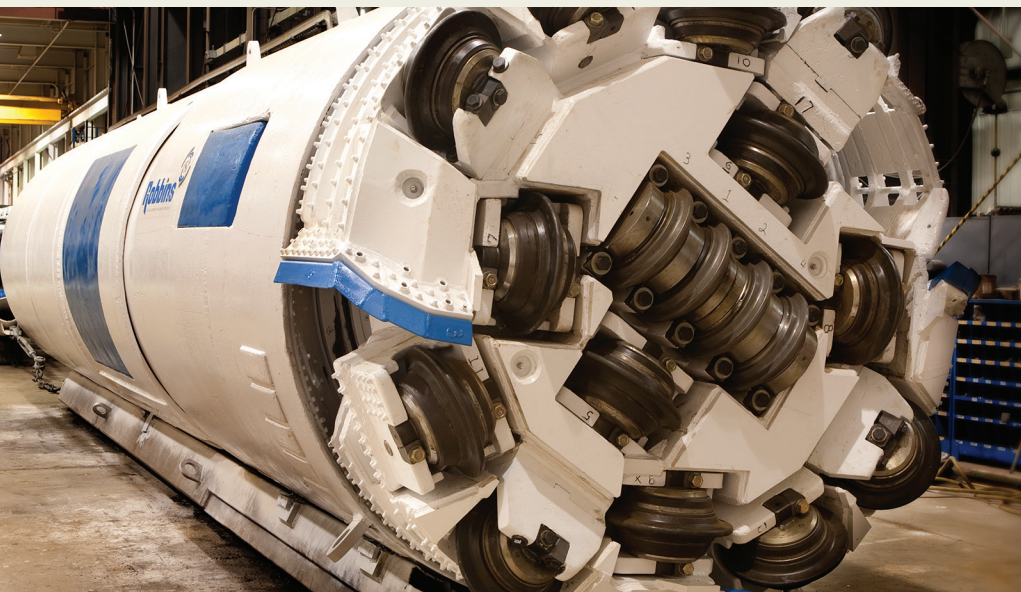
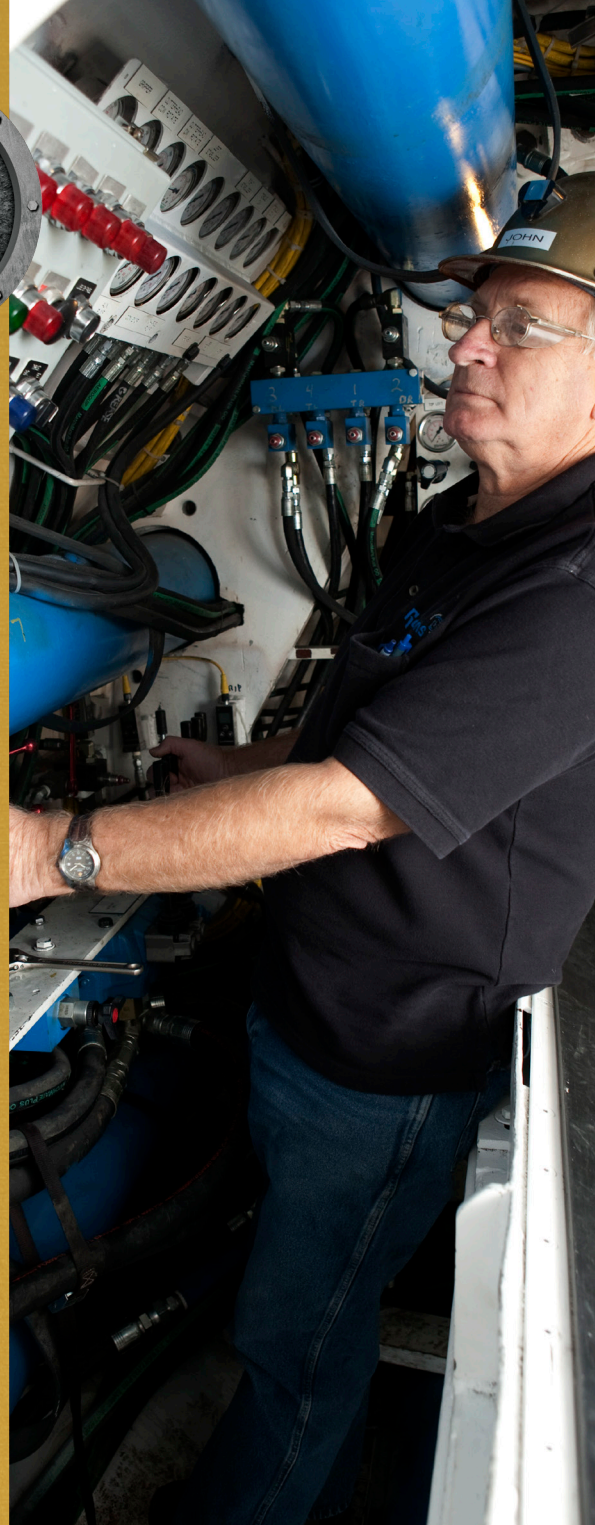
GUIDED BORING

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.

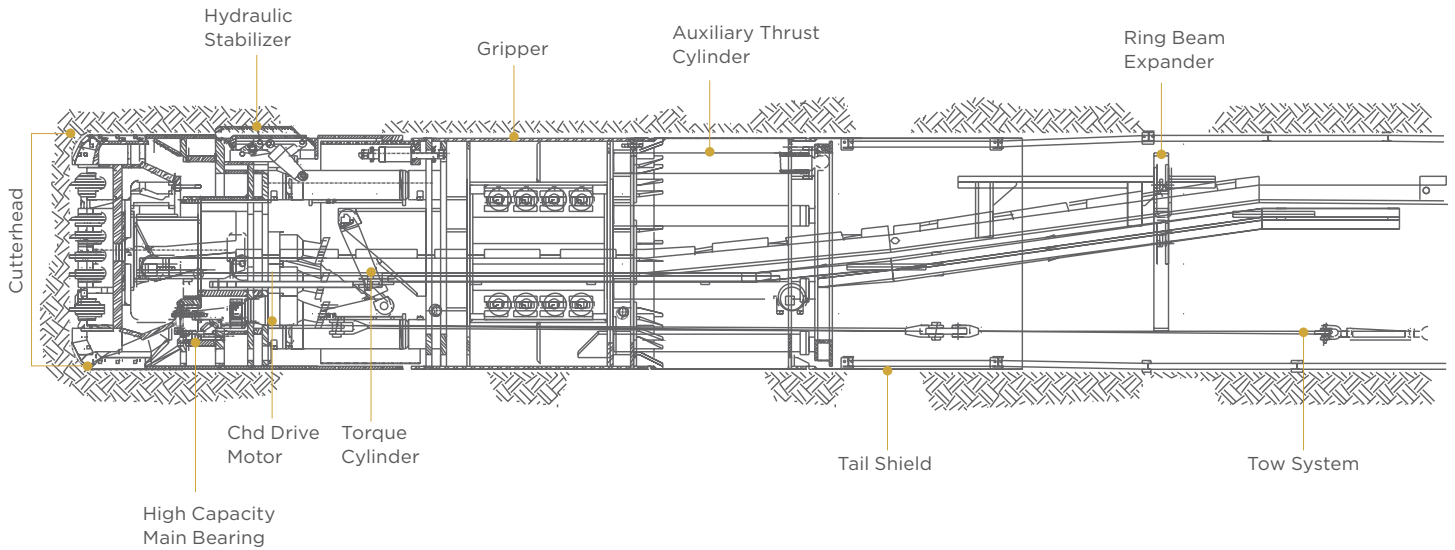
TUNNELLING WITH NO LIMITATIONS

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.

**AVAILABLE FOR
PURCHASE OR LEASE**



DOUBLE SHIELD TBM (SBU-DS)



SPECIFICATIONS

MACHINE DIAMETERS

2.2 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 304 mm to 432 mm discs, depending on geology

SBU-DS 2.2/2.5 M

Bore Diameter - 2.2 m to 2.5m
Boring Stroke - 762 mm
Main Bearing - Tapered Roller
Machine Thrust - 560 tonne max
Cutterhead Drive -
5 x hydraulic motors
Drive Motors -
2 x 261 kW water-cooled
Max. Torque - 315 kN-m at 12 RPM
Max. System Press. - 345 bar

SBU-DS 2.6/3.0 M

Bore Diameter - 2.6 to 3.0 m
Boring Stroke - 1,270 mm
Main Bearing - Tapered Roller
Machine Thrust - 1,400 tonne max
Cutterhead Drive - Electric
Drive Motors -
2 x 186 kW water-cooled
Max. Torque - 1,230 kN-m at 9 RPM
Max. System Press. - 345 bar