

# ROBBINS SBU DIVISION

Metric Version



## MOTORIZED SMALL BORING UNIT (SBU-M)

The Motorized SBU is the optimal choice for longer utility installations (over 100 m) or for crossings with specific line and grade requirements. The SBU-M is an intermittently manned, articulated mixed ground and hard rock boring machine for use with standard Auger Boring Machines (ABMs) or pipe jacking systems. The SBU-M is attached to the lead pipe or casing and uses disc cutters to excavate rock, or a mixture of both disc cutters and soft ground tooling for mixed ground. A small invert auger or vacuum system removes spoils from the face. The SBU-M is bolted to the lead casing prior to excavation for shorter starter and exit shafts. An in-shield motor provides torque to the cutterhead, while forward thrust is derived through the casing via the ABM.

### SBU-M APPLICATIONS

- Pipe jacking
- Line- and grade-sensitive rock crossings
- Alternative to microtunnelling in dry to near dry rock/ mixed ground conditions
- Bore lengths over 100 m

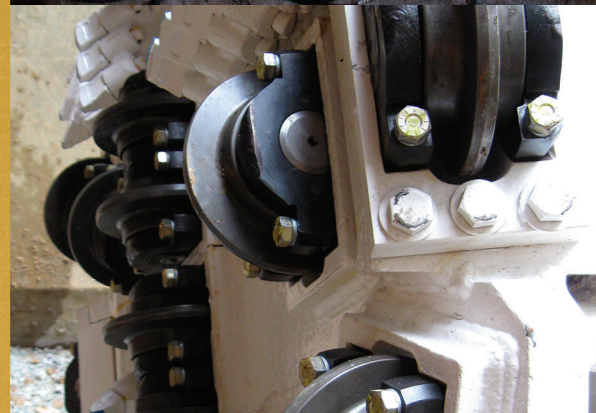
### THE MOST ACCURATE TUNNELING

The SBU-M can be steered throughout the drive from an operator's console inside the rear shield. Articulation cylinders and manually adjustable stabilizer pads allow for continuous control of line and grade. Accuracy is continuously monitored using a laser targeting system.

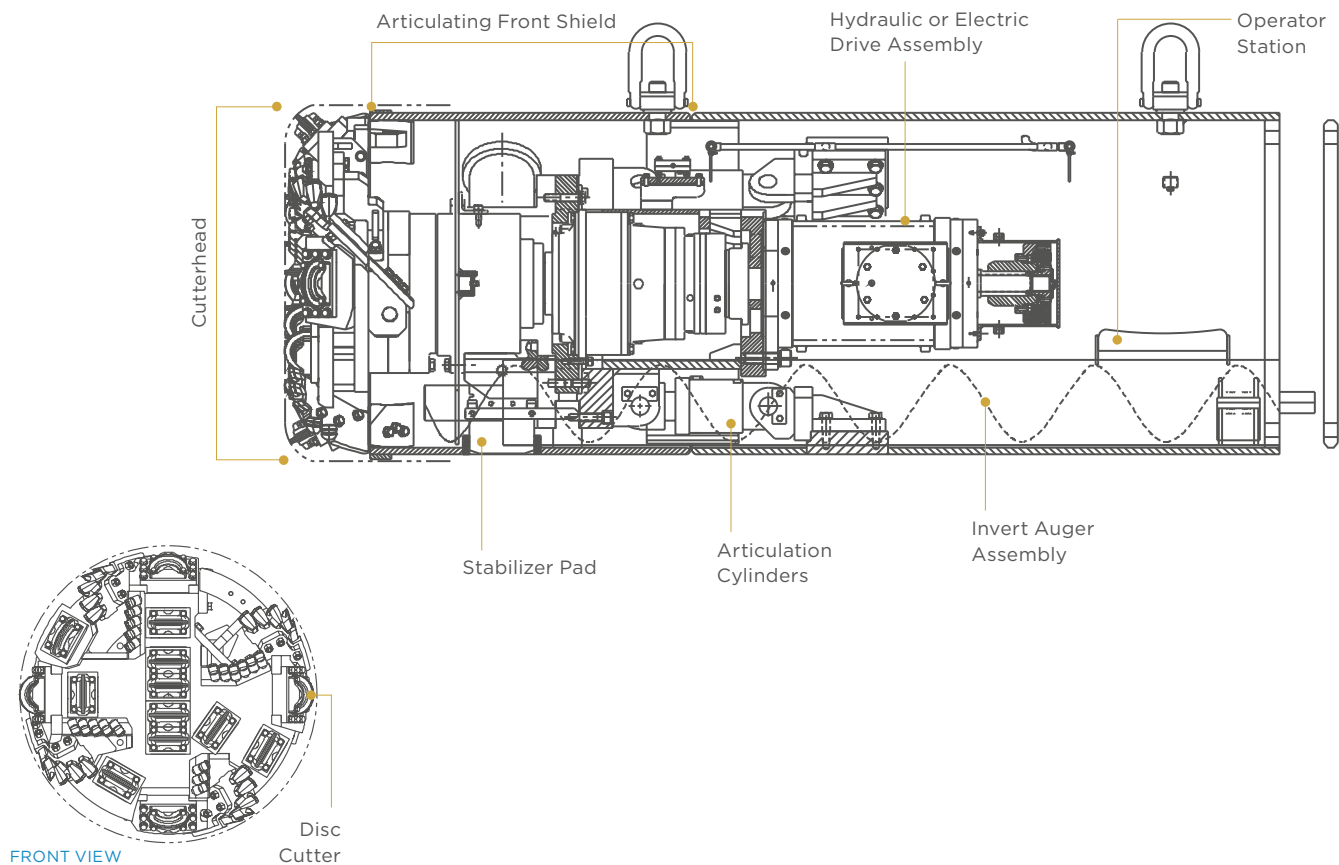
### A COST EFFECTIVE SOLUTION

The SBU-M offers more efficient excavation than typical carbide bit or roller cone cutting heads. Most carbide tools tend to break off in rock above 50 MPa UCS. The SBU-M uses disc cutters to chip away hard rock from 25 to over 175 MPa UCS.

### AVAILABLE FOR PURCHASE OR LEASE



# MOTORIZED SMALL BORING UNIT (SBU-M)



## SPECIFICATIONS

### MACHINE DIAMETERS

1.2 to 2.0 m

### ROCK STRENGTHS

25 to over 175 MPa UCS

### GROUND CONDITIONS

Medium to hard rock or mixed ground

### CUTTERHEADS

Both hard rock and mixed ground cutterheads are available

### CUTTERS

All machines are equipped with 165, 241, 292, or 356 mm discs

HYDRAULIC AND ELECTRIC MOTORS ARE AVAILABLE.  
CONTACT US FOR MORE INFORMATION ON HYDRAULIC MODELS.

### SBU-M 48

Bore Diameter - 1270 mm  
Approx. Weight - 10 metric tons  
Approx. Length - 3.7 m  
Power Required -  
380/440 V; 3 Phase; 125 kW

### SBU-M 54

Bore Diameter - 1420 mm  
Approx. Weight - 13 metric tons  
Approx. Length - 3.7 m  
Power Required -  
380/440 V; 3 Phase; 125 kW

### SBU-M 60

Bore Diameter - 1570 mm  
Approx. Weight - 16 metric tons  
Approx. Length - 4.3 m  
Power Required -  
380/440 V; 3 Phase; 250 kW

### SBU-M 66

Bore Diameter - 1730 mm  
Approx. Weight - 16 metric tons  
Approx. Length - 4.3 m  
Power Required -  
380/440 V; 3 Phase; 250 kW

### SBU-M 72

Bore Diameter - 1880 mm  
Approx. Weight - 17 metric tons  
Approx. Length - 4.6 m  
Power Required -  
380/440 V; 3 Phase; 350 kW

### SBU-M 78

Bore Diameter - 2030 mm  
Approx. Weight - 17 metric tons  
Approx. Length - 4.6 m  
Power Required -  
380/440 V; 3 Phase; 350 kW