

Use of drilling rigs in rock consolida- tion

Stonepower drilling rigs are designed to be multi-purpose and convertible, which makes them perfectly suitable for various ways of consolidation.

Consolidation is used to strengthen and reinforce the excavated rock, preventing it from collapsing in both above-ground and underground sites. Safe and durable structures are created by consolidating the rock, i.e. by improving its load-bearing capacity.

Reinforcement bolting

Bolting is a commonly used method of reinforcing rock. Bolting ensures the safety of the site during the excavation work and after it.

Stonepower drilling rigs to help with reinforcement bolting:

Thanks to its excellent reach and roto boom, the Stonepower drilling rigs reach well and move nimbly on rock construction sites. With remote control, they are safe to work in a wide variety of conditions.

Strengths of the Stonepower drilling rigs in the different working stages of consolidation

- Remote control
- Excellent reach both horizontally and vertically
- Good boom geometry
- Roto boom as standard feature
- Efficient drill
- Hose drum as a standard feature
- Cylinder feeding
- Water flushing



Grip bolting and anchoring

Grip bolting is used in the construction of foundations. Sites include, for example, supporting wind turbines and masts. In anchoring, the mass of the rock is utilized as part of the concrete structure. It can, among other things, guarantee the immobility of structures.

Stonepower drilling rigs to help with anchoring:

When anchoring with the Stonepower Scorpion drilling rig, it is possible to install the Eurodrill hammer drill instead of the standard Montabert drifter. The Scorpion has a good reach in horizontal drilling up to 7.4 m high, and 9 m to the ceiling.

Injection

Injection is used both to block water leaks and to strengthen rock structures. In injection, holes are drilled into the rock, into which concrete or chemical sealing material is fed under pressure.

Stonepower drilling rigs to help with injection:

Good boom geometry and an efficient drill are an unbeatable combination when working on rock sites. Water flushing, cylinder feeding and a hose drum for drill machine hoses, which are standard in Stonepower drill rigs, are convenient features during the work phases of consolidation.

Stonepower drilling rigs to help you with rock consolidation

Stone Spider

Drilling diameter	45–89 mm
Drilling depth	4–26 m
Weight	14 500 kg

Stone Scorpion

Drilling diameter	41–64 mm
Drilling depth	4–14,8 m
Weight	9 400 kg

Stone Termite

Drilling diameter	32–64 mm
Drilling depth	3,3–4 m
Weight	6 150 kg