

OMEGA-BOLT®



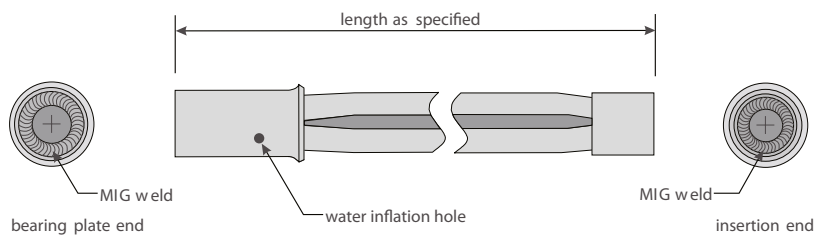
OMEGA BOLT™

The DSI Omega Bolt™ is an expandable rock bolt with excellent elongation properties designed to accommodate ground movement. The Omega Bolt™ is a folded steel tube with a welded ferrule on each end.

Safe and easy to install, the Omega Bolt™ is inserted into the drilled hole and inflated using high pressure water.

Inflated to the exact shape of the drilled hole, the Omega Bolt™ can tolerate a large variation in hole diameter.

Available both “black” and coated. The coating is a zinc rich resin epoxy compound. The coating does not interfere with normal installation procedures.



	12 Tonnes Standard	12 Tonnes Plus	16 Tonnes Plus	24 Tonnes Standard	24 Tonnes Plus
Minimum Breaking Load (kN)	120	115	150	240	220
Minimum Elongation	10%	20%	20%	10%	20%
Profile Diameter	1.08"	1.08"	1.42"	1.42"	1.42"
Material Thickness	0.078"	0.078"	0.078"	0.118"	0.118"
Hole Diameter Range	1-1/4 to 1-1/2"	1-1/4 to 1-1/2"	1.7 to 2.05"	1.7 to 2.05"	1.7 to 2.05"
Optimal Hole Diameter	1-3/8 to 1-1/2"	1-3/8 to 1-1/2"	1-3/4 to 2"	1-3/4 to 2"	1-3/4 to 2"
Inflation Pressure	300 bar	300 bar	300 bar	300 bar	300 bar

OMEGA BOLT™ PUMP

Inlet air pressure range: 75-90 PSI, 5.1-6.2 Bar

Outlet water pressure range: 4350-4700 PSI, 300-325 Bar

Approximate bolt fill time for a standard 12 tonne 8 foot bolt : 60 Seconds

Two stage filtration system with coarse and fine mesh.

The pump inflates all Omega Bolt™ sizes with optional chucks:

Model Number	Chuck Capacity
A	10 and 12 Tonnes
B	16 and 24 Tonnes

Replacement chucks and seals for these chucks are available for purchase through DSI



OMEGA BOLT™ COATING

The need for anti-corrosion coatings has existed for many years in the ground support industry, but the application requirements have made coating selection limited. Varying groundwater and chemical conditions continually challenge long term coating performance.

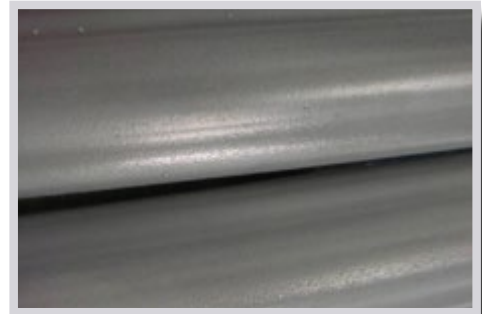
The DSI Omega Bolts™ are coated to allow increase their life span in corrosive conditions compared to the basic black bolt product. A zinc metal powder is added to the epoxy to offer a galvanic corrosion protection system to the bolt.



Advantages:

- Coating is thin, handles well with existing installation equipment and allows for bushing protection.
- Coating does not de-laminate with bolt inflation.
- Very abrasion resistant.
- The Zn coating protects the steel in the eventuality of scratches as the high adhesion and self healing process team up to provide corrosion protection.
- Applied to standard black bolts in all sizes 12, 16 and 24 tonnes.

The DSI Omega Bolt™ Coating incorporates two forms of corrosion protection, first an epoxy base for acidic environments and second a high Zinc content for basic environments. The coating is applied as a Zinc rich epoxy primer powder coating and then baked on. This forms a very thin, strong coating that doesn't affect handling but provides superior corrosion protection. Zinc filled epoxy coating provides excellent protection in both acidic and alkaline conditions.



ACCESSORIES



Chuck Tester

- The chuck tester is a useful tool to ascertain when the inflation seals are worn and or bolts do not seem to be inflating properly.
- Used for the mechanics to coordinate with regular maintenance checks.
- The tool is simple to use. placed in the inflation chuck – similar to the rock bolt.

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