Pumbable J-LOK P™

JENNMAR CIVIL

Features

J-Lok P is a two part resin to provide a mechanical link with the wall of a borehole and the surface of the tendon.

- Significantly decreases bolting cycle time.
- Provides true, long term, single pass ground support in poor or collapsing drill hole conditions.
- Decreases stope access down time for increased production.
- Immediate tension can be applied.
- Customizable and reliable set times from seconds to hours.
- Quality Control reassurance to geotechnical engineers and underground personnel.

Pump SYSTEMS

- Skid/Light Vehicle Mounted or Machine Mounted System. Available for Mechanized bolters, Cable Bolters, Jumbos, Scissor-Lift Bolters, etc.
- Power: 480V, 600V, 1000V or Remote Hydraulic PTO with 24VDC.
- Cab mounted push button station with 7" touch screen.
- Loading station complete with manual hatches to ease loading.

Installation Methods

- Resin-into-bolt rock bolting at all angles.
- Bolt-into-resin rock bolting at all angles.

Application	Typical Resin Speed for Application	Gel Time[1]	12" Short Encapsulation Pull Test (Time to 20 tons)[1,2]
Solid Rebar Bolts	J-Lok P 10	5 - 7 Minutes	10 Seconds
	J-Lok P 60	15 - 25 Minutes	60 Seconds
Hollow Core Bolts (SDA, MPA,...)	J-Lok P 120	60 - 75 Minutes	120 Seconds
	J-Lok P 180	140 - 200 Minutes	3 Minutes
Long Tendons (Cables, Strand...)	J-Lok P 250	4 - 6 Minutes	10 Minutes
	J-Lok P 700	15 - 30 Minutes	1 -2 Hours

Note:

1.) Gel time is temperature dependent and will be faster when temperatures exceed 55°F and slower when below 55°F.

2.) Pull tests conducted following ASTM F432 guidelines.

J-Lok P is packaged in easy to handle 42 lb resin and catalyst kits.

Bolting Applications

J-Lok P has been formulated for anchoring and sealing rock bolts in mining and tunneling applications. It is designed to instantly thicken after injection retaining a thixotropic nature within the rock bolt hole to avoid resin loss and allow sufficient time for complete installation of the rock bolt. It is especially effective in vertical bolting applications, and can also be injected through SDA's (Self-Drilling Anchors). There are several versions of J-Lok P available, in order to meet the requirement for different application conditions and processes.

J-Lok P is composed of 80% inert limestone particles and a proprietary resin formula. The J-Lok P composite has an unconfined compressive strength of 6,500 psi, 45 MPa (ASTM D 790-02). The resin used to manufacture J-Lok P has an unconfined compressive strength of 16,500 psi, 114 MPa (ASTM D 790-02).

Any anchorage system performance varies with surrounding strata strength. J-Lok P provides approximately 2.5 tons per grouted inch pull out resistance in hard rock and 0.5 tons per grouted inch in soft rock. Estimated performance can be viewed in the graph to the right.