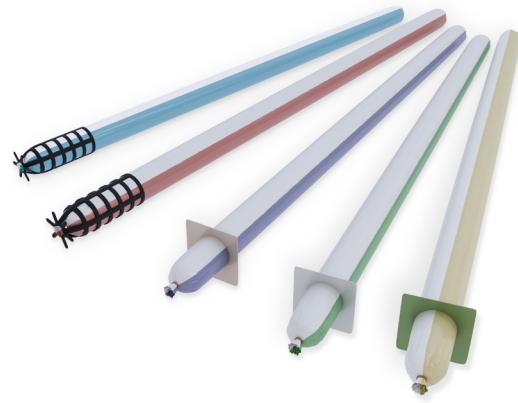


MINOVA

LOKSET™ RESIN CAPSULES

SUPERIOR QUALITY RESIN BOLT SUPPORT SYSTEM



Lokset capsule colours and retainers may differ based on specification.

DESCRIPTION

Lokset resin capsule consists of a filled polyester mastic and a catalyst paste, contained in a heat-sealed tube of polyester film. A film barrier prevents premature chemical reaction until the moment of use. They are intended for the installation of bolts to reinforce rock strata and installation of various anchoring elements to building structures.

APPLICATION AND USES

- > Anchoring of steel/GFRP rock bolts for ground support in mines & tunnels
- > Anchoring of rock reinforcement in rock cuts & slopes
- > Bonding of anchorage of equipment to rock or concrete
- > Anchoring of bolts for machinery
- > Anchoring of short pins & reinforcement to building structures

ADVANTAGES

- > Full encapsulation with pre-tensioning when using combination Toospeedie capsules
- > Rapid insertion, easy and quick to use
- > Protects bolt from corrosion can be used in wet or underwater conditions
- > No expansion stresses and can be used in weak strata
- > Unique design of capsule configuration enabling extremely effective mixing of resin mastic and catalyst compartments
- > ISO 9001: 2015 Quality system, with in-house NABL testing facility

TECHNICAL PROPERTIES

A wide range of set times is offered for varied conditions. The standard set times are as tabulated; these meet most underground mine requirements. The set times are standardized at 25°C.

PRODUCT DESCRIPTION	CATEGORY	GEL TIME (SEC)
SS-28*1200*2M	Medium	45 – 55
SS-26*1200*2M	Medium	45 – 55
TS-26*1200*2FS	Slow & Fast	(80 - 100) & (28 - 33)
TS-26*900*2FS	Slow & Fast	(80 - 100) & (28 - 33)
SS-26*900*2M	Medium	45 – 55
SS-26*500*1M	Medium	45 – 55
SS-26*300*1M	Medium	45 – 55
SS-24*600*1AS	Adv. Slow	175 – 203
SS-24*500*1AFP	Adv. Fast	58 – 64
SS-24*400*1AFP	Adv. Fast	58 – 64
SS-40*300*1AS	Adv. Slow (High Strength Capsule)	175 – 203
SS-32*300*1AS	Adv. Slow (High Strength Capsule)	175 – 203
SS-24*450*1AFP	Adv. Fast	58 – 64
SS-24*350*1AFP	Adv. Fast	58 – 64
SS-24*300*1MP	Medium	45 – 55
SS-24*500*1ASP	Adv. Slow	175 – 203

Note: Capsule diameter, gel time and length of capsule can be adjusted as per customer specific requirement.

For optimum results, it is important to ensure careful control of:

1. Hole diameter i.e. bit size.
2. Hole length, i.e. length of drill rod.
3. Use of sufficient resin to anchor the desired length of the bolt to the surrounding strata.
4. A minimum of 500mm of resin bond is recommended to ensure long-term anchor strength of end-anchored bolts.

APPLICATION METHOD

Lokset resin capsules can be applied using different types of bolting machines including hand-held bolters, leg-mounted bolters and mechanised mobile bolters. If capsules are placed in the borehole by compressed air it may be necessary to use a special type designed for pneumatic shooting. For the optimal choice of capsule type, it is recommended to consult your Minova representative and if possible, perform anchoring tests under real conditions. During most standard applications the following steps should be taken:

- > Drill a hole to the correct depth and diameter; drilled holes must be made clear of dust and debris by flushing with water or air. The optimal difference in diameter between the bolt and borehole is between 4 and 10 mm.
- > Insert required number of capsules into the hole and place bolt into the hole.
- > Attach bolt to rotary machine and start a slow rotation through the capsule(s) until the bottom of the drilled hole is reached.
- > When the bolt head reaches the hole bottom, stop movement, and spin the bolt for five seconds at 200-600 rpm or a minimum of 35 revolutions. Do not overspin. If bolt rotation continues through the gel, damage to the anchor may occur.
- > Stop rotation and leave bolt undisturbed until resin has cured. Put plate, washer and nut over bolt and tighten up if required.

TECHNICAL SUPPORT

We provide technical advisory service by a team of specialists in the field. The service includes on site assistance and advice on evaluation trials and laboratory work.

MANUFACTURER

Minova Runaya Pvt Ltd

An ISO 9001:2015

Quality Management Certified Company

Certificate No. GSCI-IN/QMS/2024/007

SAFETY INSTRUCTIONS AND LIMITATIONS

Observe the usual precautionary measures for handling chemicals and refer to the Lokset SDS. In case of incorrect anchor selection, wrong hole dimensions or the incorrect anchoring method, i.e., lack of anchor rotation or low rotation speed, the capsule components might be insufficiently mixed. In such cases, the bond strength may be less than the theoretical strength. The capsules should not be used in weak, loose, incoherent or highly porous soil, such as sands and clays. Capsules should not be used in holes with flowing water, with a strong presence of water and near groundwater sources. When working with resin capsules wear, safety gloves, goggles and protective clothing. Do not open or puncture capsules prior to use. If clothes become saturated with any of the capsule's components it is recommended to change into a set of clean clothing. For skin contact, wash thoroughly with soap and water. For detailed safety information, please refer to the corresponding Safety Data Sheet.

STORAGE AND SHELF LIFE

The capsules shall be stored in closed original packaging, in dry and well-ventilated areas, away from direct sunlight. Shelf-life period for storage temperature $\leq 20^{\circ}\text{C}$ is 9 months. A higher storage temperature can lead to shortening of the shelf-life. Storage at temperatures above 30°C is not recommended.

DISPOSAL

Follow local regulations.

CUSTOMER SERVICE

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