

CEMENTITIOUS GROUTS



Tekseal® LD

MSHA-Approved Pumpable, Permanent, Blast-Proof Ventilation Seal System

Uses

The Tekseal® LD pumpable seal process is a revolutionary system for installing permanent underground ventilation seals.

Description

The Tekseal® LD system is a simple, innovative, and the most cost effective permanent seal system for the mining industry. Formwork for the Tekseal® LD “plug” is constructed of timber cribs or posts, boards and brattice cloth. Alternatively, concrete blocks or steel prefabricated panels can be used. Supplied as a powder, the Tekseal® LD forms a low-density foam (0.6 to 0.8 specific gravity) when combined with a controlled amount of air and water in Minova’s specially designed placer unit. The 400 psi compressive strength mixture begins to gel in minutes, forming a non-toxic, non-combustible product weighing approximately 1200 lbs/yd³. The lower causticity of the Tekseal® LD mix allows safer handling than with other standard cement products.



Advantages

- **LD** – Longer pumping distance up to 4,000’ with high pressure placer pump.
- **Acid Mine Water Resistant** – Determined as a result of months of MSHA testing in pH 3 water.
- **Simple** – Easy to install; eliminates requirement for hitching into roof, ribs and floor.
- **Proven** – Thousands of installations have been constructed in the USA alone.
- **Ease of Use** – Ideal for difficult to reach areas and/or areas in need of major rehabilitation for conventional seals.
- **Labor Saving** – Requires the fewest possible man hours.
- **Safety** – Less exposure time in questionable areas; less heavy work involved.
- **Yieldable** – Yields with ground pressure to 60% of original height before brittle failure. A substantial improvement over conventional seals, Tekseal® LD mimics the stiffness of the adjacent ribs. This helps maintain even stresses, resulting in reduced fracturing of the ribs and minimizing air leakage through the surrounding strata.
- **Reduced Cure Times** – By controlled increases in the product density, cure times can be as low as 3 days.
- **MSHA Approved** – All sizes of roadway entry approved for both 50 psi & 120 psi dynamic blast pressures. (See www.msha.gov for details.)

Consult your local Minova representative for additional application information and formwork construction details.

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Tekseal® LD

Packaging

45 lb, 3-ply bags with 1 polyethylene layer, 48 bags per stretch-wrapped pallet. Alternatively, Tekseal® LD is available in "super-sacks," reducing handling, manpower and waste packaging issues.

Instructions for Use

To calibrate the placer unit and to make adjustments to the water supply, trained and certified supervisors are required and are available through Minova or authorized contractors. They must be on site to advise mine personnel, especially during the pumping process.

1. Remove all loose material from roof, ribs and floor at the seal site (no need to rebolt, hitch or grade).
2. Run at least 2,000' of 1-1/2" slick line or hose from the placer to the seal site.
3. Hook up fresh water at a rate of 25 gpm at 50 psi, and AC power, to the placer. 15 gal of water per 100 lbs of Tekseal® LD powder are required.
4. Pump the mix into the formwork.

Placer – Made in the USA by Minova; Multi-use placer unit is used to transfer several of Minova's cementitious products: Tekfoam, Tekcrib, Tekrok, Tekrok SCR

Motor: 20 hp AC; Full load amps - 21 @ 460V, 18 @ 575V; Cable Size: normally #6. Develops 200+ psi, and typically pumps Tekseal® LD cement 4,000' through a 1-1/2" hose. For greater pumping distances, please contact your local Minova representative. Requires water supply @ 50 psi without the optional water heater, 100 psi with.

Dimensions: 3'6" x 2'3" x 11'9";

Wgt: 1,700 lbs;

Unit capacity: 17.5 yds³/hour.

Water Heater – Required in some applications to bring the water temperature above 60°F.

Full load amps - 90 @ 460V, 110 @ 575V;

Cable Size: normally #2;

Dimensions: 3'2" x 3'4" x 3'10";

Wgt: 1,700 lbs when full

Shelf Life

Three months in dry conditions.

Minova Americas Products

Bolts and Plates

Anchoring Products

Pumpable Cementitious Grouts

Airtite® Sealants and Coatings

Chemical Grouts



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Important Note: Warranty

Minova USA Inc. warrants that its products, at the time of shipment, conform to the applicable descriptions set forth in the invoice and are free from defects in material and workmanship. NO OTHER WARRANTY, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, SHALL EXIST IN CONNECTION WITH THE SALE OR USE OF ANY MINOVA USA INC. PRODUCT, AND ALL SUCH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED AND EXCLUDED.

All claims under this warranty must be made in writing to Minova USA Inc. within 15 days after discovery of the defect, and within 90 days of the date of shipment by Minova USA Inc. of the product claimed defective. Upon timely receipt of a claim, Minova USA Inc. shall have the option either to inspect the product while in Buyer's possession or to request Buyer to return the product to Minova USA Inc. for inspection. Claims not made as provided above and within the applicable time period will be barred. All warranties shall be null and void if the products have not been stored and used in accordance with procedures recommended by Minova USA Inc.

Minova USA Inc. shall, at its option, either replace the nonconforming or defective product or refund to Buyer its purchase price. The foregoing constitutes Buyer's sole and exclusive remedy for any breach of warranty.