

Vector™

Post-Tech™ PT Grease Injection Unbonded Post-Tensioned Concrete Structures

Description

It is generally the opinion of those who have studied and observed corrosion of unbonded post-tensioned cables in heat sealed or push-through cables that the corrosion can be attributed to one or a combination of the following causes:

- Poor quality grease
- Inadequate or “spotty” grease coverage
- Air voids in the sheaths
- Inadequate protection at anchor zones
- Damaged or exposed sheaths
- Exposure to environmental elements prior to installation

The Post-Tech PT Grease Injection system can address all of the aforementioned conditions by using a proven method of re-packing post-tensioned cables. Grease has been shown to fill the cable voids and to penetrate cracks, defects and porous grout plugs through which moisture can otherwise penetrate. The re-packing of unbonded post-tensioned cables with corrosion-inhibiting grease provides a cost effective way to prevent or minimize further deterioration. It is recommended that the system be used in conjunction with the PT Cable Drying system to assure that all moisture is purged from the cable sheath.

How it works

- After moisture inside each cable sheath is expelled with the Post-Tech PT Cable Drying process, rust-inhibiting, Post-Tensioning Institute (PTI) specified grease is injected under (high) pressure through installed ports or exposed cable anchors to ensure full coverage.
- Grease fills the sheathing over the entire length of cable greatly reducing or eliminating air pockets.
- The grease typically provides good penetration into the anchors and grout plugs and helps to seal the joint between the grout and the concrete.
- PT Grease Injection can provide complete coverage of every wire of the cable.
- PT Grease Injection is a proven system that reduces the risk of future cable corrosion.



Post-Tech PT Grease Injection

The PT Grease Injection process is used in conjunction with PT Corrosion Evaluation, and PT Cable Drying to provide an economical solution for engineers and building owners to address their corrosion mitigation and protection issues. These two systems working together can help extend the service life and integrity of structures at a fraction of the cost of other repair methods.

The Post-Tech range of PT Corrosion Solutions is utilized as part of an overall strategy for the evaluation, identification, and protection of post-tensioned concreted structures. Structural assessments should be conducted by a qualified structural engineer. For corrosion mitigation of metals directly embedded in concrete such as temperature reinforcement and anchors, Vector recommends the use of galvanic corrosion protection systems. For additional product information please visit www.vector-corrosion.com.

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Vector Corrosion Technologies Ltd.
474 Dovercourt Drive
Winnipeg, MB R3Y 1G4
Phone: (204) 489-6300
Fax: (204) 489-6033

Vector Corrosion Technologies, Inc.
13312 N. 56th Street, #102
Tampa, Florida 33617
Phone: (813) 830-7566
Fax: (813) 830-7565

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TECHNOLOGIES**
www.vector-corrosion.com

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Email: info@vector-corrosion.com