

VISCOTAQ™ FLANGE PROTECTION SYSTEM (ATMOSPHERIC)



The ViscotAQ™ Flange Protection System comprises Viscosealant™ in combination with ViscotAQ EZ Wrap™ to prevent corrosion occurring between flange faces and is suitable for both onshore and offshore applications. For additional protection of the flange bolts, ViscotAQ Bolt Caps accompanied with Viscosealant are applied to the nuts and bolts.

The ViscotAQ Flange Protection System provides a seal that is not affected by vibrations of the pipeline, movements, freeze/thaw, expansion and contraction. The product remains in the same state and can be removed even after many years of service. ViscotAQ is hydrophobic; therefore water intake and water vapour permeability are very low. ViscotAQ is also non-toxic, contains no VOC's and adheres aggressively to most surfaces such as steel, PE, epoxies, tar, stainless, aluminium, and more. The result is a long-term corrosion prevention system and a maintenance free solution for many years.

COMPOSITION

ViscotAQ is a non-crystalline a-polar viscous elastic (viscoelastic) semi-solid polyolefin coating for corrosion prevention of underground and aboveground substrates.

ViscotAQ's molecular chemistry is unique and designed in such a way that the viscosity gives it permanent wetting characteristics and the elasticity of the product provides the strength and feeling of a semi-solid. The ViscotAQ compound bonds to the substrate by means of Van der Waals principles, penetrating the pores and anomalies of the substrate. The coating remains in intimate contact with the substrate creating an impermeable homogeneous corrosion prevention coating.

FEATURES

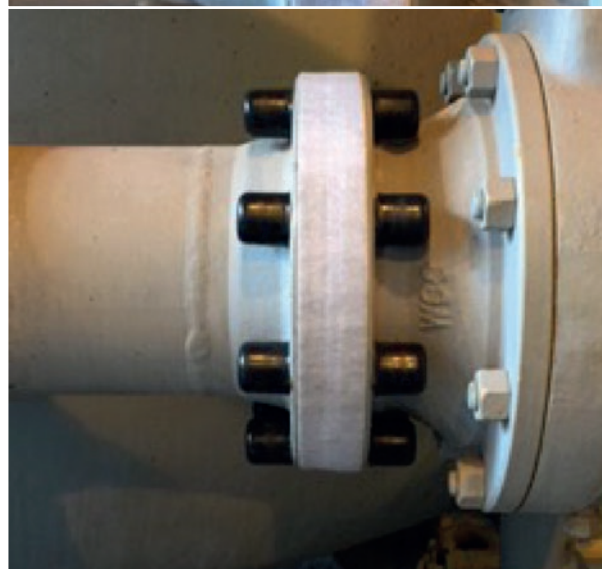
- Impermeable to moisture and gases
- Immediate adhesion to substrate / permanent wetting characteristics
- No primer needed
- Easy to apply, no mixing or messy clean-up
- Minimal surface preparation required (SP2-wire brush)
- Self-healing characteristics
- Inert material, no deterioration over time
- Resistant to aggressive soil conditions such as water, acid, salts, or soil organics
- Quick long-term protective coating, ready for immediate service
- Contains no solvents, no carcinogens, non-toxic, non-flammable
- Contains fire retardant materials and self-extinguishing
- UV resistant and never cracks or becomes brittle
- Flexible, pliable, conforms to irregular shapes easily
- Freeze / thaw resistant
- Thermal resistance -45°F to 160°F (-45°C to 71°C)
- Ability to fill voids and anomalies of substrate
- Meets NACE 0109:2019 and ISO 21809-3:2016

COMPONENTS

ViscotAQ Viscosealant™

ViscotAQ EZ Wrap™

ViscotAQ™ Bolt Caps (optional)



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METHOD OF APPLICATION

1. Surface Preparation

All surfaces shall be cleaned of mud, mill lacquer, wax, tar, oil, grease, or other foreign contaminants.

- Edges of the plant/existing coating shall be bevelled, and the plant coating shall be roughened over a minimum length of 6"/15 cm.
- Surface preparation may be carried out by a wire-brush cleaning to a minimum degree of cleanliness of ISO 8501-1, grade St 2 (SSPC SP 2), but preferably power brush cleaning, grade St 3 (SSPC SP 3 /SSPC SP11) or commercial blast-cleaning to a minimum degree of cleanliness of ISO 8501-1, grade Sa 2, SSPC 6.
- Dust contamination shall be grade 3 or better measured in accordance with ISO 8502-3. Remove any grease and dust with industrial alcohol (SP 1, solvent cleaning) using lint free wiping rags.
- All cleaned areas shall have protective coating applied before end of shift. If a cleaned surface does not get coated, it shall be re-cleaned on the shift.
- An alternative peel test procedure is recommended prior to application. Please refer to the Viscotaq Technical Manual for full surface preparation and peel test requirements.

2. Viscotaq Viscosealant™

- Protect the flange neck with a removable tape in order not to pollute the neck with the Viscosealant.
- Inject the Viscosealant cartridge into a caulking gun, next inject the Viscosealant in the complete circumference of the flange. (Heating of Viscosealant may be needed for easier application, material best applied at $\geq 35^{\circ}\text{C}/90^{\circ}\text{F}$.)
- Remove excessive material with a putty knife. A flexible nozzle can be used in order to penetrate the flange aperture successfully depending on the flange class and flange type.

3. Viscotaq EZ Wrap™

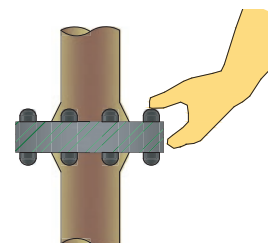
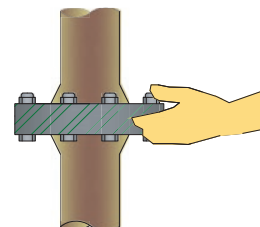
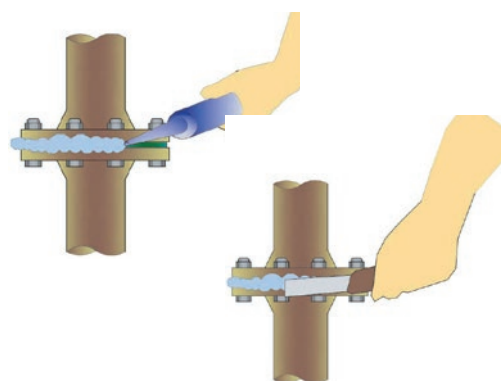
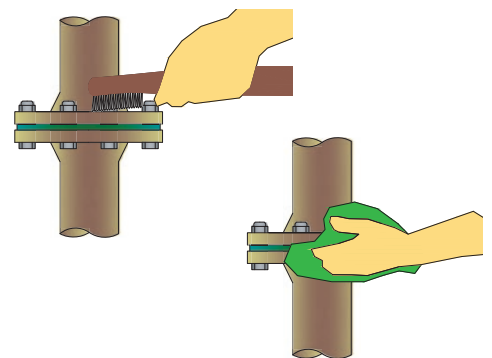
For aboveground applications Viscotaq EZ Wrap can be used in place of the Viscowrap. EZ Wrap can be painted if desired, in addition no outer wrap is required.

- Remove the protective tape on the neck and apply one layer of EZ Wrap over the complete circumference of the flange. Overlap EZ Wrap at least 5 cm/2". A roller may be used to ensure complete adhesion.
- Apply two separate wraps so that the circumference overlap between the two wraps is always a minimum 1 cm - 1/2" if the flange neck does not match the width of the EZ WRAP- more is possible, less is not allowed.
- The EZ WRAP should be painted with an acrylic flexible paint (Archco 65).

4. Bolt Capps

Bolt Caps can be used for protecting the flange nuts and bolts.

- Apply Viscosealant into caps before installation. Viscosealant will provide corrosion prevention as well as hold the caps in place.



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