# VISCOTAQ<sup>™</sup> BURIED FLANGE PROTECTION



Buried flanges can often be difficult to protect against corrosion. Viscotaq<sup>™</sup> provides an easy solution for corrosion prevention.

Viscotaq products can be moulded around the bolts and uneven surfaces. The product remains in a semi-solid state, offers immediate adhesion without the need for primer, requires minimal surface preparation and forms a continuous protective coating. Viscotaq bonds to the substrate at a molecular level creating a coating that is impermeable to moisture & oxygen.

## COMPOSITION

Viscotaq<sup>™</sup> 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 compound remains in intimate contact with the substrate creating an impermeable homogeneous corrosion prevention coating.

### COMPONENTS

Viscotaq Viscowrap<sup>™</sup> (ST, HT or XHT) Viscotaq Viscomastic<sup>™</sup>

Viscotaq Viscosealant™ (if required)

Viscotaq<sup>™</sup> Outer Wrap (HDPE, PVC, PE or Glass Wrap, if required)







## METHOD OF APPLICATION

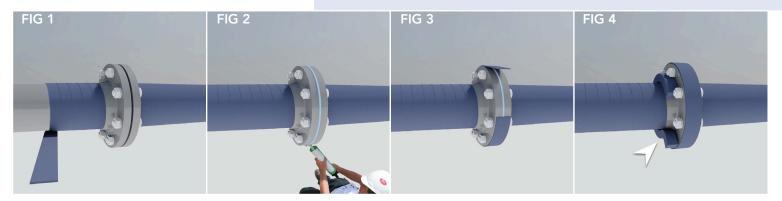
#### 1. Surface Preparation:

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 lent 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 Viscowrap<sup>™</sup> (on the pipe)

- Start wrapping the Viscowrap on the pipe as near to the flange as possible. Start with a straight circumferential wrap.
- Wrap into the direction of the factory coating and end straight with an overlap of a minimum 150 cm/6" onto the factory coating. This can be completed using spiral wrapping or multiple circumferential wraps. (Fig. 1).
- Wrap the Viscowrap with slight tension and a minimum 1cm/ ½" overlap.
- If wrapping is not an option due to space limitations, individual strips of Viscowrap may be used.



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### 3. Viscotaq Viscosealant<sup>™</sup> (when desired)

- Viscosealant is to be applied into the void between the flange faces, when the space is large enough for sealant to fit.
- For optimum application of Viscosealant, preheat material to 35°C/90°F.
- Apply the Viscosealant all the way around the flange pushing the sealant as far in the gap as possible (Fig. 2).
- Smooth the surface with a putty knife, removing excessive material.

### 4. Viscotaq Viscomastic™

- For optimum application of Viscomastic, the material should have a temperature above 25°C/77°F.
- The material should not be too cold, otherwise the material will be stiff and have a low viscosity when applying in difficult to reach areas.
- Cut the Viscomastic material in smaller pieces and push them into the flange bolts and irregular surfaces to be protected (Fig. 4).
- Use gloves and a putty knife to knead the Viscomastic at a 45° angle from the flange rim toward the pipeline.
- All bolts and nuts or other exposed objects should be covered with Viscomastic. Avoid inclusion of moisture and air.

### 5. Viscotaq Viscowrap<sup>™</sup> (on the outer rim)

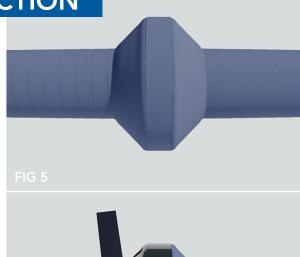
- Wrap one layer of Viscowrap material along the circumference of the flange. (Fig 5).
- End with a circumference overlap of 5 cm/2".
- When the flange is too wide for one wrap, make multiple single wraps, in such way that the circumference overlap is at least 1/2".
- During multiple circumference overlaps, they should be positioned in such way that they do not overlap each other.

### 6. Viscotaq<sup>™</sup> Outer Wrap, PE or PVC

- Start wrapping the Outer Wrap on the flange rim to one side and wrap downward with a 75% overlap. (Fig 6).
- Continue this process of back and forth around the flange until wrapping is complete (Fig 8).

Viscotaq Glass Wrap can be used in place of or in addition to the PVC or PE when additional mechanical protection is required.

\*Please refer to the Viscotaq Technical Manual for inspection and testing.



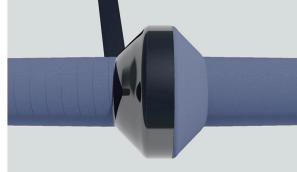
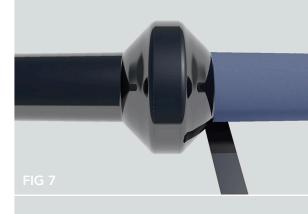


FIG 6













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