# VISCOTAQ™ CASING END SEAL SYSTEM

The Viscotaq<sup>™</sup> Casing End Seal System is based upon the use of ViscoMastic<sup>™</sup> in combination with ViscoWrap<sup>™</sup> and Denso Glass Outerwrap<sup>™</sup>.

The system is applied to prevent water infiltration and corrosion where the carrier pipe enters the casing pipe. One of the unique characteristics of the application is that the carrier pipe does not need to be centered in the casing.

The Viscotaq<sup>™</sup> Casing End Seal System can be installed on new and existing casings.

### **COMPOSITION**

Viscotaq<sup>™</sup> is a non-crystalline a-polar viscous elastic (visco-elastic) 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**

- Carrier pipe does not have to be centered in casing pipe
- Can be used on casings with multiple internal pipes
- Easy to install
- Inert material, no deterioration over time

### **COMPONENTS**

Viscotaq ViscoMastic<sup>™</sup> (ST or XHT) Viscotaq ViscoWrap<sup>™</sup> (ST, HT or XHT) Denso Glass Outerwrap<sup>™</sup>



A unique and useful characteristic of this application is that the carrier pipe does not need to be centered in the casing.

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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 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.

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### 2. Viscotaq ViscoMastic™

- For optimum application of ViscoMastic, the material should have a temperature above 77°F (25°C).
- Apply ViscoMastic a minimum of 1½"- 2" inside of the casing between the casing and carrier pipe.
- Taper ViscoMastic at a 30° angle from the casing pipe to the carrier pipe.
- ViscoMastic should be packed into the casing void with as few air pockets as possible.

## 3. Viscotaq ViscoWrap™

- Apply the ViscoWrap over the casing end seal area, starting on the casing ≥ 8" from the casing end.
- Wrap ViscoWrap with a 50% overlap from casing pipe to carrier pipe. Wrap at an angle with slight tension to create a smooth overlap.
- Ensure no air pockets are formed during wrapping.
- During transition to the carrier pipe, ensure that the last full wrap during the transition overlaps the casing by a minimum of 1". Follow through with wrapping with a 10% overlap and continue 8" on the carrier pipe.
- For a smooth transition, cover a minimum of 8"/20 cm onto carrier pipe and casing pipe.

### 5. Denso Glass Outerwrap<sup>™</sup>

Denso Glass Outerwrap is recommended for applications that require additional hydrocarbon resistance and/or mechanical protection.

Materials & Tools: Plastic wrap (shrink-wrap), Rubber gloves (heavy duty), Spray bottle (with water), and Scissors.

- Remove Denso Glass Outerwrap from packaging wearing rubber gloves and spray the wrap with water.
- Denso Glass Outerwrap cannot be applied at temperatures below freezing.
- Apply Denso Glass Outerwrap over ViscoWrap: Wrap with 50% overlap while continuing to spray with water while applying. A double thickness of the wrap is sufficient for most areas. When applying on uneven surfaces (i.e., casing end seals, flanges) wrap with sufficient tension to create a smooth transition.
- After Denso Glass Outerwrap is applied, wrap with plastic wrap (shrink wrap) with tension to smooth wrinkles and folds to form one continuous cast.
- Gently poke holes in plastic wrap for ventilation with preferably a punch roller. If you are doing this manually, then poke holes gently at various locations. Holes should be every few inches around the circumference of the pipe.
- When desired, remove plastic wrap when Denso Glass Outerwrap has cured.
   Average curing time is 1-3 hours. Denso Glass Outerwrap can be painted if desired.

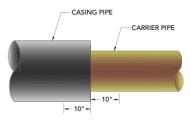


Fig. 1: Clean 10" surface area of both pipes.

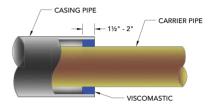


Fig. 2: Pack ViscoMastic a minimum of 1½" - 2" into void.

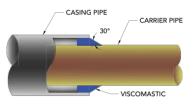


Fig. 3: Taper ViscoMastic at a 30 degree angle from the casing pipe to the carrier pipe.

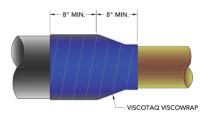


Fig. 4: Wrap ViscoWrap from casing pipe to carrier pipe.

Start wrapping min. 8" from casing end and continue ≥8"

onto carrier pipe.

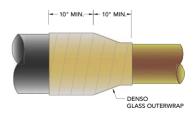


Fig. 5: Apply Denso Glass Outerwrap over Viscowrap layer. Start wrapping min. 10" from casing end and continue ≥ 10" on carrier pipe.

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