VISCOTAQ™ CORROSION PREVENTION COATING & MOISTURE BARRIER FOR INSULATED GIRTH WELDS

Coating failure and a pervious insulation system can lead to CUI (corrosion under insulation) and often go undetected.

Viscotaq[™] Viscowrap provides corrosion prevention at the pipe and girth welds as well as the vapour/moisture barrier for the insulation. Viscotaq can be applied with minimal surface preparation, does not require primer and forms a homogeneous continuous, corrosion prevention & moisture barrier coating. Viscotag bonds at a molecular level creating an impermeable barrier to moisture & oxygen. Viscotaq shows excellent adhesion to virtually all surfaces (pipe, cladding, other coatings, insulation) over a wide temperature range. Viscotaq always remains in a semisolid state and in constant contact with the substrate. Ease of application and outstanding performance is what makes Viscotaq an excellent technology for corrosion prevention and waterproofing.

COMPOSITION

Viscotaq is a non crystalline a-polar viscous elastic semi-solid polyolefin coating for protection against corrosion 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; forcing the material to flow into the pores and anomalies of the substrate. The elasticity of the product gives it the strength and feeling of a semi-solid. The product bonds at a molecular level creating an impermeable homogeneous corrosion prevention coating.

COMPONENTS

Viscotaq Viscowrap[™]
Viscotaq[™] Outer Wrap

10mil PVC for cold environments

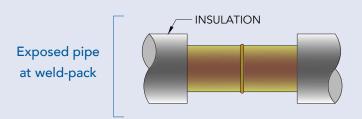


METHOD OF APPLICATION

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[™] (corrosion prevention on pipe and sealing of insulation)

The existing factory coating must be beveled to an angle of 45 degrees (when applicable). In case of thick coatings, bitumen or coal tar enamel, a bridge should be made on the bare steel onto the coating transition with a first straight circumferential wrap. This initial circumferential wrap will allow for properly wrapping over the 45 degree angle.

- Begin wrapping from the bottom with Viscowrap, starting with a minimum of 4 inches overlap onto the existing coating. (< 30" pipelines, 4" overlap; > 30" pipelines, 6" overlap.)
- The first wrap should be a straight wrap onto the existing coating.
- Once the initial straight circumferential wrap is completed, wrap with slight tension up the pipe starting on the initial wrap.
- Wrap at an angle with slight tension to create a smooth overlap and to ensure no air pockets are formed during wrapping.
- Wrap the Viscowrap with slight tension and a minimum 1 cm/ $\frac{1}{2}$ " overlap.
- End wrapping of Viscowrap with a straight circumferential wrap overlapping onto the existing coating.
- For difficult to reach areas or where wrapping is not possible, the Viscowrap can be placed on the pipe/substrate in strips overlapping a min of $\frac{1}{2}$ ".

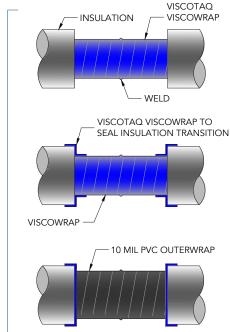
(Continued overleaf.)

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3. Sealing termination of factory applied insulation with Viscotag Viscowrap™ (optional)

- Wrap Viscowrap from previously coated pipe, overlapping a minimum of 2", and wrap towards cladding over exposed insulation.
- Mould Viscowrap from pipe over the insulation transition to cladding/outside layer.
- Pieces and strips can be cut placed and overlapping ≥1" to ensure complete coverage of the transition.

Viscowrap coating applied to pipe

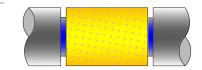


4. Viscotaq PVC Outer Wrap (10 mil)

Outer Wrap is applied for mechanical protection of the Viscowrap and to assure and accelerate adhesion.

- PVC Outer Wrap must be wrapped with a 50% minimum overlap, with tension.
- Wrap Outer Wrap starting from the bottom and wrapping upwards. Wrap in the opposite direction to how the Viscowrap was wrapped.
- The first wrap should be straight, followed by wrapping with tension up the pipe.
- The last section should end on a 4 o'clock position and be applied onto the pipe without tension.
- A ¼" section of Viscowrap material should still be visible after the PVC/PE Outer Wrap has been applied.

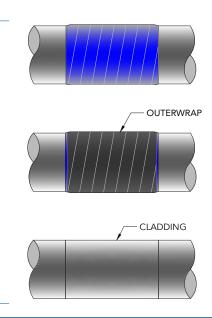
Installation reinstalled at weld-pack



5. Install insulation over coated weld

- Wrap Viscowrap from cladding to cladding over insulation to create a vapour barrier.
- Wrap Viscotaq PVC Outer Wrap (10mil) over Viscowrap.
- *Apply Viscowrap & Outer Wrap as per guidelines previously covered in this document.
- Apply cladding over weld pack (if desired).

Viscowrap over weld-pack





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