

VISCOTAQ™ ViscoWrap XHT

AMORPHOUS, LOW VISCOSITY, APOLAR, VISCO-ELASTIC, SEMI-SOLID,
POLYOLEFIN COATING FOR EXTRA HIGH TEMPERATURES

DESCRIPTION

VISCOTAQ™ ViscoWrap XHT is an amorphous, apolar, visco-elastic, semi-solid, polyolefin coating for corrosion prevention of underground and aboveground substrates for extra high temperatures. It is part of the VISCOTAQ™ coating system which consists of a corrosion protective inner layer (ViscoWrap XHT) and a mechanical protective outer layer. This coating system offers exceptional corrosion prevention and waterproofing for a variety of substrates.

USES

- Coating for concrete, steel, PVC, metal, wood, vinyl, and other coatings
- Soil-to-air transitions
- Pipe, flanges, elbows, tees, valves and fittings
- Girth welds
- Buried and above ground pipelines with minimal surface preparation
- Pipeline coating rehabilitation applications
- CUI applications
- End seal for pipe casing
- Tank chimes
- Waterproofing for bell and spigot joints

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
- Excellent cathodic protection/low cathodic disbondment
- 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 from -45°C to 125°C
- Ability to fill voids and anomalies of substrate
- Meets NACE 0109:2019, ISO 21809-3:2016 & AS4822-2018

SURFACE PREPARATION

Surface preparation should include the following:

- Surface inspected prior to application with any defects documented.
- Surface preparation should be a minimum ISO 8501-1 ST2/SSPC-SP2 (Hand Tool Clean).
- Once loose materials are removed, clean surface with 100% Isopropyl Alcohol, IPA, VISCOTAQ Substrate Cleaner to SSPC-SP1 to remove any remaining dust, grease, and moisture.
- In the case of abrasive blasting, a surface cleanliness of Sa 2 (SSPC 6) with a surface roughness of less than 100 microns is recommended.
- Surface of substrate should be 3°C or greater above the dew point.
- Keep the working area clean and dry at all times. Avoid the presence of water.
- Refer to the VISCOTAQ™ Technical Manual for further details.

Any adjacent coating should be cleaned and prepared to ST2/ST3, if applicable. Suggested overlap onto the existing pipe coating is 100mm for <760mm diameter pipe and 150mm for >760mm diameter pipe.



APPLICATION

VISCOTAQ™ ViscoWrap XHT is applied in the following manner:

- Remove the release liner and place the adhesive side onto the substrate (pipe).
- The initial wrap should be a straight circumferential wrap.
- Once completed, wrap the pipe with slight tension and a minimum overlap of 10mm or 10% of the roll width whichever is greater.
- Wrap at an angle to create a smooth overlap and to ensure no tenting or air pockets are formed during wrapping.
- End wrapping with a straight circumferential wrap.
- For coating repairs and difficult to reach areas ViscoWrap XHT can be applied in pieces, strips, or individual circumferential wraps (cigarette wrap).

After wrapping of ViscoWrap XHT is completed, immediately begin wrapping over the ViscoWrap XHT with PE Outerwrap or PVC Outerwrap to complete the VISCOTAQ™ Coating System.

VISCOTAQ™ PE Outerwrap or **PVC Outerwrap** is applied in the following manner:

- PE Outerwrap or PVC Outerwrap should be wrapped with tension and a minimum of 50% overlap.
- The first and termination wraps should be a straight circumferential wrap.
- A 3-5 mm section of ViscoWrap XHT should still be visible at each end of the outerwrap application.

Denso Glass Outerwrap™ may be used in addition to the PE Outerwrap or PVC Outerwrap when additional mechanical protection or increased service temperature is required. Glass Outerwrap (GOW) is applied in accordance with the TDS.

STORAGE

Store in a dry, well-ventilated area between 4°C and 60°C in original, unopened containers. Shelf life is unlimited under these conditions. It is recommended that all components be stored between 20°C and 30°C for 24 hours prior to use for optimum product application characteristics.

Due to the adhesive nature of the product, release films/papers should be kept in place during storage and whenever the material is placed on its side after removal from the case.

PACKAGING

Tape Width (mm)	Tape Length (m)	Rolls*/Carton
50mm	5m	20
50mm	10m	12
100mm	10m	6
150mm	10m	4
300mm	10m	2

TECHNICAL DATA

PROPERTIES	METRIC
Material State	Semisolid
Thickness (ISO 4593:1993E)	1.8 mm (70mils) avg.
Density (DIN 53479)	1.1-1.4
Glass Transition Temperature (ASTM E1356-03)	-42.92°C
Softening Point (ASTM E1356-03)	152°C
Water Vapor Permeability (ASTM E96/96M-10)	<4 x 10 ⁻⁴ g/day/m ² /Pa
Water Absorption (ISO 62)	<0.03%
Cathodic Disbondment at 23°C (ASTM G8-96/ISO 21809-3)	0mm (Self-healing)
Cathodic Disbondment at 50°C (ASTM G8-96/ISO 21809-3)	0mm (Self-healing)
Volume Resistivity (ASTM D257-07)	>2.2 x 10 ¹³ ohm*cm
Surface Resistivity (ASTM D257-07)	>5.6 x 10 ¹⁵ ohm*m ²
Thermal Resistance	-45°C to 125°C
Dielectric Strength (ASTM D149-09)	>17.5 kV/mm
Impact Strength (ISO 21809-3 (2016) Annex D)	>15 J (Immediate)
Indentation (ISO 21809-3 (2016) Annex E)	No holidays
UV/Weather Cycle Test (ASTM D4587, 1000 Hours)	Excellent, rating 10
Wet Adhesion Test (CSA Z245-20-06 Sec. 12.14)	Excellent
Chemical Resistance in Aggressive Soils Tested in Sulfuric Acid (30%), Nitric Acid (10%), Phosphoric Acid (20%), Hydrochloric Acid (10%)	Excellent No deterioration, 72 hours at 70°C / No corrosion, 72 hours at 70°C



DENSO (AUSTRALIA) PTY LTD
77-95 National Boulevard
Campbellfield, VIC 3061
AUSTRALIA

TEL: +61 3 9356 7600
FAX: +61 3 9356 7699
denso@densoaustralia.com.au
www.densoaustralia.com.au

**A MEMBER OF
WINN & COALES
INTERNATIONAL**