WrapidSleeve® GTS-PP wraparound sleeves are designed for the corrosion protection of polypropylene coated pipelines. The joint completion system also uses liquid epoxy. For alternate configurations, consult your Canusa-CPS representative for project specific recommended installation guidelines.

**WrapidSleeve**

- **Product Description**
  - **GTS-PP WrapidSleeve®**
  - **Liquid Epoxy Type P**
  - **Cure**

- **Equipment List**
  - Propane tank, hose, torch & regulator
  - Appropriately sized induction coil, stop watch
  - Tools for surface abrasion, power grinder
  - Digital thermometer with suitable probe
  - Spacer Blocks (recommended)
  - Protective Heat Shields (pre-sized for the pipe diameter)
  - Knife, pencil, roller, rags & approved solvent cleanser
  - Epoxy applicator pad, wet film thickness gauge
  - Standard safety equipment

- **Surface Preparation**
  - Ensure that the pipe is dry before cleaning.
  - Thoroughly clean the weld area with a sand or grit blaster to "near white metal" SIS Sa 2½ or equivalent.
  - Using a grinder with a grind disk with roughness rating of 40-60, ensure that the PP mainline coating edges are beveled to 15° from the horizontal and that the adjacent PP pipe coating is cleaned, exposing fresh PP, to a distance of 25mm beyond the sleeve width.

- **Positional Markings**
  - Measure and mark the width of the GTS-PP sleeve across the joint. Also, adjust the induction coil's heating area to the width of the GTS-PP sleeve. The induction coil heating width shall be approximately 25 to 75 mm wider than the supplied GTS-PP sleeve width.

- **Pre-Warm**
  - Using the appropriate sized induction coil or propane torch, pre-warm the steel area to 50-65°C. Using a temperature measuring device, ensure that the correct temperature is reached on the steel.

- **Liquid Epoxy**
  - Follow the preparation, mixing and applications instructions provided with the supplied Canusa Liquid Epoxy Pack. For bulk quantities, mix the epoxy cure with epoxy base (see Liquid Epoxy Product data sheet for mixing ratio).

- **Liquid Epoxy Application**
  - Apply mixed epoxy to a minimum uniform thickness of 6 mils (150 microns) on all exposed bare metal plus FBE toe only, using the applicator pads as supplied or an approved tool.

- **Heat Shield Application**
  - Heat shields are to be wrapped tightly around the overlap edges to prevent the mainline coating from potentially lifting during pre-heating. Ensure that the heat shields are not in contact with the epoxy coated cutback area.

- **Epoxy Curing and Pre-Heat**
  - Carefully, move the induction coil into place and pre-heat the epoxy coated cutback to a minimum of 175°C. Preheat temperature and profile is dependent on project specific conditions, and must be determined prior to the start of project.

- **Sleeve Installation**
  - Use moderate flame intensity for sleeve shrinking.
  - Remove protective heat shields prior to next step.
Entire pipe profile. Adhesive should be sure with a roller.

Smooth any wrinkles by gently working them outward from the centre of the closure. For J-Lay installation, use Canusa sleeve stabilization bracket to maintain sleeve in the vertical position. Optional spacers can be inserted under the edge of the sleeve to minimize the potential of air entrapment.

Place the underlap of the sleeve onto the joint, centering the sleeve such that the sleeve overlap is positioned at either the 10 or 2 o’clock position. Press the underlap firmly into place. For J-Lay installation, use Canusa sleeve stabilization bracket to maintain sleeve in the vertical position. Optional spacers can be inserted under the edge of the sleeve to minimize the potential of air entrapment.

Press the closure and overlap firmly into place. It is strongly recommended that protective heat shields are wrapped around the pipe beside the ends of the sleeve to prevent waxing of the mainline coating.

Gently heat the closure and pat it down with a gloved hand. Repeating this procedure, move from one side to the other. Smooth any wrinkles by gently working them outward from the centre of the closure with a roller.

Using the torch, begin heating at the centre of the sleeve and heat circumferentially around the pipe. If the backing becomes shiny or gives off smoke, move the torch away from that area. For J-Lay installation, when the centre portion of the sleeve is shrunk tightly to the pipe, remove the sleeve stabilization bracket.

Wrap the sleeve loosely around the pipe, ensuring the appropriate overlap. Ensure that the overlap of the sleeve is a nominal width of 75mm (minimum acceptable width is 50mm). Before finishing wrapping the sleeve: (1) heat the backing side of the underlap until the backing starts to recover; (2) heat the adhesive side of the closure until the adhesive appears glossy.

Quality Check - Adhesion Test

Test sleeve adhesion by gently pulling the edge of the backing back to ensure that the adhesive remains in place and is fully bonded to the factory coating. The sleeve is well bonded when the adhesive and coating remain intimately contacted. If required to improve bonding, additional heat should be applied to the sleeve. Remove protective heat shields when application is completed.

Onshore and Offshore Guidelines

After shrinking is complete, allow the sleeve to cool to less than 90°C prior to laying (for offshore applications, product can be water quenched).