

## PLA

### Tubular sleeve for pipeline corrosion protection

#### Product Description



CanusaTubes™ are shipped with an inner release liner for protection from contamination.

#### Equipment List



Propane tank, hose, torch & regulator; Appropriate tools for surface abrasion; Knife, roller, rags & approved solvent cleanser; Digital thermometer with suitable probe; Standard safety equipment; gloves, goggles, hard hat, etc.

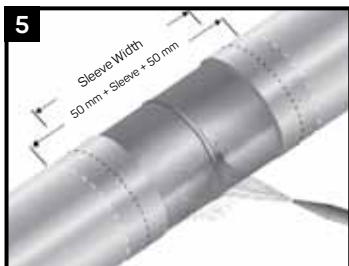
#### Surface Preparation



Ensure that the PE coating edges are beveled to 30°. Clean exposed steel and adjacent pipe coating with a solvent cleanser to remove the presence of oil, grease, and other contaminants.



Before welding together the carrier pipe, slide the CanusaTube sleeve at least 1 m away from the cutback area of the joint.



Ensure that the pipe dry before cleaning. Prepare the steel joint area to a minimum of St3 /SP3. Lightly abrade the pipe coating adjacent to the weld area to a distance of 50mm (2") beyond each end of the sleeve width.



Wipe clean or air blast the steel and pipe coating to remove foreign contaminants.

#### Sleeve Installation

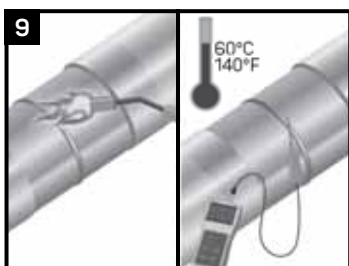


Ensure that there is no dirt or moisture inside the tube and that the tube is not cut. If the sleeve is not useable, a one-piece Wrapid Sleeve or Canusa Wrap sleeve should be used.

#### Flame Intensity & Torch Size



#### Pre-Heat

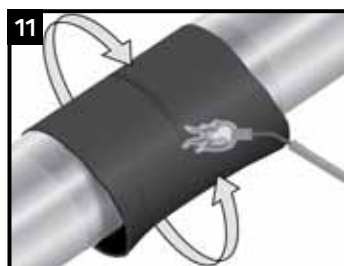


Pre-Heat the joint area to a minimum of 60°C (140°F). Using a temperature measuring device, ensure the correct temperature is reached on the steel and at least 50mm (2") on each side of the sleeve.

#### Sleeve Installation



Completely remove the inner release liner from the sleeve and centre the sleeve over the area to be sealed.



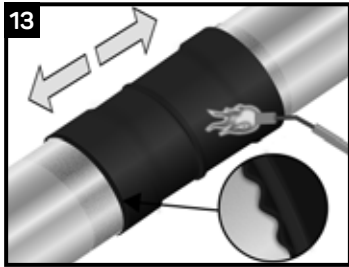
Using the appropriate sized torch, begin at the centre of the sleeve and heat circumferentially around the pipe. Use broad strokes.

#### Sleeve Installation

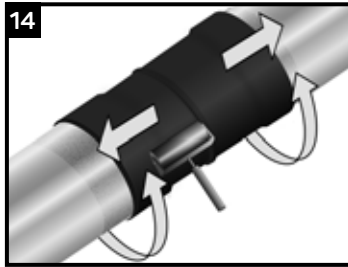


Continue heating from the centre toward one end of the sleeve until recovery is complete. In a similar manner, heat and shrink the remaining side. With a yellow backing, a pink-orange shade will appear when the proper temperature has been reached.

## Sleeve Installation

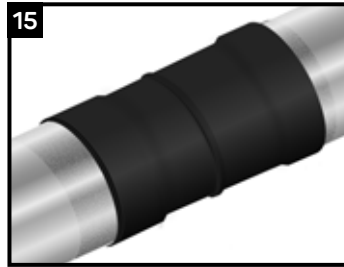


Shrinking has been completed when the adhesive begins to ooze at the sleeve edges all around the circumference. Finish shrinking the sleeve with long horizontal strokes over the entire surface to ensure a uniform bond.



While the sleeve is still hot and soft, use a hand roller to firmly roll the sleeve surface and push any trapped air up and out of the sleeve, as shown above. If necessary, reheat to roll out air.

## Inspection



Visually inspect the installed sleeve for the following:

- Sleeve is in full contact with the steel joint.
- Adhesive flows beyond both sleeve edges.
- No cracks or holes in sleeve backing.

## Backfilling Guidelines

After shrinking is complete, allow the sleeve to cool for 2 hours prior to lowering and backfilling. To prevent damage to the sleeve, use selected backfill material, (no sharp stones or large particles) otherwise an extruded polyethylene mesh or other suitable shield should be used.

## Storage & Safety Guidelines

To ensure maximum performance, store Canusa products in a dry, ventilated area. Keep products sealed in original cartons and avoid exposure to direct sunlight, rain, snow, dust or other adverse environmental elements. Avoid prolonged storage at temperatures above 35°C (95°F) or below -20°C (-4°F). Product installation should be done in accordance with local health and safety regulations.

These installation instructions are intended as a guide for standard products. Consult your Canusa representative for specific projects or unique applications.

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### Quality Management system registered to ISO 9001

Canusa warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the installation guide when used in compliance with Canusa's written instructions. Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection therewith. Canusa's liability is stated in the standard terms and conditions of sale. Canusa makes no other warranty either expressed or implied. All information contained in this installation guide is to be used as a guide and is subject to change without notice. This installation guide supersedes all previous installation guides on this product. E&OE

Part No. 99060-012

IG\_CanusaTube PLA\_rev017

## CanusaTube™ - PMA

### Tubular sleeve for protection of Couplings and Welded Joints

#### Product Description



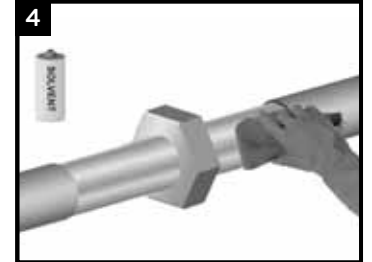
PMA CanusaTubes are supplied in standard lengths of 300, 500, 1000 and 1500 mm.

#### Equipment List



Propane tank, hose, torch & regulator; Appropriate tools for surface abrasion; Knife, roller, rags & approved solvent cleanser; Digital thermometer with suitable probe; Standard safety equipment; gloves, goggles, hard hat, etc.

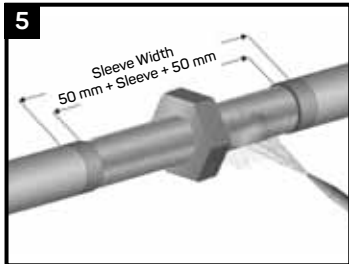
#### Surface Preparation



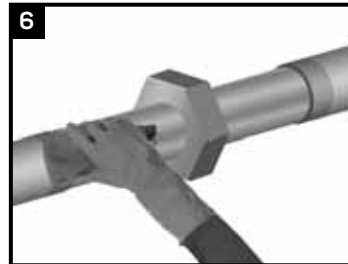
Ensure that the coating edges are beveled to 30°. Clean exposed steel and adjacent pipe coating with a solvent cleanser to remove the presence of oil, grease, and other contaminants.



Prior to fitting together or welding the joint, slide the CanusaTube sleeve at least 1 m away from the cutback area of the joint. Ensure that the protective paper supplied with each sleeve is placed between the adhesive and the pipe to prevent premature adhesion to the mainline coating.

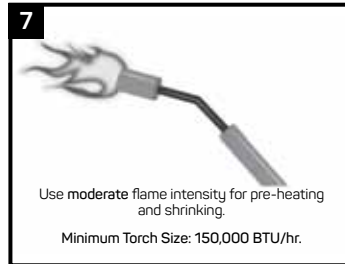


Ensure that the pipe is dry before cleaning. Prepare the steel joint area to a minimum of St2 /SP2. Lightly abrade the pipe coating adjacent to the weld area to a distance of 50 mm (2") beyond each end of the sleeve width.



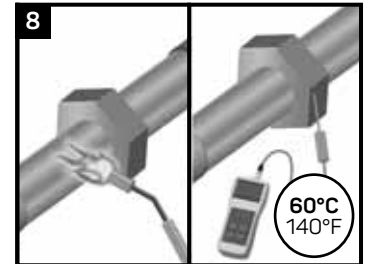
Wipe clean or air blast the steel and pipe coating to remove foreign contaminants.

#### Flame Intensity & Torch Size



Use moderate flame intensity for pre-heating and shrinking.  
Minimum Torch Size: 150,000 BTU/hr.

#### Pre-Heat

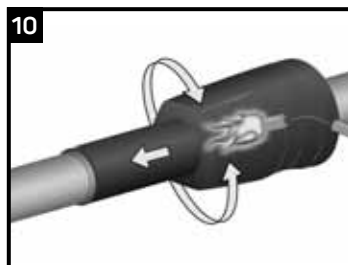


Pre-heat the joint area to a minimum of 60°C (140°F). Using a temperature measuring device, ensure that the correct temperature is reached on the steel and at least 50 mm (2") on each side of the sleeve.

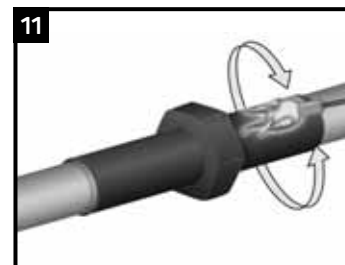
#### Sleeve Installation



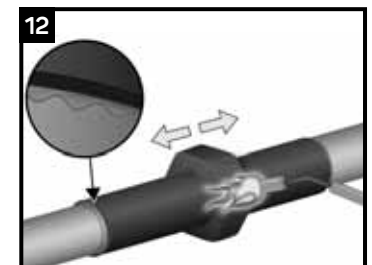
Slide the tube onto the steel joint area, positioning the weld seam at the 12 o'clock position (if applicable). Centre the tube to ensure a minimum 50 mm (2") overlap onto the pipe coating. Remove the protective paper lining prior to shrinkdown.



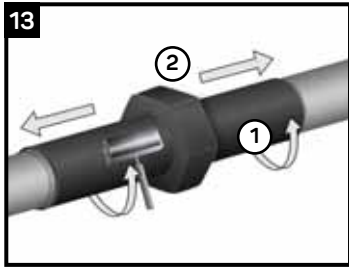
Using long strokes and a moderate flame intensity, begin shrinking the PMA around the coupling joint, starting in the middle to secure the sleeve around the coupling.



Continue heating from the centre toward one end of the sleeve until recovery is complete. In a similar manner, heat and shrink the other side from the centre towards the remaining end until recovery is complete.

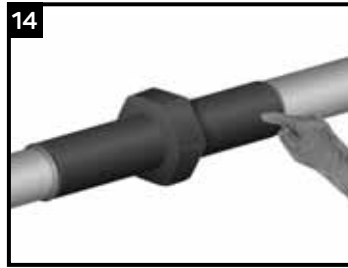


Shrinking has been completed when the adhesive begins to ooze at the sleeve edges all around the circumference. Finish shrinking the sleeve with long horizontal strokes over the entire surface to ensure a uniform bond.



While the sleeve is still hot and soft, use a hand roller to firmly roll the sleeve surface and push any trapped air up and out of the sleeve, as shown above. If necessary, reheat to roll out air.

### Quality Check (Finger Probe Test)



With a gloved hand, press down on the installed sleeve to ensure the backing and sleeve are soft. If there are any cool spots, the sleeve should be reworked with additional heat.

### Inspection



Visually inspect the installed sleeve for the following:

- Sleeve is in full contact with the steel joint.
- Adhesive flows beyond both sleeve edges.
- No cracks or holes in sleeve backing.
- Weld-seam integrity is maintained.

### Storage & Safety Guidelines

To ensure maximum performance, store Canusa products in a dry, ventilated area. Keep products sealed in original cartons and avoid exposure to direct sunlight, rain, snow, dust or other adverse environmental elements. Avoid prolonged storage at temperatures above 35°C (95°F) or below -20°C (-4°F). Product installation should be done in accordance with local health and safety regulations.

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Part No. 99060-009

IG\_CanusaTube PMA\_rev012

### Backfilling Guidelines

After shrinking is complete, allow the sleeve to cool for 2 hours prior to lowering and backfilling. To prevent damage to the sleeve, use selected backfill material, (no sharp stones or large particles). Otherwise, an extruded polyethylene mesh or other suitable shield should be used.