

MIS-65 / MIS-100

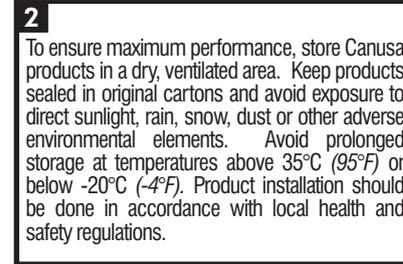
Wraparound, heat-shrinkable sleeves for girth-weld corrosion protection of offshore heated infill systems

Product Description



Canusa MIS-65 and MIS-100 sleeves are supplied in the Wraparound Sleeve™ configuration, pre-cut with a pre-attached closure seal. The adhesive is protected from contamination by an inner liner.

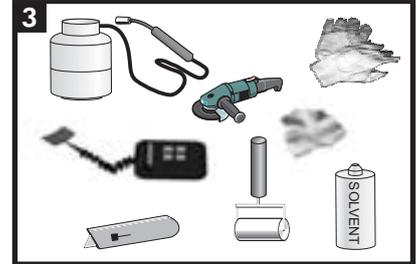
Storage & Safety Guidelines



2 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.

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.

Flame Intensity & Torch Size

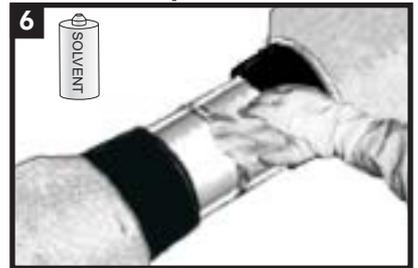
4	<p>Pipe O.D. ≤ 450mm (18")</p> <p>Use moderate flame intensity for pre-heating and shrinking.</p> <p>Minimum Torch Size: 150,000 BTU/hr.</p>	<p>Pipe O.D. > 450mm (18")</p> <p>Use moderate to high flame intensity for pre-heating and shrinking.</p> <p>Minimum Torch Size: 300,000 BTU/hr.</p>
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Application Guidelines

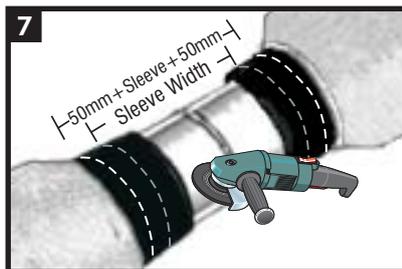
5	Surface Preparation
	ISO 8501:1
	Minimum
MIS-65	St3
MIS-100	St3
	Pre-Heat Temperature
	Minimum Pre-Heat Temperature °C (°F)
MIS-65	65°C (150°F)
MIS-100	90°C (195°F)

Follow these guidelines when installing MIS sleeves

Surface Preparation



Ensure that the mainline 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. Cleansing of coating overlap not required for AE coating type.



Ensure that the pipe is dry and surface moisture has been removed prior to surface preparation. If required, use propane torch heating to raise the steel temperature accordingly (to > 40 deg C). Prepare the bare steel cutback to ISO 8501:1 class St 3 preparation standards using mechanical wire brush or grinder equipment.

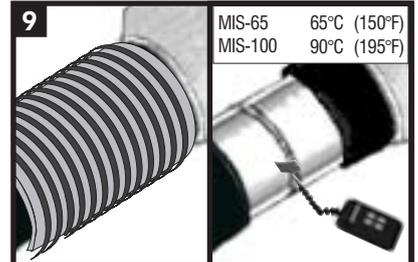


Wipe clean or air blast the steel and adjacent line coating to remove foreign contaminants

For CTE, remove any outer paper wrapping to a distance of 6" (150 mm) adjacent to the bare steel cutback to expose the coal tar surface.

For White Wash Painted Coating, remove all white wash paint materials using an approved solvent cleanser for the entire width to be covered by the MIS sleeve.

Pre-Heat



If the MIS sleeve is to be installed immediately after welding procedures, the entire joint area must be allowed to cool below 180°C.

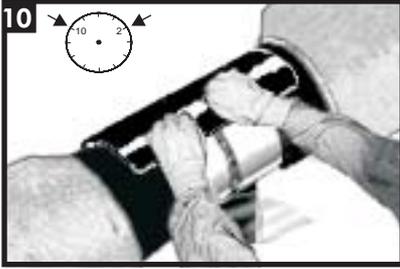
Pre-heat the joint area to the minimum temperatures as specified for MIS-65 and MIS-100.

Using a temperature measuring device, ensure that the correct temperature is obtained both on the steel surface and both sides of the adjacent coating

MIS-65 / MIS-100

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Sleeve Installation



Remove the release liner from the adhesive surface of the sleeve. Centre the sleeve over the joint such that a minimum overlap of 50mm is obtained onto both sides of the adjacent mainline coating. Complete the wrapping of the sleeve around the pipe, ensuring there is minimal sag at the pipe bottom. Clean the overlap of the sleeve to remove any dirt or dust. The overlapped portion of the sleeve should be aligned. The closure seal should be positioned between the 10 and 2 o'clock positions. Sleeve width shall be selected to fit within the minimum CWC cutback dimension.



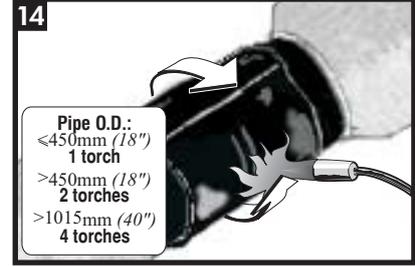
Gently heat the backing of the underlap, the adhesive side of the overlap and the adhesive side of the closure until it becomes shiny.



Press the closure firmly into place. Ensure the closure is in complete contact with the underlying sleeve.

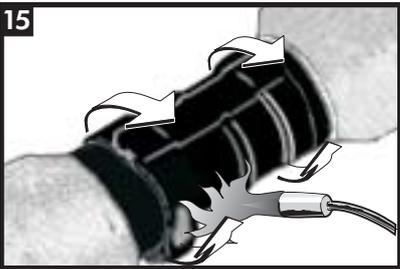


Gently heat the closure and pat it down with a gloved hand. Repeating this procedure, move from one side to the other. Smooth any wrinkles by gently working them outward from the centre of the closure with a gloved hand.

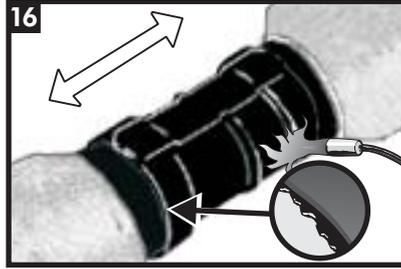


Pipe O.D.:
 <450mm (18")
 1 torch
 >450mm (18")
 2 torches
 >1015mm (40")
 4 torches

Using an appropriate propane torch, begin at the centre of the sleeve and heat circumferentially around the pipe, using broad strokes. If utilizing two torches, operators should work on opposite sides of the pipe.



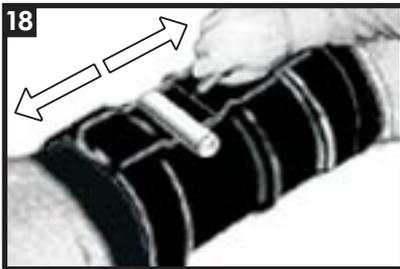
Continue heating from the centre toward one end of the sleeve until recovery is complete. In a similar manner, heat and shrink the remaining side.



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 gently 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.



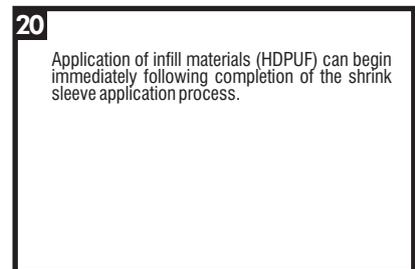
Continue the procedure by also firmly rolling the closure with long horizontal strokes from the weld outwards.



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.

Infiling Work



Application of infill materials (HDPUF) can begin immediately following completion of the shrink sleeve application process.



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