



# O'BRIEN MJ™ Polymer Coated Tubing System

- Multiple Tube Sizes up to Four ½” Tubes in Bundle
- Choice of Metallurgy and Wall Thickness
- Does Not Affect Standard Pressure Rating of Tubing
- Eliminate Fittings and Leak Points with Long Continuous Coils
- Reduced Installation Labor and Scrap
- Reduce Tray Space and Weight
- TAW05589 Polymer Protects Tubes from:
 

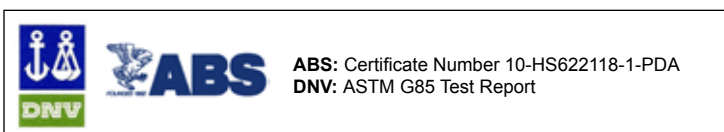
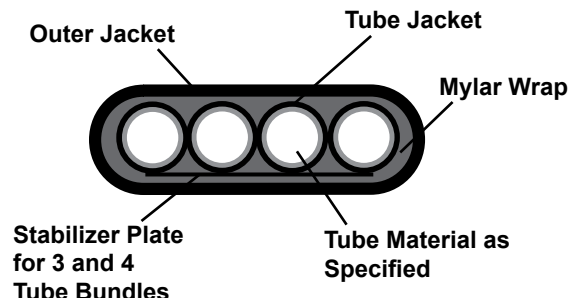
External Corrosion	Grit Blasting
Construction Debris	Abrasion
High Pressure Wash Down	Marine Environment
Weld Slag	



O'BRIEN MJ™, is a preassembled coil of O'Brien TAW05589 TPU (thermoplastic elastomeric urethane) polymer coated tubes in a flat configuration. Compared to stick tubing, coil MJ reduces the installation labor of multiple runs of tubing while saving valuable tray space and eliminating leak paths. TAW05589 TPU is a durable, continuously extruded system that provides protection from atmospheric corrosion sources such as weld slag, grinding abrasives and contact with dissimilar metals. Single TAW05589 TPU polymer coated tubing is also available where multiple tubes are not needed. These products are ideal for use in process plants, refineries and offshore platforms.

O'BRIEN MJ's flat (non-cabled) configuration allows for easy and tight radius bending. It installs with the speed and ease of similar size wire bundles using traditional hand bending tools. It also presents readily identified tubes in continuous lengths of a wide variety of tubing metallurgies. Simple offset bends can be made to make manifold connections. The dual protection system allows for individual tubes to be split out and connected to bulkheads while maintaining a continuous protective polymer coating on each tube. End sealing kits are used to protect connection, splice and T-fittings completing the O'BRIEN MJ polymer coated corrosion control system.

When installing tubing for hydraulic, chemical injection and control lines, eliminating leak paths is of critical importance for HSE (health safety and environment). Fewer leak points with continuous coils and corrosion protection are also key to HAZOP (hazardous operations) review.



# O'BRIEN MJ™ Polymer Coated Tubing System

## Model Number Construction

<b>TPMJXU</b>	O'BRIEN MJ Polymer Coated Tubing
X	Number of tubes (max is 4 for 1/4" - 1/2" tubes, max is 2 for one or two 3/4" tubes)
U	TAW05589 TPU polymer
-	Separator
X#	Tube designation, for multiple tubes or mixed tubes. Select tubes from the tubing list.

## TAW05589 TPU Polymer Coating

The application of O'Brien TAW05589 polymer coating includes proprietary processes of substrate preparation and extrusion of a proprietary polyether based thermoplastic polyurethane formulated for UV, ozone, abrasion and tear resistance as well as hydrolytic stability.

O'Brien TAW05589 TPU		
	Test Method	Typical Value
Physical		
Hardness	ASTM D-2240	75A
Mechanical		
Tensile Strength PSI	ASTM D-412	6000 PSI (41 MPa)
Elongation at Break	ASTM D-412	685%
Tear Strength	ASTM D-624	315 lb/in (57 N/mm)
Tabor Abrasion Resistance	ASTM D-1044	20 mg
Flame	UL-94	V0/V2
Minimum Installation Temperature		-40°F (-40°C)
Minimum Service Temperature		-67°F (-58°C)
Maximum Service Temperature		250°F (121°C)
Chemical Resistance		
Halogenated Chlorides		NO
Weathering		E
UV Resistance		E

E Excellent G = Good F = Fair P = Poor

## Process Tubes

### Seamless 316L SS

<b>F2</b>	1/4" x 0.035" SMLS 316/316L SS tubing.
<b>B2</b>	1/4" x 0.049" SMLS 316/316L SS tubing.
<b>K2</b>	1/4" x 0.065" SMLS 316/316L SS tubing.
<b>F3</b>	3/8" x 0.035" SMLS 316/316L SS tubing.
<b>B3</b>	3/8" x 0.049" SMLS 316/316L SS tubing.
<b>K3</b>	3/8" x 0.065" SMLS 316/316L SS tubing.
<b>F4</b>	1/2" x 0.035" SMLS 316/316L SS tubing.
<b>B4</b>	1/2" x 0.049" SMLS 316/316L SS tubing.
<b>K4</b>	1/2" x 0.065" SMLS 316/316L SS tubing.
<b>B6</b>	3/4" x 0.049" SMLS 316/316L SS tubing.
<b>K6</b>	3/4" x 0.065" SMLS 316/316L SS tubing.
<b>MF6</b>	6mm x 1mm SMLS 316/316L SS tubing.
<b>MF8</b>	8mm x 1mm SMLS 316/316L SS tubing.
<b>MF10</b>	10mm x 1mm SMLS 316/316L SS tubing.
<b>MB10</b>	10mm x 1.5mm SMLS 316/316L SS tubing.
<b>MF12</b>	12mm x 1mm SMLS 316/316L SS tubing.
<b>MB12</b>	12mm x 1.5mm SMLS 316/316L SS tubing.

### Seamless 316L 2.5% Moly

<b>CF2</b>	1/4" x 0.035" SMLS 316/316L 2.5% Moly tubing.
<b>CB2</b>	1/4" x 0.049" SMLS 316/316L 2.5% Moly tubing.
<b>CK2</b>	1/4" x 0.065" SMLS 316/316L 2.5% Moly tubing.
<b>CF3</b>	3/8" x 0.035" SMLS 316/316L 2.5% Moly tubing.
<b>CB3</b>	3/8" x 0.049" SMLS 316/316L 2.5% Moly tubing.
<b>CK3</b>	3/8" x 0.065" SMLS 316/316L 2.5% Moly tubing.
<b>CF4</b>	1/2" x 0.035" SMLS 316/316L 2.5% Moly tubing.
<b>CB4</b>	1/2" x 0.049" SMLS 316/316L 2.5% Moly tubing.
<b>CK4</b>	1/2" x 0.065" SMLS 316/316L 2.5% Moly tubing.
<b>CMF6</b>	6mm x 1mm SMLS 316/316L 2.5% Moly tubing.
<b>CMF8</b>	8mm x 1mm SMLS 316/316L 2.5% Moly tubing.
<b>CMF10</b>	10mm x 1mm SMLS 316/316L 2.5% Moly tubing.
<b>CMB10</b>	10mm x 1.5mm SMLS 316/316L 2.5% Moly tubing.
<b>CMF12</b>	12mm x 1mm SMLS 316/316L 2.5% Moly tubing.
<b>CMB12</b>	12mm x 1.5mm SMLS 316/316L 2.5% Moly tubing.

### Seamless Alloy 825

<b>AB2</b>	1/4" x 0.035" SMLS 825 SS tubing.
<b>AB3</b>	3/8" x 0.035" SMLS 825 SS tubing.
<b>AB4</b>	1/2" x 0.035" SMLS 825 SS tubing.
<b>AC4</b>	1/2" x 0.065" SMLS 825 SS tubing.

## Heat Shrink Seals and Self Fusing Silicone Tape

<b>TPKJP-SR-B10</b>	3M roll of black self fusing silicone tape. Seals 3-6 fittings
<b>TPKHS-D2</b>	Heat shrink sleeve for two tube bundles
<b>TPKHS-N3</b>	Heat shrink sleeve for three tube bundles
<b>TPKHS-N4</b>	Heat shrink sleeve for four tube bundles

## Heat Shrink Boots for Single Jacketed Tubes

<b>TPKHS-S075</b>	Heat shrink sleeve 0.20" - 0.75" (5 - 20mm)
<b>TPKHS-S100</b>	Heat shrink sleeve 0.30" - 1.00" (8 - 25mm)
<b>TPKHS-S200</b>	Heat shrink sleeve 0.75" - 2.00" (20 - 50mm)

## Accessories

### Sealing the Ends, Fittings and Jacket



Heat Shrink Sleeve for Multiple Tube Bundles



Heat Shrink Sleeve for Union and Bulkhead Fittings



Self-Bonding Silicone Tape for Unions, Tees and Bulkhead Fittings

