

Welding Sleeves

Interface Catheter Solutions Expertise

Interface Catheter Solutions' experience designing and producing tubing welding machines along with balloon development and production provides the expertise to create high-quality, custom welding sleeves to produce strong homogenous welds.

Custom Welding Sleeves

Interface welding sleeves are made of heat shrink tubing customized to help form and shape the bond along with creating a smooth transition between the two thermally bonded materials. The heat shrink tubing has resistance to high temperatures so that it will not melt during the welding process. The welding sleeves are clear so that an operator is able to view when the tubes have been fused together. The sleeves also have custom slits that allow for easy removal. The welding sleeves are customized based on tubing material, diameter and wall thickness.

Materials typically being welded together include thermoplastics such as multiple durometers of Pebax®, Nylon and Polyurethane. Welding sleeves are used when welding similar polymer components such as for overlapping joints or butting two tubes with the same outer dimension together.

Overlap joints are most commonly used in thermal bonding balloons to catheter shafts. Butt joints are typically used in fusing two different durometers together or a braided to non-braided tubing application.



- Welding sleeve material includes Teflon® and Polyolefin
- Wall thickness from .002 to .010 inches (.05 mm - .25 mm)
- Diameters from .006 to .125 inches (.15 mm - 3 mm)
- Welding sleeves contain a double slit for easy removal upon weld completion
- Slit length is customized to fit the desirable weld length