

TRIAD WEDGE WELDING SYSTEM



U.S. Patent No. 5,865,942

For the bonding of thermoplastic textiles, the Triad Wedge Welding System is ideal for your in-house fabrication needs to produce tents, tarps, awnings, flags, banners, liners, covers, curtains, bags, tubes, etc. The Triad can weld PVC, PE, PP, Urethane and many other weldable, flexible membranes. It can also weld supported and non-supported material in thicknesses of 5 to 100 oz. and is designed to be portable, versatile and user friendly.

Smokeless and Noiseless Operation

Because it's a wedge, the Triad will not produce any hazardous smoke during the welding process, as hot air welders do. The Triad is noiseless, for a more pleasant working environment.

Increase Productivity

The Triad is fast! It can weld 12 to 14 oz. material at approximately 20 feet per minute. With thinner materials, the maximum speed of the Triad is approximately 30 feet per minute.

Reduce Labor Costs

By utilizing the built-in tracking system and available Track Sections, the Triad can be operated by a single person. Set-up is easy on the floor, or a table surface, and the guides provide accurate results.

- #33-010: Triad Wedge Welder, 120V, 1" Wedge (25mm)
- #33-015: Triad Wedge Welder, 120V, 1.5" Wedge (38mm)
- #33-020: Triad Wedge Welder, 120V, 2" Wedge (51mm)
- #33-030: Triad Wedge Welder, 240V, 25mm Wedge (1")
- #33-035: Triad Wedge Welder, 240V, 38mm Wedge (1.5")
- #33-040: Triad Wedge Welder, 240V, 51mm Wedge (2")

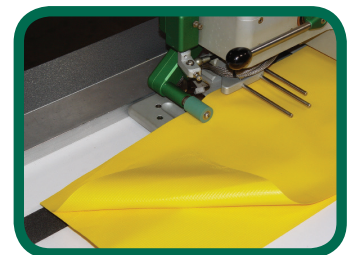
Create Additional Welding Styles with your imagination!



Overlap Weld








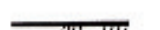


Hem Weld

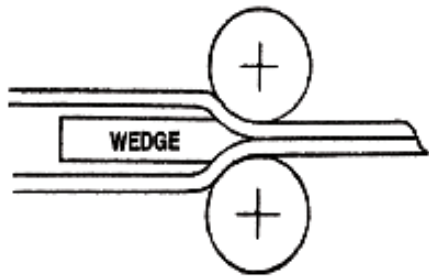


Fin Weld

The Standard Triad can Achieve the Following Welds: (specify wedge size)

-  Overlap Weld - 1/2" to 2" weld width
-  Hem Weld - Adjustable pocket size
-  Fin Weld - 1/2" to 2" weld width
-  Tube Weld - 1-1/2" diameter and up
-  Sleeve Weld - 1" diameter and up
-  Insert Cable Weld - Insert cable into hem while welding, 7/8" max.
-  Tape Weld - Up to 2" weld width
-  Channel Weld - Using split wedge

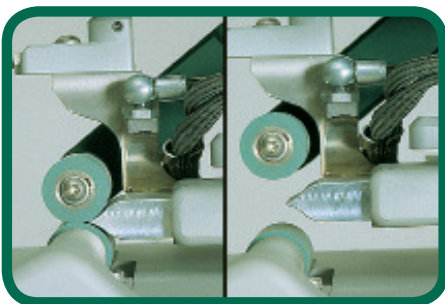
TRIAD WEDGE WELDING SYSTEM



How does it work?

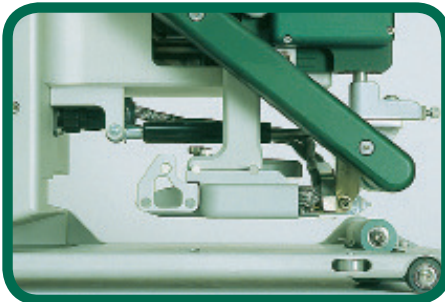
The welding of various thermoplastics occurs by a combination of wedge temperature, material speed passing over the wedge, and pressure of the pinch rollers. The material is placed between the pinch rollers and the hot wedge is inserted. Contact is made between the top and bottom of the material and a melting of the coating occurs with a certain speed of the material crossing the hot wedge surface. The pinch rollers then apply pressure to the melted coating to create the lasting bond.

The Triad can be used as a stationary unit for short weld lengths, or as a self-propelled unit for long run welding where the Triad automatically begins moving when the wedge is inserted.



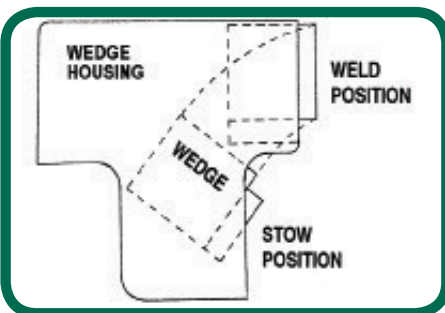
Patented Self-Centering Wedge

The wedge will self-center with change in material thickness automatically, or it can be manually adjusted for welding two materials of different thicknesses.



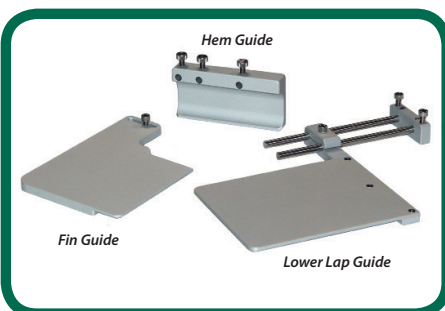
Patented Suspended Wedge

This allows the operator to pass material through the Triad in many different ways to achieve various weld styles.



Exclusive Wedge Housing

A unique feature that allows the hot wedge to be stored out of the way, to help minimize heat distortion of product and provides operator protection while setting up material.



Standard Guides

The standard Triad includes the three guides to perform the basic weld styles: Lower Lap Guide, Hem Guide, and Fin Guide. These guides work alone or in conjunction to accomplish the basic weld styles and more.