

Equipment & Application Methods

Types of Equipment:

Hot Air Welding	Hot Wedge Welding	Heat Seal Press
Hot Roll Lamination	RF/HF Welding	Ultrasonic Welding
Fusing Press	Household Iron	

Which type of equipment will best suit your production needs?

No matter what type of equipment you are using, be sure to follow the *recommended guidelines* provided by AFI for the best end result!

ASK DR. AFI

Looking for a solution? Have a quality issue? Need a better bond? Want improved product durability? What's your dilemma?

Submit it to us at:

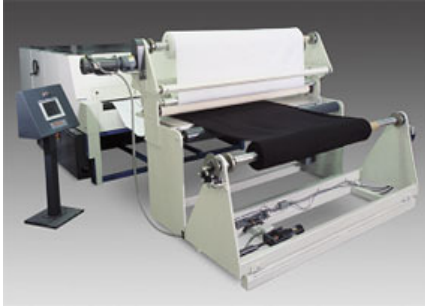
info@adhesivefilms.com

Application Methods:

The **HOT AIR WELDER** offers a very high production rate. The fabric to be bonded and the adhesive seam tape are passed through two rollers. The hot air nozzle should be directed at the center of the upper roller. Please Note: the correct position of the hot air nozzle is very *critical* because incorrect positioning may result in poor sealing, scorching fabric or even "burn through" of the tape. Pressure is obtained where the top and bottom rollers meet; speed of the machine is measured by the number of feet or meters being processed per minute.



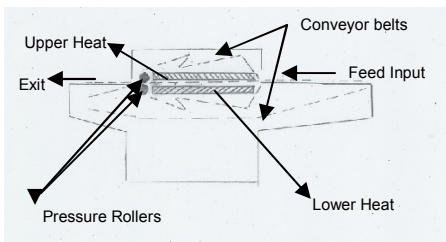
The **HOT WEDGE WELDER** has a "wedge" (heating element) which is set to the required temperature. There are top and bottom rollers which can be set to the desired pressure; and a speed setting which controls the amount of time the material and adhesive are exposed to the heat and pressure settings.



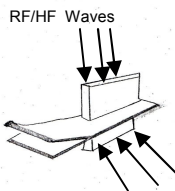
Hot Roll Laminator: The roller or rollers are heated which will activate the adhesive film, allowing it to bond to the surface material as it passes through the rollers. Hot roll laminators have the option of heating one or both rollers.



Heat Seal Press: This type of equipment typically has heat indicators with an adjustable thermostat and timer. The combination of heat and pressure activates the adhesive and provides consistent melting in the area to be bonded. Pressure can be delivered manually or via compressed air.



Fusing Press: Temperature is achieved with the top & lower heating elements and when pressure is exerted the adhesive is driven into the fabric creating a bond.



RF / HF Welding: Radio frequency or high frequency welding is used to bond a variety of fabrics, films, foams and plastics. Bonding is accomplished by sending a radio frequency current through two or more layers of thermoplastic material. With the addition of applied pressure, the layers flow together and form a bond.



Ultrasonic Welding: Ultrasonic welding is accomplished with high-frequency ultrasonic acoustic vibrations being applied to work pieces being held together under pressure to create a solid bond. Flexibility, cleanliness & dimensional reliability are a few key features.