

Industrial Heat Sealing Irons

In-house industrial heat sealing saves time and money by allowing patching and splicing of belts at your facility. Taconic offers handheld digitally controlled heat sealing irons in two sizes for splicing and a handheld patching iron for smaller applications.

3" x 6" Handheld Iron

- Heated platen size: 3" x 6"
- Weight: 17 lbs
- Temperature controlled up to 750 °F (399 °C)
- 120V or 220V voltage available



3" x 12" Handheld Iron

- Heated platen size: 3" x 12"
- Weight: 20 lbs
- Temperature controlled up to 750 °F (399 °C)
- 120V voltage



2" x 3" Patching Iron

- Heated platen size: 2" x 3"
- Weight: 4 lbs
- Cooling stand
- No temperature control - 750+ °F (399+ °C)
- 120V voltage (300W or 400W available)



Thermal Insulation Pad

- Replaces Marinite/Refractory/Calcium Silicate Boards
- Conformable to non-planar surfaces
- Maintains even pressure and a level surface during welding
- Usable on both sides
- For use during active welding only.
(Temp. resistant up to 500 °F. Iron cannot contact/be stored on pad)
- Available in custom sizes to fit your application needs
- SRC-5 release cloth is recommended during use to ensure nonstick performance. These single use SRC-5 cloths can be supplied at custom widths and lengths.



Taconic PTFE Heat Sealing & Belt Installation Procedures

Materials:

- Heat Sealing Iron
- Tape Measure
- Straight Boards (2'x6')
- Large C-Clamps (4)
- Cutting Surface
- Straight Edge
- Stapler/Tape
- Isopropyl Alcohol
- Release Cloth/Film
- Heat Resistant Padding
- Reinforcement Material
- Cloth

Steps:

1. Determine the splicing work area on the machine. The work area should be a flat smooth surface at least one to two feet in length. The area should be cleaned of any water, oil and debris with isopropyl alcohol. Plug the iron into an outlet close to this area and allow time to heat. Set the iron at 750 °F (399 °C)
2. Pull the new belt through so that the ends meet in the splicing area.
3. Clamp one end of the belt by placing a straight board width wise and secure it to a solid support with the C-clamps.
4. Tension the belt, overlap it and line up the edges. Measure the distance of the overlap on both sides. The difference in length should be +/- .25". Clamp the other end of the belts as described in step 3.
5. Insert a cutting surface under the overlapped area to prevent damaging the iron.
6. Using a straight edge, cut the material splitting the overlapped area.
7. Remove the top and bottom excess pieces. Then remove the cutting surface from under the belt.
8. Insert the heat resistant padding under the cut splice area.
9. Place and align the reinforcement material (fabric on the bottom, then the film on the heat resistant padding) under the cut splice area. Be sure the belt area of splice, reinforcement and film are all free of debris.
10. Cover area to be sealed with the release cloth/film.
11. Use a portion of the excess pieces from Step 7 to test the iron temperature and to determine the minimum time required for heat sealing (1-2 minutes is usually sufficient). A proper seal, when pulled apart, will delaminate the PTFE from one of the fiberglass sides.
12. Be sure to seal the entire area. Overlap subsequent Heat Sealing Iron imprints by approximately 1" to ensure there are no cold weld sections.
13. Feel for voids in the seal (waves, wrinkles, loose areas). A good seal cannot be picked apart.
14. Once the bottom reinforcement is complete, any top covers can be sealed in the same manner.
15. Allow belt to cool for 15 minutes prior to tensioning.
16. Remove clamps. You are now ready for a production run on your Taconic belt.

Through innovative company initiatives, we're helping our customers 'Find a Better Way...' including applying our pre-existing coating expertise, and manufacturing infrastructure, to your specific woven substrate needs. We can design and coat your bespoke solutions up to 4000mm wide.



**OVER 60
YEARS of
innovation**

ISO 9001 Registered

Lester T. Russell, the acknowledged inventor of the process for applying PTFE to fiberglass fabric, founded Taconic in 1961.

The company produces advanced engineered composite materials for use in diverse markets. Taconic is dedicated to quality, innovation and environmental safety.

Our talented R & D, engineering and multi-lingual sales support network assures success in solving our customers' application challenges around the globe.

Rev. 12-24



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