

**This brochure is the only intended as a guide to acquaint operators with Q-TEK saddle fusing machines and their use. Procedures and recommendations by your company and the pipe and fitting manufactures are the ones you must follow. If you are in doubt about any practice, pressure, temperature, or time setting, ask your supervisor!**

**Here is a re-cap of our guide for using Q-TEK saddle fusing machines.**

1. Make sure everything that will be used matches the pipe sizes. This includes the fitting, the fitting holder, the heater and heater faces attached to it, and the liners in the saddle fusing machines.
2. The saddle fusing machines must be clean and in good working order. Check it out **before** using it.
3. The heating iron must work properly -- come up to heat and hold the correct temperature. Heater faces must be properly attached to the heating iron to conduct the heat uniformly and give good melt patterns. The heater face coatings must be clean and free of dents or scratches to heat the plastic uniformly without sticking.
4. **Be sure you are using the correct procedures for fusing saddle fittings on thermo-plastic pipe. Your company or the manufacturers of the pipe and fittings will tell you the correct heating and fusing temperatures, times and pressures. Use only the authorized Setting! Don't guess. This is an exact science and you are responsible for following an exact procedure,**
5. Use the correct fitting holder. The fitting should slide freely in and out of the holder and be held in position without being sloppy. Holders are made for all manufacturer's fittings and can be quickly and easily changed. Screw the correct fitting holder at least 1/2" on the spindle. Lightly tighten the thumbscrew against the flat on the spindle threads. Then back the thumbscrew off 1/8 turn so the fitting can align itself with the pipe.
6. Clean the pipe where the saddle fusing machine is going to be clamped. Tighten the clamps firmly to hold the saddle fusing machine in place.
7. Place the saddle "T", branch saddle, tapping tee, or other fitting in the holder. Secure it in place with the slide-yoke or thumbscrew. Lower the fitting down onto the pipe to make sure the fitting lines up with the pipe. Then raise the handle.
8. When the fitting is in the holder, you can place the COLD heating iron (with faces attached) in the center of the saddle fusing machine. Lower the fitting (in the holder) over the cold heating iron. Move the heating iron so it is centered under the fitting. This will give a uniform melt pattern on the fitting and on the pipe. Then set the heater positioning stop against the side of the heating iron.
9. Once the heater has been centered and the positioning stop set you can remove the heating iron and bring it up to the correct temperature. Check your company procedures or the recommendations of the pipe and fitting manufacturers for the temperature settings.
10. Clean the melt area on the pipe and the melt area of the fitting so they are 100% free of dirt, oil and moisture.
11. When the heater has reached the correct temperature, place it on the pipe against the heater positioning stop, immediately bring the fitting down on the heater face, apply pressure and lock the spindle in place.  
  
Your company and the pipe and fitting manufacturers give the correct heating and fusing temperatures, time for heating and fusing and the pressure to be used during the heating cycle and the fusing cycle.
12. As the pipe and fitting are being heated you will see a uniform melt pattern form around the heater face on the fitting. When the pipe and fitting have been heated at the correct temperature for the proper time and you have a good uniform bead formed around the fitting: (a) unlock the spindle, (b) raise the handle, (c) remove the heating iron, and (d) check the melt pattern on the pipe.  
  
You have only a few seconds between removing the heating iron and the actual fusing to make a good joint. Bring the saddle fitting down onto the pipe slowly and then apply the correct fusing pressure and lock the spindle.
13. Let the fusion cool completely. While cooling, loosen the slide-yoke or thumbscrew holding the fitting in the phone.
14. After the fusion has cooled, release the spindle lock and raise the handle to open position. Loosen the pipe clamps and remove the saddle fusing machine from the pipe.
15. Inspect each and every fused joint. Follow your company's inspection procedure exactly!
16. When you are finished with the saddle fusing machine, make sure it is clean and working properly -- ready for the next use.