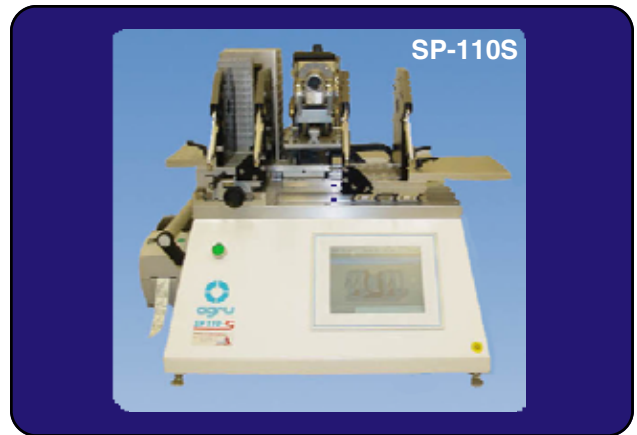


SP-S Series IR Fusion Equipment

The SP-S equipment precisely controls all movements and parameters of the heating element and pipe clamps during each phase of the welding process. This full automation eliminates operator influence during the fusion process and provides unmatched repeatability.

Product Benefits

- The completely **Automated Fusion Process** provides unmatched welding reliability, ease of use and fastest weld times.
- The **Large Size Range** eliminates the need to rent multiple tools for a project.
- An **Automated Planing Depth** feature enhances fabrication capabilities.
- The **Magnetic Clamp Inserts** make pipe size change over quick.
- The **Validation Program** provides several QA sources including multiple label printout, stored electronic data and a PC download program.



Specifications

Welding Materials for Both Models
PVDF, PP, PPn, ECTFE and PFA*

*PFA requires expansion pack

Welding Size Range

SP-110S: 1/2" - 4" (20mm - 110mm)

SP-315S: 4" - 12" (110mm - 315mm)

Equipment Size (WxDxH)

SP-110S:

26-5/8" x 35-1/2" x 24-7/8", 198 lbs.

SP-110S in Storage Box*:

32-5/8" x 42-1/2" x 28-3/4", 308 lbs.

*SP-110S shipped in larger wood crate

SP-315S:

41-1/8" x 62-1/4" x 57-1/8", 1,985 lbs.

SP-315S in Storage Box:

42-1/8" x 67" x 59-1/2", 2,600 lbs.

Accessories Included in Both Models
SDR Clamp Insert Set, Thermal Printer, Transformer and DATAWORKS software for weld data management.

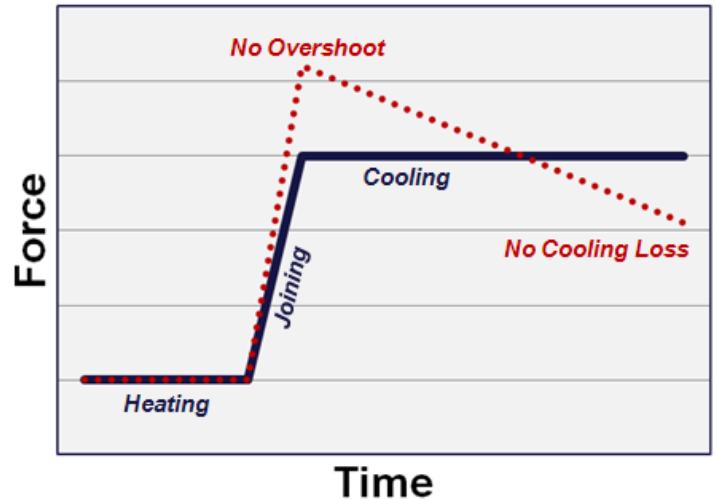


Superior Control Over Parameters

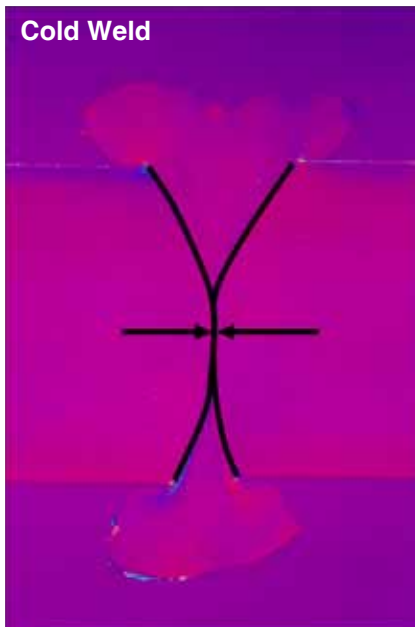
The automated force control technology in the SP line of IR fusion equipment removes the unreliability found in manually operated tools. The equipment controls and automatically moves the clamps and heating element. The joining pressure is precisely controlled and monitored by the machine's components. All critical parameters (temperature, time and pressure) are controlled by the machine and pre-programmed for your convenience.

The force controlled clamps and weld process prevents overshoot, caused by exerting too much force during the joining phase resulting in a **cold weld**. The welded material shrinks during the cooling phase, causing the pressure on the joint to reduce. The SP tools maintain force on the joint to produce a strong and consistent weld. The leading technology found in Asahi's SP equipment provides unmatched repeatability and reliability.

SP Force Control



Prevents Cold Welds



When fusing thermoplastics together, the theory is that the resin is melted into a liquid state, then sets as one solid piece. It is the molten material from both components that is fused together to provide the strength and integrity of the joint.

A **cold weld** is the result of overshooting the joining force, which displaces the molten material. As a result, limited fusion between the material has taken place and the two pieces are contacting each other without a complete bond. Cold welds do not have the structural integrity required for a piping system.

Cold welds are extremely difficult too visually identify and are usually not discovered until the system is subjected to hydrostatic pressure. **Cold welds are prevented by the SP force controlled welding technology which automatically controls the joining pressure.**