

SFS



The **isoweld**® Family

Fulfilling your flat roof needs

The Beauty of Induction Welding

Induction welding is a unique process that welds stress plates to TPO or PVC membrane using heat and radio frequency alternating currents. SFS advocates for this connection process because:

Speed – Induction welding machines facilitate rapid connection creation, achieving individual welds in mere seconds. By simply pressing the inductor pad onto the plate, pressing a button initiates an almost instantaneous weld. This efficiency enables contractors to substantially reduce installation time, allowing them to complete more projects within a given timeframe.

Durability – Induction welding creates a very strong connection that is pressure and weather tight. When executed using SFS technology, the connection can withstand up to 200 MPH winds.

Safety – This welding method eliminates the use of an open flame, concentrating heat at a safe distance from the installer. In turn, the use of an induction welder results in a reduced need for extensive protective equipment and fewer associated hazards such as smoke, fumes, and chemicals.

Ease of Use – With fewer hazards and ergonomic machinery design, induction welding simplifies the overall installation process by minimizing disruptions and hazards. Plus, the equipment is easy to learn and maintain.



Why isoweld®?

Testimonials



“We are getting 2–3 seconds faster weld time out of the (isoweld®) machine. Which, on 80,000–90,000 plates, is a weeks worth of labor.”

Kyle Drayer
Tri-County Roofing and Sheet Metal



“With this tool, (the isoweld® B) the work can be uninterrupted and we don’t stop to check if there are cable problems.”

Dario Fugazza
Geoteco Roofer

System Features at a Glance

- No penetration of the roof membrane required
- Up to 50% less fasteners required
- Ultimate speed and agility
- Choice of membrane placement direction
- Reduction of membrane overlaps at seams, creating greater coverage
- Heat is concentrated at a safe distance from the installer; no open flame
- Welds able to with-stand up to 200 MPH winds



Meet the Family



isoweld® B stand-up

Application

The isoweld® B is the first of its kind: a cordless induction welder for attaching TPO and PVC membranes. This cordless option lets you move freely and avoid tripping hazards like wires and external power sources. It combines the features already existing in the corded isoweld® tools and takes the technology to the next level to give your company an advantageous edge.

Features

- Approximately 500 welds per charge
- Enhanced mobility
- An impressive 3 second weld time
- Improved safety with reduction of tripping hazards
- Streamlined installation processes

Meet the Family



isoweld® Stand-up

Application

Within mere seconds, the isoweld® stand up tool produces a strong, durable weld between an SFS induction plate and a roofing membrane like TPO or PVC. We have incorporated various quality monitoring technologies so OEMs and building owners are assured that their final projects meet the highest standards within the industry.

Features

- A plate-finding function
- Programmed for no “false positive welds”
- Utilizes a simple 1-step calibration process
- Agility centered design
- Constant monitoring of membrane surface temperature

Meet the Family



isoweld® Backpack

Application

An alternative option to the standing-style isoweld®, which offers the same rapid and durable induction welding technology. When users are faced with unique roofing layouts or prefer to have the weight of the tool redistributed onto their core, the backpack style is available so they can continue to work efficiently.

Features

- A tool design that enhances ergonomic movements
- Flexible handle so inductor can be placed on a slanted surface
- Comfortable closed cell foam padded straps
- Long power cable connecting inductor to backpack
- Plate finding function
- Simple 1-step calibration
- Programmed for no “false positive welds”

Meet the Family



isoweld® Magnet Set

Application

After using the isoweld® tools, magnets are used to compress and cool the welds for increased strength. Our magnets are equipped with a unique self-centering design that ensures the entire weld is covered during the cooling/compression stage. To help protect your membrane from damage like tears or knicks, users can simply flip the tool to demagnetize any debris that has been collected on the face of the magnet, making it significantly easier to wipe and clean.

Features

- Self-centering technology over insulation stress plates
- Innovative spring-loaded design for easy cleaning
- Less time spent wiping the face of the magnet
- Same exceptional cooling rate as previous designs
- Fewer repair patches

Meet the Family



isofast+™

Application

Before using our induction welding tools, first turn to the isofast+™ for your plate installation needs. Simply load your plates and fasteners, insert your drill, and press down on the foam handles to securely fasten insulation to a roof deck. By reducing physical strains like kneeling and bending required in traditional attachment methods, the isofast+™ can increase installers speed, morale, and efficiency.

Features

- Ergonomic design so installer can remain standing when drilling into substrate
- Funnel shaped screw loader for easy insert
- Ability to install 12 plates per minute (vs 8 per minute with conventional methods)
- Automatic plate reloader
- Wheels for easy movement from plate to plate
- Adjustable foam grip handles

Meet the Family



Handheld Inductor

Application

When paired with our main line of isoweld® induction welding tools, the handheld inductor gives installers more flexibility in tight or difficult areas. The handheld inductor comes with a long cable so that obstacles like pipes, drains, and HVAC units can be easily worked around.














isoweld® B Mobile

Application

Don't get slowed down by areas where the handheld inductor is primarily preferred; instead, utilize the isoweld® B Mobile. It prioritizes agile movement from one location to another while powering the handheld inductor to create the same quick and durable weld as its other family members.

System Information



isoweld® System Tool Components

	System component	Description
	isoweld® stand-up	Stand-up style induction welder which welds adhesive coated plates to a single-ply membrane
	isoweld® backpack	Backpack induction welder which welds adhesive coated plates to a single-ply membrane
	isoweld® B stand-up	A cordless induction welder used to weld adhesive coated plates to a single ply membrane
	isofast+™	A 2-in-one roofing tool made to both set and install plates to the roofing deck
	isoweld® B mobile	A smaller, more portable option for the isoweld® B battery to power the handheld inductor
	isoweld® handheld inductor	Provides a secure weld function in tight spaces near rooftop protrusions and on parapet walls
	Magnets (set of 12)	Specially designed isoweld® magnets, used for clamping and cooling the weld Detachable handles allow for use in tight areas and parapet walls
	Pad for EPS/XPS	Spacer used to weld with EPS and XPS insulation
	Teflon pads	Thin pad placed on inductor surface
	isoweld® B battery	isoweld® B battery insert which is compatible with the isoweld® B stand-up and the isoweld® B mobile
	isoweld® B charger	Charging system for isoweld® B battery insert

For additional safety information, dimensional measurements, or technical data, please visit our website us.sfs.com. *

Low Slope Roofing Products

Insulation Stress Plates

	Product	OD	ID	Thickness	Finish/Material
	isoweld® TPO plate Part No: 1555269	3.15"	0.260"	0.03"	G-90 Steel with proprietary adhesive coating
	isoweld® PVC plate Part No: 1555270	3.15"	0.260"	0.03"	G-90 Steel with proprietary adhesive coating

isoweld® Fasteners

	Product	Diameter	Head style/drive	Lengths
	#15 Dekfast	#15	#3 phillips truss	2" to 16"
	#12 Purlin	#12	Pancake #3 square	3-3/4" to 8-3/4"
	TPR-L Peel Rivet	1/4"	Low profile mushroom head	1-1/2" to 10"



Customer support



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