

Spinweld Fitting Procedure

- 1) Mark out Position Spinweld Fitting is to be placed in.
- 2) Drill correct hole size for fitting. Refer to attached page for hole saw sizes.
- 3) Deburr edges of the hole do not remove material from hole as this may result in the hole being too large for the fitting.
- 4) Check that the fitting fits into the hole and has approx 1mm of clearance around the fitting.
- 5) Use the fitting as a mask and apply spin-slick to the area around the fitting. This will stop the molten excess material produced during spin welding adhering to the moulded product and make clean up much easier.

If the hole is too large this will result in the fitting being difficult to control when spinning and will also result in a lack of contact area between the fitting and the product thus giving a poor weld.

If the hole is too small this will result in increased friction, which can cause the following two faults.

A) Reduction of speed in the router, which will result in a lack of heat between the two parts being welded, thus, giving a poor weld, which is likely to fail.

B) The fitting trying to adhere to the product around its outside diameter rather than on the actual weld faces, thus giving a poor weld, which is likely to fail.

- 6) If the fitting is tight in the hole remove some more material from the hole using a deburring tool, do not remove too much.
- 7) Using the correct Spinweld tool in the router place the fitting onto the tool, check the router setting is correct. **Refer to router settings chart.**
- 8) Hold the fitting in the hole in the product and start the router, let the weight of the router push the fitting into the product (See note below) this will generate friction and heat This occurs quickly approximately within 4-5 seconds **(Refer To Router Settings Chart)** once the fitting has been pushed far enough into the product stop the router and leave a little bit of pressure on the fitting until the weld has cooled.

Note!! Only minimal pressure from the operator is required.

If the fitting is pushed into the product too quickly this will cause the router to slow down and result in a lack of friction.

This will result in a poor weld, which is likely to fail.

Router Settings (min RPM)

Product Size	Router Capacity in Watts	Recommended RPM	Recommended Welding Time	Recommended Rest Time At End Of Welding
1/2" Bsp	1200 Watts	9,000 RPM	3 Seconds	10 Seconds
3/4" Bsp	1200 Watts	9,000 RPM	3 Seconds	10 Seconds
1/2" Bsp	2300 Watts with Electronic Brake	9,000 RPM	3.5 Seconds	10 Seconds
3/4" Bsp	2300 Watts with Electronic Brake	9,000 RPM	3.5 Seconds	10 Seconds
1" Bsp	2300 Watts with Electronic Brake	9,000 RPM	4.5 Seconds	10 Seconds
1 1/4" Bsp	2300 Watts with Electronic Brake	9,000 RPM	4.5 Seconds	10 Seconds
1 1/2" Bsp	2300 Watts with Electronic Brake	9,000 RPM	4.5 Seconds	10 Seconds
2" BSP	2300 Watts with Electronic Brake	9,000 RPM	4.5 Seconds	10 Seconds
3" Bsp	2300 Watts with Electronic Brake	9,000 RPM	5 Seconds	10 Seconds
2" Buttress Style Drain	2300 Watts with Electronic Brake	9,000 RPM	4.5 Seconds	10 Seconds
Spinweld Male 2" BSPT Threaded	2300 Watts with Electronic Brake	9,000 RPM	4.5 Seconds	10 Seconds
Spinweld Cap Test Patch	2300 Watts with Electronic Brake	9,000 RPM	3 Seconds	10 Seconds
S/Weld Cap 0-15mm	1200 Watts	9,000 RPM	2.5 Seconds	10 Seconds
S/Weld Cap 15-25mm	1200 Watts	9,000 RPM	2.5 Seconds	10 Seconds
S/Weld Cap 25-35mm	1200 Watts	9,000 RPM	2.5 Seconds	10 Seconds
S/Weld Cap 35-45mm	1200 Watts	9,000 RPM	2.5 Seconds	10 Seconds
S/Weld Cap 45-55mm	1200 Watts	9,000 RPM	2.5 Seconds	10 Seconds
S/Weld Cap 55-65mm	1200 Watts	9,000 RPM	2.5 Seconds	10 Seconds

**This data is a suggested recommendation only and may vary.
This is then dependent on the power of the router being used.**

Recommended Hole Saw Sizes

BSP Threaded Fittings

- 1) Code: SWI ½", 1½" BSP Threaded Spinweld Fitting
Recommended Hole Saw Size = 32mm
- 2) Code: SWI ¾", 3¼" BSP Threaded Spinweld Fitting
Recommended Hole Saw Size = 35mm
- 3) Code: SWI 1", 1" BSP Threaded Spinweld Fitting
Recommended Hole Saw Size = 41mm
- 4) Code: SWI 1.25", 1 1¼" BSP Threaded Spinweld Fitting
Recommended Hole Saw Size = 51mm
- 5) Code: SWI 1.5", 1 1½" BSP Threaded Spinweld Fitting
Recommended Hole Saw Size = 57mm
- 6) Code: SWI 2", 2" BSP Threaded Spinweld Fitting
Recommended Hole Saw Size = 70mm
- 7) Code: SWI 3", 3" BSP Threaded Spinweld Fitting
Recommended Hole Saw Size = 98mm

BSPT Threaded Fittings

- 1) Code: XSWBSPTM2, 2" BSPT Male Threaded Spinweld Fitting
Recommended Hole Saw Size = 51mm
- 2) Code: XSWBSPTF2, 2" BSPT Female Threaded Spinweld Fitting
Recommended Hole Saw Size = 70mm