

Installation Instructions

1. Mount the **welding purge panel** to a vertical surface using four ¼ in. (6 mm) screws. See Swagelok® *WPP Series Welding Purge Panel* catalog, MS-02-362-E, for mounting dimensions.
Optional: the panel may be placed on a table or bench in the vertical position.
2. Connect a purge gas source to the **supply inlet** of the purge panel. See Fig. 1.
3. For purge panel models without an integral regulator, the purge gas must be externally regulated to a maximum of 50 psig (3.4 bar).

⚠ Note:
In all installations, it is recommended that an external relief valve (not included) be installed upstream of the purge panel to provide overpressurization protection.

Fig. 1. WPP Series Welding Purge Panel

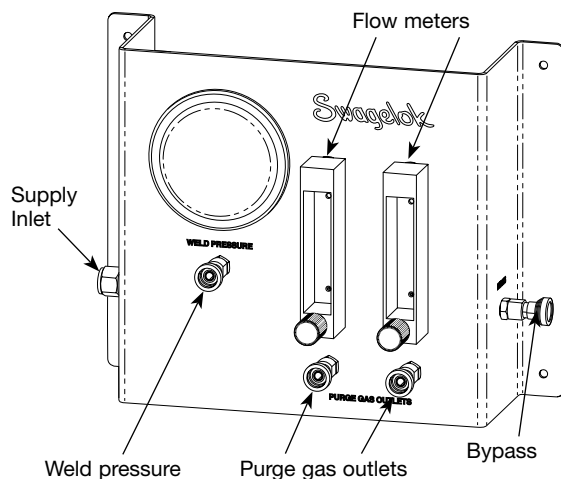
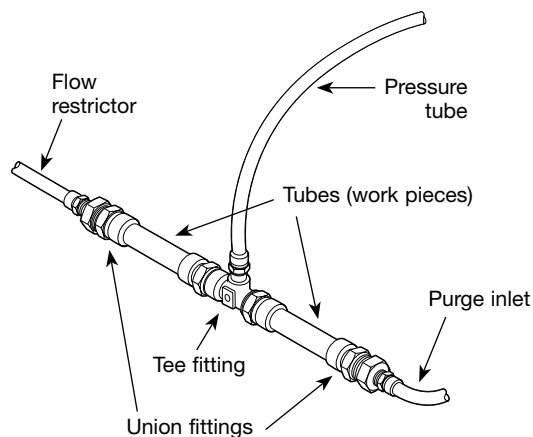


Fig. 2. Welding Purge Set-up



Operation Instructions

1. Gather the **tubes** to be welded (work pieces) and install the **tee fitting**, the **union fittings**, and the **flow restrictor** (not included). See Fig 2.
Note: Contact your authorized Swagelok representative for information about the Swagelok purge kit, which includes these fittings and flow restrictor.
2. Select an appropriate ID purge rate using the **Purge Rate and Pressure Table**, page 2, and match this purge rate to one of the **flow meters** on the purge panel. Using a Swagelok QC4 series quick connect stem (not included), connect the **purge inlet** to the appropriate **purge gas outlet** on the purge panel.
3. Select an appropriate shield gas flow rate using the **Purge Rate and Pressure Table**, page 2, and match this flow rate to one of the **flow meters** on the purge panel. Using a Swagelok QC4 series quick connect stem (not included), connect the welding head / torch to the appropriate **purge gas outlet** on the purge panel.
*Note: For welding devices that have internal shield gas flow controls, it is recommended that the shield gas connection be made to the **bypass** instead of the purge gas outlet.*
4. Connect the **pressure tube** to the **weld pressure** port using a Swagelok QC4 series quick connect stem (not included).
5. Turn on the purge gas source and adjust the purge gas **flow meter(s)** on the purge panel as appropriate to achieve the desired flow rates and weld pressure.
Note: It is recommended that both the ID purge and the shield gas flow rate be adjusted simultaneously because adjusting one flow meter can affect the setting of the other flow meter(s) on the panel.
6. Once the appropriate flow rates are achieved, disconnect the **tee fitting** and fixture the **work pieces** as appropriate. Make the weld.

Purge Rate and Pressure Table

Tube Size in. (mm)	Wall Thickness ^① in. (mm)	Minimum ID Purge Rate std ft ³ /h (std L/h)	Recommended Starting Pressure in. H ₂ O (mm H ₂ O)	Shield Gas Flow Rate std ft ³ /h (std L/h)	Restrictor Size in. (mm)
1/16 (1.6)	0.020 (0.8)	3 (1.5)	7.0 to 9.0 (178 to 229)	10 to 20 (283 to 566)	n/a
1/8 (3.2)	0.028 (0.71)	5.0 (142)	5.0 to 9.0 (127 to 229)	10 to 20 (283 to 566)	1/16 (1.6)
1/4 (6.4)	0.035 (0.89)	7.0 (198)	2.8 to 3.4 (71.1 to 86.4)	10 to 20 (283 to 566)	1/8 (3.2)
3/8 (9.5)	0.035 (0.89)	7.0 (198)	1.5 to 2.5 (38.1 to 63.5)	10 to 20 (283 to 566)	1/8 (3.2)
1/2 (12.7)	0.049 (1.24)	15 (425)	1.0 to 1.5 (25.4 to 38.1)	10 to 40 (283 to 1133)	1/4 (6.4)
1/2 (12.7)	0.065 (1.65)	15 (425)	1.8 to 2.8 (45.7 to 71.1)	10 to 40 (283 to 1133)	1/4 (6.4)
3/4 (19.1)	0.065 (1.65)	20 (566)	0.5 to 1.1 (12.7 to 27.9)	15 to 40 (425 to 1133)	1/4 (6.4)
1 (25.4)	0.065 (1.50)	40 (1133)	0.5 to 0.7 (12.7 to 17.8)	15 to 40 (425 to 1133)	1/4 (6.4)
1 1/2 (38.1)	0.065 (1.50)	80 (2265)	0.5 to 0.7 (12.7 to 17.8)	15 to 50 (425 to 1416)	1/4 (6.4)
2 (50.4)	0.065 (1.50)	150 (4248)	0.4 to 0.7 (10.2 to 17.8)	15 to 50 (425 to 1416)	3/8 (9.5)

① Contact your authorized Swagelok representative for information on additional thicknesses.

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