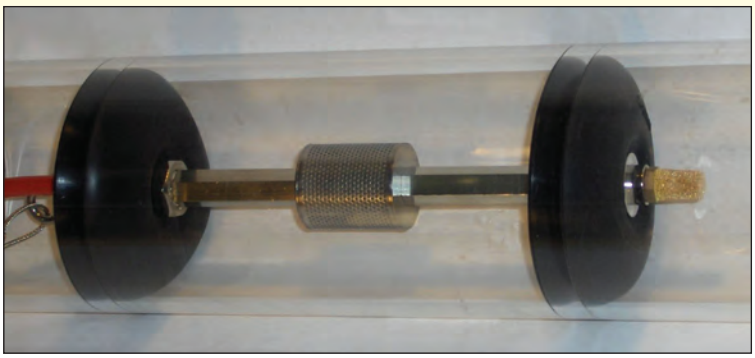
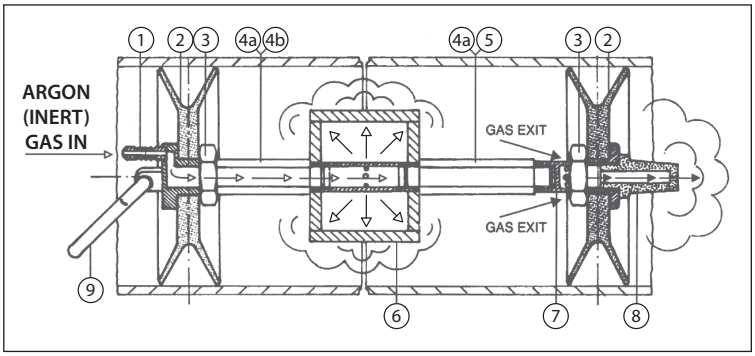
INTERPURGE MAXI-PURGING SYSTEMS

All Parts, Components and Accessories of the Maxi-Purge Pipe Weld Purging Systems are specifically engineered to provide the fastest, most efficient means to purge rest oxygen (atmosphere) from a pipe/tube joint that is to be welded, which results in obtaining very low oxygen levels. With all elements in place, a Maxi-Purge Unit permits welders to achieve high quality welds typically required by the semi-conductor and nuclear industries today, that was difficult to obtain, in the past.





The key components of the Maxi-Purge System includes:

BAFFLES: InterPurge Baffles are manufactured from silicone rubber that is halogen free (non-contaminating) and heat resistant to a maximum temperature of 630°F (330°C). The double-lipped baffles conform to a wide variety of pipe contours while ensuring a fully sealed purging space. ***Note:*** though the baffles can withstand a high temperature, they can be damaged if subjected directly to an open flame. To avoid damage and excess wear & tear on the baffles, always use the designated sizes. Use the pipe size and schedule, or the baffles working diameter range from the table on the next page to select the Maxi-Purge unit for your pipe/tube applications' inside diameter (I.D.).

DIFFUSER: A unique feature of the InterPurge Pipe Weld Purging Systems is the use of sintered (powdered) stainless diffusers and fine, multiple layered mesh diffusers to distribute inert gas evenly without creating turbulence. Turbulence may lead to contamination of the weld area and very long purge times. The non-turbulent delivery of inert gas ensures a high distribution at the weld seam while helping a welder achieve excellent weld quality and a uniform reduction of the discoloration of the pipe and weld seam internally.

HARDWARE: The Maxi-Purge Units' universal hardware allows the same parts and components to be used with the same range of baffles that the Maxi-Purge 1 System (1.496" – 3.976" I.D. range) covers. Likewise, the same hardware from the Maxi-Purge 2 System can be used with the baffles that cover it's (3.937" – 16.142") I.D. range. ***Note:*** Baffles from Maxi-Purge 1 units will not fit on the hardware for the Maxi-Purge 2 units, and vice versa. Accessories, such as the stainless steel retrieval cables and the low permeability gas hoses are interchangeable between the Maxi-Purge 1 and Maxi-Purge 2 Systems.

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COMPLETE "READY-TO-USE" MAXI-PURGE UNITS

Each complete Maxi-Purge unit comes with 2 baffles, 1 diffuser, all necessary hardware, 30' retrieval cable and 30' hose package consisting of a 6" whip line, male/female quick disconnects, 30' low permeability hose and connection for flow meter or regulator.

	Pipe Sizes	For Range of Pipe I.D.		Order Code
		Standard	Metric	
MAXI-PURGE SYSTEM 1	1 1/2" SCH 10S & 40S	1.49" - 1.69"	38 - 43mm	J50330045
	1 1/2" SCH 5S & **2" TUBING**	1.69" - 1.89"	43 - 48 mm	J50330050
	2" SCH 40S & 80S	1.85" - 2.09"	47 - 53 mm	J50330055
	2" SCH 5S 10S & 40S	2.04" - 2.28"	52 - 58 mm	J50330060
	2 1/2" TUBING	2.12" - 2.48"	54 - 63 mm	J50330065
	2 1/2" TUBING & SCH 10S 40S & 80S	2.28" - 2.68"	58 - 68 mm	J50330070
	2 1/2" SCH 5S	2.51" - 2.83"	64 - 72 mm	J50330075
	3" TUBING	2.68" - 2.99"	68 - 76 mm	J50330080
	3" SCH 40S & 80S	2.83" - 3.19"	72 - 81 mm	J50330085
	3" SCH 5S 10S & 40S	2.95" - 3.39"	75 - 86 mm	J50330090
	3 1/2" SCH 40S & 80S	3.15" - 3.58"	80 - 91 mm	J50330095
	4" TUBING & SCH 80S	3.54" - 3.98"	90 - 101 mm	J50330107
MAXI-PURGE SYSTEM 2	4" SCH 5S 10S & 40S	3.94" - 4.41"	100 - 112 mm	J50330115
	4" SCH 5S & 10S	4.13" - 4.72"	105 - 120 mm	J50330125
	5" SCH 5S 10S 40S & 80S	4.72" - 5.51"	120 - 140 mm	J50330145
	6" TUBING & SCH 80S	5.31" - 6.10"	135 - 155 mm	J50330160
	6" SCH 5S 10S & 40S	5.70" - 6.50"	145 - 165 mm	J50330175
		6.30" - 7.09"	160 - 180 mm	J50330190
	8" SCH 80S	6.88" - 7.87"	175 - 200 mm	J50330210
	8" SCH 5S 10S & 40S	7.67" - 8.66"	195 - 220 mm	J50330230
		8.46" - 9.45"	215 - 240 mm	J50330250
	10" SCH 40S & 80S	9.25" - 10.24"	235 - 260 mm	J50330270
	10" SCH 5S 10S & 40S	10.04" - 11.02"	255 - 280 mm	J50330290
	12" SCH 80S & 80	10.82" - 11.81"	275 - 300 mm	J50330310
	12" SCH 5S 10S 40S & 80S	11.41" - 12.60"	290 - 320 mm	J50330330
	14" SCH 80	12.20" - 13.39"	310 - 340 mm	J50330350
	14" SCH 5S 10S & 40	12.80" - 13.98"	325 - 355 mm	J50330365
		13.58" - 14.76"	345 - 375 mm	J50330385
	16" SCH 80	14.17" - 15.35"	360 - 390 mm	J50330400
	16" SCH 5S 10S & 40	14.96" - 16.14"	380 - 410 mm	J50330420

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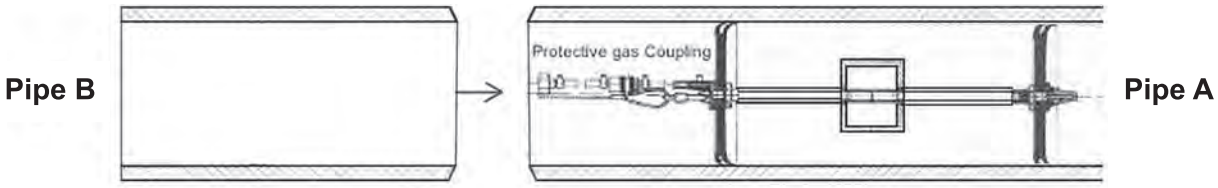
PURGING INSTRUCTIONS

Scan for 2 Minute Purge Video!

General Guidelines for the use of InterPurge purging equipment during the pipe welding process.

1. Assemble purge unit, making sure all connections are properly fastened and tightened. Some units may be pre-assembled. Attach purge hose.

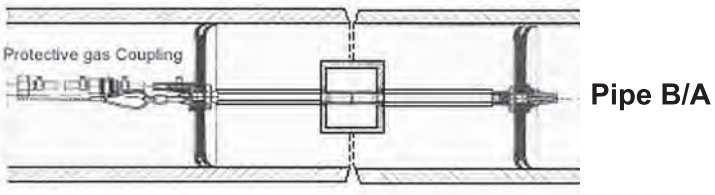
2. Push the entire unit into Pipe A, ensuring that the retrieval cable and gas inlet is facing you and approximately 2” (50mm) deep into the pipe.



3. Fish Purge Hose and Retrieval Cable through Pipe (B) whether spool or elbow.

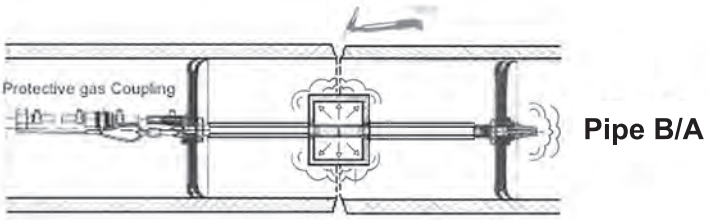
4. Align Pipes A and B and set at the proper root gap.

5. Pull Purge Unit toward you into Pipe B approx. 6” (150mm) so the gas diffuser sits at the root gap. Inside distance of baffle to baffle is approx. 8” (200mm), so now, unit should be evenly spaced within both sections of the pipe.



6. For a faster, more efficient purge, pre-seal the root gap with halogen-free (non-contaminating) aluminum tape.

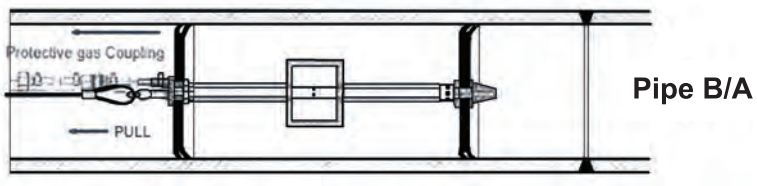
7. Purge with inert gas at a 20-30 CFH (9.40 - 14.10 L/min.) flow rate for 2 - 4 minutes. (The use of an oxygen indicator to accurately measure oxygen content to below 50 ppm, or at the value set by quality control, is highly recommended, as it also indicates to the welders when they can begin)



8. When the set oxygen value is reached, reduce the flow to 5 - 10 CFH (2.35 - 4.70 L/min.) and proceed to weld by pulling 2”- 3” of tape off of the pipe ahead of the root pass.

9. Continue to purge for an extra minute after the weld is completed, during the cool-down phase, so that oxidation does not form on the heat affected zone. Then pull the purge unit through the completed section by the retrieval cable, stopping just short of the next section.

10. If more sections are to be added, simply repeat steps 3 through 9, as necessary.



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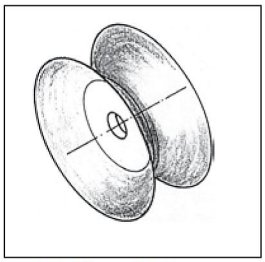
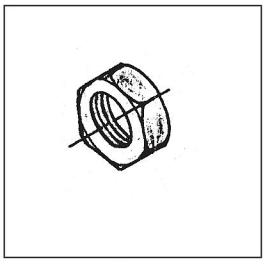
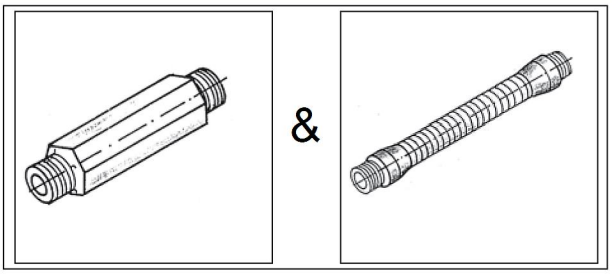
COMPONENTS ASSEMBLY:
STANDARD MAXI-PURGING SYSTEM



2. Baffles (2x)

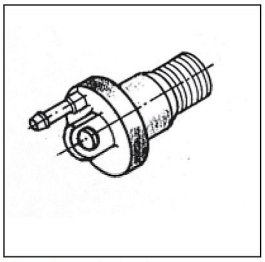


3. Nuts (2x)

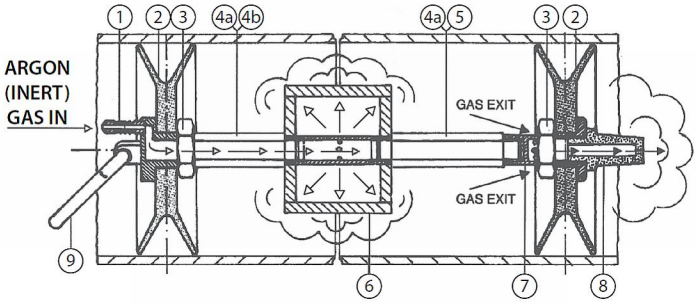


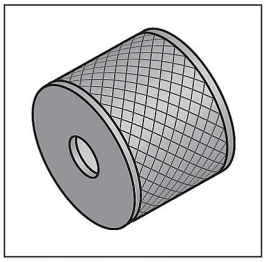
4a. Rigid Arms (2x) Std
4b. Short Arm (1x)

5. Flexible Arm (1x)

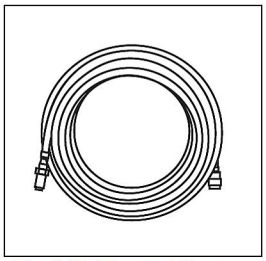


1. Gas Inlet

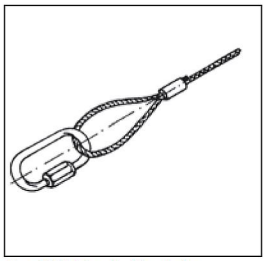




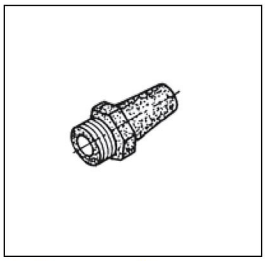
6. Gas Diffuser



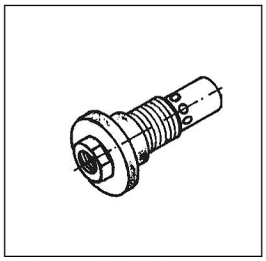
10. 30' Hose Pkg



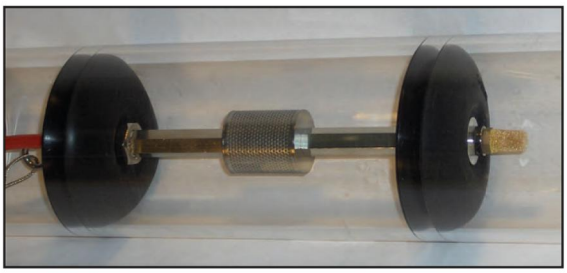
9. 30' Pull Cable
with Safety Hook



8. Excess Pressure
Vent

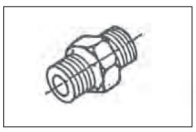


7. Gas Outlet

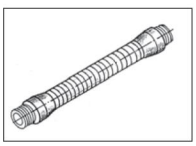


FOR ELBOWS & CURVED PIPE - EXCHANGE 2 PARTS

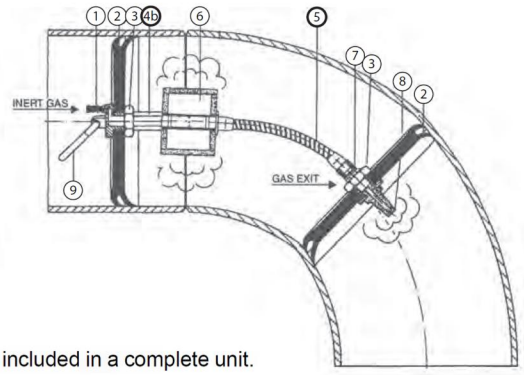
When dealing with elbows and curved sections of pipe, exchange the rigid arm (4a) with a short arm (4b) - placed between the gas inlet and diffuser. Then change the second rigid arm (4a) with the flexible arm (5) - placed between the diffuser and the gas outlet as illustrated below.



4b. Short Arm (1x)



5. Flexible Arm (1x)



Note: These 2 parts are included in a complete unit.