CARBON STEEL PRESS FITTINGS
TOOLING & INSTALLATION GUIDELINES (1/2" – 2")
- GAS APPLICATION -

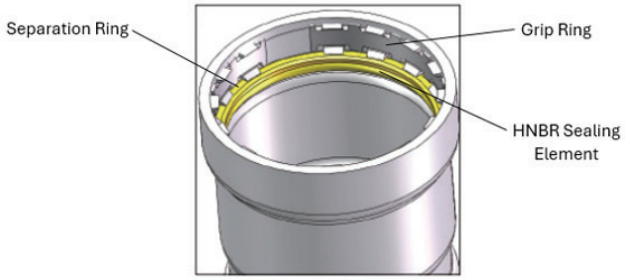
WARNING! It is the responsibility of the end user to follow all instructions for installing Carbon Steel Press fittings. Always ensure that the pressing tool and its jaws are appropriate for the schedule of pipe and size of fitting. Be sure to refer to the pressing tool manufacturer's instructions for operation and maintenance prior to use. Failure to follow these instructions may result in extensive property damage, serious injury or death.

1. **CUT PIPE:**
   When cutting, maintain a minimum of 4" away from the vise to prevent possible damage to the pipe. Cut pipe square using a displacement-type cutter or fine-toothed saw.

2. **DEBURR PIPE:**
   After the pipe is cut to length, deburr the ID and OD with a deburring tool or a fine file to prevent damage to the HNBR (Hydrogenated Nitrile Butadiene Rubber) sealing element when inserting the pipe into the press fitting.

3. **CLEAN PIPE:**
   Sand pipe OD to proper insertion in depth. The pipe surface must be smooth, free of indentations, pits and deformations and must be free of oil and grease.

4. **CHECK FITTING:**
   Ensure that the grip ring, separation ring, and HNBR sealing element are intact and seated properly (see illustration). Verify that sealing element is proper type for installed application (example: yellow for gas connection).

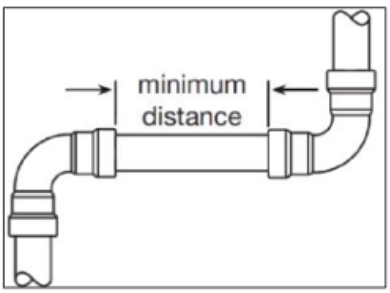


5. **MEASURE & MARK INSERTION DEPTH:**
   Determine the insertion depth from the chart below. With a permanent marker, mark the proper insertion depth on the surface of the pipe. The marking on the pipe must remain visible (but close to the fitting) after the connection is pressed to identify any movement before or after pressing.

Pipe Diameter (inch)	Minimum Insertion Depth of Press Fittings (inch)
1/2"	1.06"
3/4"	1.19"
1"	1.38"
1 1/4"	1.81"
1 1/2"	1.88"
2"	2"

>>> MINIMUM DISTANCE:
Reference the following chart to ensure a correct press, which maintains a minimum distance between press fittings. Failure to provide this distance may result in an improper seal and may lead to leakage.

Pipe Diameter (inch)	Minimum Between Press Fittings (inch)
1/2"	0.25"
3/4"	0.25"
1"	0.25"
1 1/4"	0.50"
1 1/2"	0.50"
2"	0.50"



6. INSERT PIPE:

Carefully insert the fitting onto the pipe while turning slightly left and right. Make sure to slide it all the way to the insertion depth mark on the pipe and make contact with the stop. The insertion depth marking must remain visible. In the case of fittings without a stop the fittings should be inserted at least as far as the marked insertion depth.

>>> ACCEPTABLE TOOLS & JAWS (1/2" – 2")

It is important to follow specific manufacturer's guidelines for the best use and practice, for the power tools and jaws used in the press system. Regular maintenance is also necessary to keep tools in good condition. Recommended maintenance and calibration schedules vary by individual tool and jaw manufacturers. Failure to do so may result in a poor crimp. Be sure to follow the instructions for the specific brand of tool and jaw used.

BRAND	TOOL	JAW
RIDGID®	RP Series	Standard Jaw
Milwaukee®	M18™	Standard Jaw

7. PRESS THE CONNECTION:

For 1/2" to 1", place press jaw at a right angle over fitting bead. Initiate the pressing process. Do not release the trigger until it has completed a full pressing cycle. An incomplete press may reduce the pressure retention capabilities of the joint and lead to subsequent system leakage. See tool manufacturer's manual for proper tool instructions.

For 1 1/4" to 2", place press ring at a right angle over fitting bead and check for proper engagement. Connect the proper press tool actuator to the press ring and initiate the pressing process.
See tool manufacturer's manual for proper tool instructions.

The yellow shrink wrap hubs will fall off after pressing, providing visual confirmation that the fitting has been pressed. If it does not fall off, then you may have to remove it by hand.

NOTE: It is not permitted to press a connection more than once.

>>> PRESSURE TESTING:

An unpressed fitting will be easily identified during the low-pressure testing of the piping system. Pressure testing with air can be dangerous at high pressures. When testing with compressed air, the range is ½ to 45 PSI. When testing with water, the range is 15 to 85 PSI. Following a successful test, the system may be pressure tested up to a maximum of 600 PSI for water and a maximum of 200 PSI for air.
Always comply with local plumbing and gas codes when pressure testing any gas system.