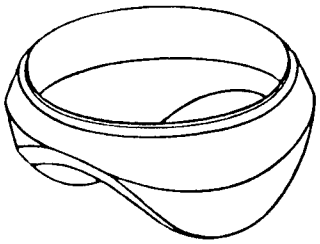
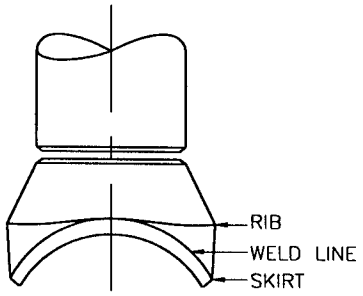


## READY TO WELD

Every fitting is shaped to fit the pipe and is self-aligning.

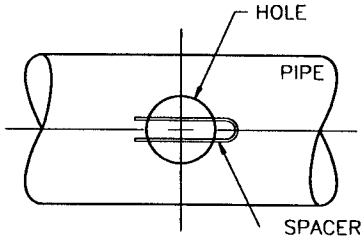



The outlet is machine-beveled for quick easy butt-welding of the branch pipe for shop or field fabrication.

# INSTALLATION PROCEDURE

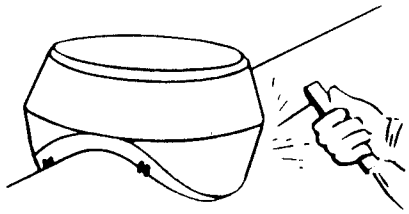
**Layout** The template is the inside of the fitting.

**Cut Hole** The hole in the run pipe on reducing sizes can be cut out either before or after the fitting is welded on. The hole can be cut with a torch, a drill or a hole saw. Welding the fitting to the run pipe prior to cutting the hole helps prevent distortion of the run and can be done generally on outlet sizes over two inches.

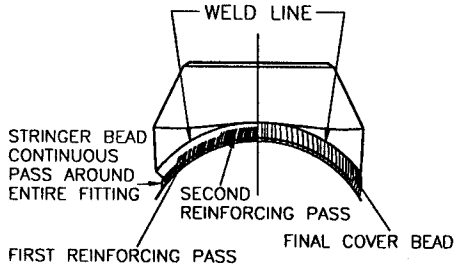



TOP VIEW SHOWING SPACER TO PROVIDE ROOT GAP

**"Space" for Welding** The Weldolet is raised off the run pipe to establish proper weld gap by placing spacers, e.g. welding rods, under the fitting. This provides a uniform welding gap between the curvature of the run and base of fitting.

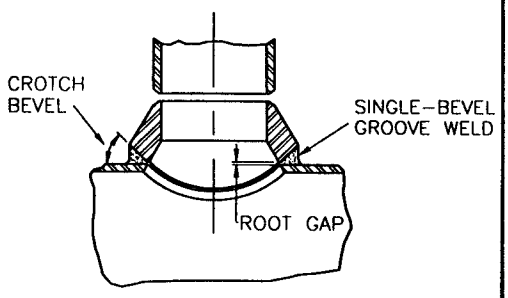


**Tack Weld** The base joint is tack welded, preferably at four points, each half way between the crotch and skirt sections of the fitting. The spacers are then removed.




**Stringer Bead** The stringer bead is applied completely around the base of the fitting. The established weld gap assures full penetration.

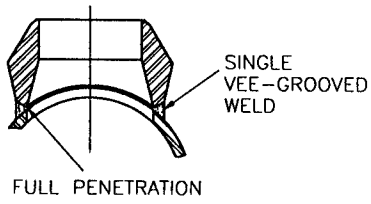
**Reinforcing Beads** Reinforcing welds should be made at the crotch bevel areas of the fitting to provide maximum weld at the crotch tapering to minimum at the skirt. Particular care should be taken to weld only the bevel portion of the fitting. (See "weld lines" on above drawing.) This eliminates the unnecessary use of continuous passes and prevents the erroneous practice of welding up to the rib on teh skirt portion of the fitting. A continuous cover bead should be added to fill the bevel and provide a smooth weld.




LONGINTUDINAL SECTION

FIG. 1

Wide bases or footings at crotch section distribute internal and external stresses. Gradual changes of section elimate stress concentration. Funnel shaped opening provides flow conditions.




TRANSVERSE SECTION

FIG. 2

Note the blending of the skirt section of the Weldolet to the run pipe to avoid abrupt change in intersection. Throat of weld at this point is designated by the welding bevel.

**EXAMPLE OF WELD PASS SEQUENCE**