



**Global Valves  
and Engineering**



# *ROLL* GROOVE FITTINGS

## ROLL GROOVE PIPING SYSTEM GUIDELINES

Roll Groove piping systems require a careful coupling selection. To ensure a properly set up system use the following guidelines:

- 1) The coupling must suit the pipe O.D., and pressure rating for the application in which it is to be used.
- 2) Use the correct gasket to suit the media being transported/conveyed.
- 3) Make sure the correct groove dimension is used to ensure the correct fittings of the coupling to the pipe.

The following industry standards must be followed to ensure a correct pipe joint assembly.

- a) All bolts should be torqued evenly to achieve metal to metal contact at the bolt pads.
- b) Tongue and recess housings must be checked for correct alignment.
- c) Apply GVE gasket lubricant to all rubber surfaces to ensure a no pinch assembly.
- d) Test the system slowly (preferably hydrostatically) and check for leaks.
- e) Depressurize the system before carefully dismantling the couplings.

## HOSE COUPLING SAFETY

Most of GVE products are designed to couple to hose. This brochure primarily focuses on GVE pipe fittings.

GVE couplings and retention devices are designed to work safely for their intended use. The selection of the proper hose, coupling and retention device, and the proper application of the coupling to the hose are of utmost importance.

Users must consider the size, temperature, application, media, pressure and hose and coupling manufacturer's recommendations when selecting the proper hose assembly components. GVE recommends that all hose assemblies be tested in accordance with the Rubber Manufacturers Association's recommendations and be inspected regularly (before each use) to ensure that they are not damaged or have become loose.

Where safety devices are integral to the coupling, they must be working and utilized. The use of supplementary safety devices such as safety clips or safety cables are recommended.

If any problem is detected, couplings must be removed from service immediately.

GVE is available to consult, train and recommend the proper selection and application of all fittings we sell. We strongly recommend that distributors and end users make use of GVE Testing and Recommendation Services. GVE can be contacted at 02 9869 5055.

## FEATURES and BENEFITS

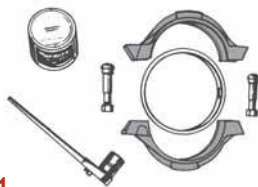
Roll Groove piping fittings for grooved pipe combine the features of a straight line or a flexible coupling, a union and an extension at each pipe joint. The housings engage the groove around the entire pipe circumference, locking the pipe together.

Roll Groove piping fittings allow easy removal of pipe sections for replacement, cleaning and service.

Since the grooves are not as deeply cut as threaded pipe, less metal is removed and more of the pressure rating of the pipe is retained.

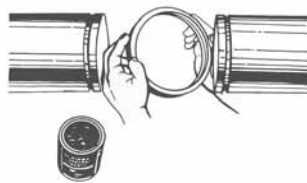
Installation time and cost is low, since only a socket wrench is required.

## INSTALLATION INSTRUCTIONS



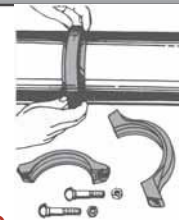
1

A socket wrench is the only tool needed to assemble the gasket, housing, nuts and bolts.



2

Before installing the gasket, make sure that the pipe ends are correctly grooved. Remove any burrs, scores, rust or other imperfections from the pipe ends and gasket.



3

Smear ordinary rubber grease on the inside and outside of the gasket. Stretch the gasket over one pipe end and bring the other pipe to be coupled into alignment. Slide the gasket into the center between the grooves on the two pipe ends.



4

Attach the two sections of the housings and insert the bolts and nuts.



5

Tighten the bolts evenly until the housings are firmly together with the metal touching.