

RESTRAINED JOINTS

Restrained joint pipe and fittings afford a positive locking system that prevents joint separation. They may be of a bolted type or beltless. They may also be either flexible or rigid in their design. Each manufacturer of pipe provides at least one proprietary method of joint restraint when necessary due to internal working pressure or soil conditions. Many of these joints employ welded rings as part of their thrust restraint system. It is not recommended to cut and field weld this pipe as shop controlled welding procedures cannot be duplicated.

No AWWA standards exist for most restrained joints.

ENGINEERS NOTE: WHEN SPECIFYING THE PROPRIETARY DESIGNS, CARE SHOULD BE TAKEN TO INCLUDE THE "OR EQUAL" CLAUSE SO AS NOT TO PRECLUDE OTHER DESIGNS WHOSE PERFORMANCE IS COMPARABLE.

In addition to these methods several other types may be considered.

1. Retainer Glands with set screws
2. Grooved type pipe and fittings (re. Sect. 4)
3. Tie Rods
4. Pipe Clamps
5. Miscellaneous Harness Methods

For pressure ratings application for any of the above methods, contact your NAPF member for recommendations and assistance.