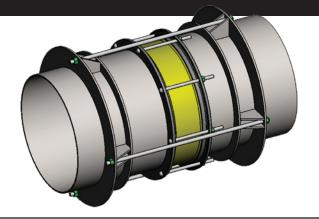
HARNESS RESTRAINT AWWA MANUAL M11

SUBMITTAL INFORMATION



USE

Joint harnesses specified per AWWA M11, designed to restrain flexible couplings (style 500 and style 400) on steel pipelines. These harness assemblies are field welded in place.

MATERIALS

RESTRAINT RINGS

This weldment is manufactured from ASTM A 36 Steel with a minimum yield stress of 36,000 psi. Two rings are required, on each side of the coupling.

TIE RODS

High tensile alloy steel per ASTM A 193 grade B7. Type 304 or 316 stainless steel available on request and requires twice as many rods.

COATING

Bare, unless otherwise specified.

PRESSURE

The standard design pressures of 50, 100, 150, 200, 250 and 300 psi are specified in the AWWA M11 manual. These pressures specify the tie rod quantities and diameter. Other pressures can be accommodated.

RING TOLERANCE

The Harness weldment inner diameter (ID) is manufactured with a 3/16 inch (on diameter) clearance between the specified pipe OD up through 24 inch and ¼ inch larger than 24 inch

SIZES

6 inch – 144 inch for steel pipe. Other sizes available on request.

