WATER SPECIALTIES PROPELLER METER™

BOLT-IN & WELD-IN TYPE STRAIGHTENING VANE INSTALLATION INSTRUCTIONS

STRAIGHTENING VANES are recommended when there is less than ten pipe diameters of straight pipe (no fittings or obstructions) directly upstream from the meter location. Straightening vanes are available from the factory and when required should be installed in the following manner, using either the Bolt-in or Weld-in instructions, prior to installing the meter on the pipe:

BOLT-IN TYPE STRAIGHTENING VANE

1. **HOLD** the vanes on the outside of the pipe ten (10) inches upstream from the center of the cutout opening. The vanes must be parallel to the center line of the pipe and should be equally spaced radially 120 degrees apart.

2. **MARK** the pipe around the straightening vane bolts and drill holes for vane mounting (9/16" dia. holes for 4" through 12" meters or 11/16" dia. holes for 14" through 20" meters).

3. **INSERT** the vanes into the pipe through the cutout opening after installing the brass and stainless/rubber washers over the vane bolts. The brass washer should be installed against the vane bolt head with the stainless/rubber washer installed against the brass washer (rubber side away from vane). Position the vanes inside the pipe with the bolts protruding through the vane mounting bolt holes. Place stainless/rubber washers over each bolt, rubber against the pipe. The brass washer should be placed between the stainless/rubber washer and the vane mounting nut. Secure nuts to hold the vanes to the pipe (approx. 60 ft./lbs torque). The vanes can be welded to the pipe if desired, however the washers should not be used. **CAUTION:** Remove the meter assembly before welding.

WELD-IN TYPE STRAIGHTENING VANE

1. **HOLD** the vanes on the outside of the pipe ten (10) inches upstream from the center of the cutout opening. The vanes must be parallel to the center line of the pipe and should be equally spaced radially 120 degrees apart.

2. **MARK** the pipe around the straightening vane bolts and drill holes for vane mounting (9/16" dia. hole for 4" through 12" meters or 11/16" dia. holes for 14" through 20" meters).

3. **INSERT** the vanes into the pipe through the cutout opening. Tack the vanes in place and double check the distance from the meter center line to the trailing edge of the vanes. Weld the vanes in place when you are certain they are positioned properly and are parallel with the flow.

McCROMETER 3255 WEST STETSON AVENUE • HEMET, CALIFORNIA 92545-7799 USA • TEL: 951-652-6811 • FAX: 951-652-3078
Visit our Website: www.mccrometer.com • E-Mail: info@mccrometer.com