Preparation of Casing Pipe

1. The casing pipe should be cleaned and free of all free-standing obstructions prior to installation.
2. All weld beads should be ground to 1/4” tall or less and have a minimum radius of curvature of 2 in.

Installation of Casing Spacers

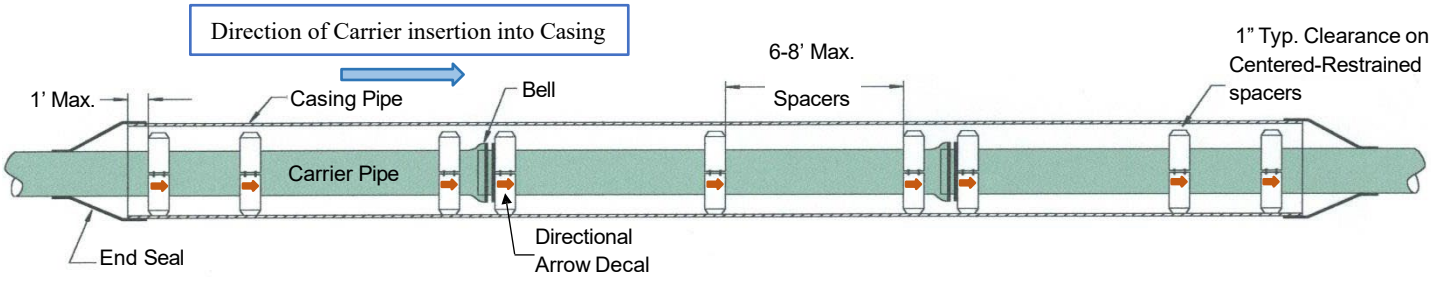
1. The casing spacers should be installed every six to eight feet unless otherwise specified by Advance Products & Systems, LLC (APS), Engineering Department.
2. Place a chalk line on each carrier pipe as an alignment guide for the placement of each spacer and when joining pipes together. This will ensure the runners from spacer to spacer are in line with one another helping to prevent the carrier pipe from rotating inside the casing.
3. Care should be taken making sure that the orientation of the spacer is correct. I.e. bottom section is on bottom and top section is on top.
4. It is very important that the flanges of the casing spacer are tightened equally to ensure proper grip around the carrier pipe. A torque wrench is not required. The bolts are to be tightened until the flanges slightly bend towards each other, or in some cases, may touch at the ends.

Installation Tips and Warnings

1. Installing a guide at the bottom of the casing for the spacers to follow helps prevent the carrier pipe from rotating inside the casing. There are several options for guides. Such as angle iron, c-channel, etc.
2. Another option that helps prevent the carrier pipe from rotating inside the casing is to push from the back of the carrier while also pulling from the front. This also reduces the stress on the spacers.
3. Never set a loaded casing spacer on a flat or irregular surface. This could cause premature failure in the spacer.

Disclaimer: Failure to follow these instructions could lead to the failure of the casing spacer. Advance Products & Systems will not be held responsible if the instructions are not followed.

Recommended Placement
(For typical 20' joint):



A. **General Carrier**: One spacer shall be placed within one foot from each end of the casing and pipe joint. Subsequent spacers shall have a maximum of 6-8' intervals within the casing.

B. **Bell & Spigot Carrier**: One spacer shall be placed on the spigot end of each segment at the line marking the limit of insertion into the bell. When the joint is complete, the spacer shall be in contact with the bells of the joint so that the spacer pushes the joint and relieves compression within the joint. Subsequent spacers shall be placed at 6' intervals.