



"THE STANDARD OF EXCELLENCE IN THE INDUSTRY"

## **CASING SPACERS (Stainless Steel – Restraint Joint) - STYLE – CCS-JR**

Casing spacer shall be made from T-304 stainless steel of a minimum thickness of 14 gauge. Each shell section shall be either 8" or 12" wide, and shall be a two-piece design. Each shell section shall have a stud bar and receiver bar TIG welded to the shell. Studs shall be T-304 and threaded as 5/8-11x7" long. Each stud bar shall include up to three studs, and shall allow a maximum of 1" adjustment to circumference to compensate for the variations in large diameter (non-uniform) pipe. The shell shall be lined with a 0.090" thick, ribbed PVC extrusion with a retaining section that overlaps the edges of the shell and prevents slippage. Bearing surfaces (runners) shall be ultra high molecular weight polyethylene (UHMW) to provide high abrasion resistance and a low coefficient of friction (0.12). The runners shall be attached to support structures (risers) at appropriate positions to properly support the carrier within the casing and to ease installation. The runners shall be mechanically bolted to the riser. The bolt heads are welded to the inside of the risers for strength. Risers shall be made of T-304 stainless steel of a maximum 10 gauge. All risers shall have a bolting plate MIG welded to the face of the riser for the connecting hardware to be attached. The connecting hardware (not included) shall be placed through the restraining hole in the bolting plate. The spacers shall be placed on the pipes(s) with the bolting plates facing away from the joint, placing the spigot side of the Restraint Joint Casing Spacer no closer to the end than the Home line and the bell side of the Restraint Joint Casing Spacer at the edge of the bell. All risers shall be MIG welded to the shell. Bottom risers 6" and over in height shall be reinforced. All reinforcing plates shall be 10 ga. T-304 stainless steel and shall be MIG welded to mating parts. **Standard positioning within the casing pipe** shall be sized such that the carrier rests near the bottom of the casing pipe and the height of the risers and runners are to provide a bottom clearance not less than one-half inch between the casing pipe and the extreme outside diameter of the joint (bell, seam weld, joint clamp, ...) of the carrier pipe. **Centered & Restrained positioning within the casing pipe** shall be sized such that the height of the risers and runners are to center the carrier pipe in the casing pipe with a top clearance of three-fourths inch minimum. **Restrained positioning within the casing pipe** shall be sized such that the carrier rests near the bottom of the casing pipe and the height of the risers and runners are to provide a bottom clearance not less than one-half inch between the casing pipe and the extreme outside diameter of the joint (bell, seam weld, joint clamp, ...) of the carrier pipe and a top clearance of three-fourths inch minimum. All welds and metal surfaces shall be chemically passivated. Due to the numerous application possibilities, consult factory for spacing requirements. Casing spacers shall be Model CCS-JR as manufactured by Cascade Waterworks Mfg. Co. of Yorkville, IL or approved equal.

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