

## JOINT RESTRAINT CASING SPACERS (Stainless Steel) - STYLE - CCS-JR

Casing spacer shall be made from T304 stainless steel of a minimum thickness of 14 gauge. Each shell section shall be 8" 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 T304 and threaded as 5/8 UNC. Each stud bar shall include up to three studs, and shall allow a maximum of 1" of adjustment in 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 T304 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 Joint Restraint Casing Spacer no closer to the end than the Home line and the bell side of the Joint Restraint 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. T304 stainless steel and shall be MIG welded to mating parts. Joint Restraint Casing Spacers shall be configured such that the height of the risers and runners are to position the carrier pipe in the casing pipe with a top clearance and a bottom clearance of three-fourths inch minimum. All weldments shall be fully chemically passivated in accordance with ASTM A380. 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.