



"THE STANDARD OF EXCELLENCE IN THE INDUSTRY"

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

Casing spacer shall be a two-piece shell per carrier pipe and made from T304 stainless steel of a minimum 14 gauge thickness. Each shell section 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. PVC Liner shall have a hardness of 85-90 durometer. Bearing surfaces (runners) shall be ultra-high molecular weight polyethylene (UHMW) to provide 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 pipe(s) within the casing pipe and to ease installation. The runners shall be mechanically bolted to the spacer. Risers shall be MIG welded to the shell, where applicable. Risers shall be made of T304 stainless steel of a maximum 10 gauge with bolt heads welded to the inside of the risers for strength. Bottom risers 6" and over in height shall be reinforced. All reinforcing plates shall be 10 gauge T304 stainless steel and shall be MIG welded to mating parts. **STANDARD (STD) 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 (CTD) & 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 (RES) 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. **MULTIPLE (MULTI) Carrier pipes within the casing pipe** shall be sized such that the carrier pipes are held at fixed distances relative to each other, with the height of the risers and runners to provide not less than three-fourths inch between the casing pipe and the outside diameter of the riser/runner combinations. Special reinforcing plates may be required to stabilize and support structure. **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** as manufactured by Cascade Waterworks Mfg. Co. of Yorkville, IL or approved equal.

These specifications are accurate at time of publication and are subject to change without prior notice.

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