

Canam can offer a complete range of **Non Weld Bow Centralizers (CPS10)** of high quality, developed to exceed API 10 D specifications for use in most demanding conditions. The Non Weld Bow Centralizers combine the highest Non Weld Centralizer restoring force with the lowest starting force. Premium quality Bows made of special alloy steel with uniform hardness provide optimum performance. The bows with extended profile prevent them from hitting against casing collars. The bows are available in a range to accommodate any well profile. Quality steel and non-weld design ensure extra strong grip while integral hinges folded on the inside are connected by high strength locking pin for maximum structural robustness. Non Weld Bow centralizers are used to position the casing in the center of the wellbore in vertical, deviated as well as horizontal wells. The Non Weld Bow centralizers reduce the effect of channeling by improving cement flow. This results in a more uniform thickness between the casing and the wellbore. By reducing the pipe movement before the cement sets in, the centralizers are able to minimize gas channeling. The centralizers provide a semi rigid casing standoff.



Non Weld Bow Centralizers (CPS10)

Non Weld design features self-locking of lips for holding bows to end collars. Bows of special alloy steel are hot formed and tempered for optimum strength, resilience and uniformity. They are then flattened as per specifications for consistent performance. High restoring force combined with low starting force is achieved with all 5 bow heights. Their installation on the casing pipe is very convenient. It requires only the placement of the two assembled halves on the pipe and inserting the pin in the end collar hinge. The centralizer when unassembled makes a compact package, greatly reducing shipping cost. Assembly at site is conveniently done, hydraulically or pneumatically.

The Non Weld Bow centralizers are available in sizes 4½" to 24".

**Non Weld Positive Centralizers (CPS20)** are available in the size range 4½" to 20", these centralizers are uniquely designed with flat bottom U profile of different depths permitting maximum fluid passage.

Available with straight bows for casing operations, this device provides nearly 100% stand-off (Concentricity) when run inside a case hole. The self-locking design ensures firm hold. Its non-welded structure eliminates brittle spots and enhances durability.



Non Weld Positive Centralizers  
(CPS20)

**Non Weld Semi Rigid Bow Centralizers (CPS29)** are available in the size range 4½" to 20", this device ensures high efficiency in casing jobs on deviated and horizontal wells. Combining the features of a standard spring bow and rigid centralizer, it has bows manufactured from alloy steel tempered for exact hardness and a non-weld design to eliminate brittle spots.

The spring characteristics of its double crested profile permit compression to facilitate movement through tight spots and dog legs. Compared to other Spring Bow Centralizers this device attains higher stand-off because of its higher restoring force.



Non Weld Semi-Rigid Bow Centralizers (CPS29)

**Non Weld Centralizers with Turbo Fins (CPS30)** are available in the size range 4½" to 20"; this sturdy non-weld device induces a spiral flow pattern in the slurry thereby increasing displacement efficiency. Fitted with specially designed multi-direction turbo fins made of alloy steel in annealed state this device improves the cleaning action of drilling fluids, distributes the cement slurry into wellbore irregularities and minimizes channeling.



Non Weld Bow Centralizer with Turbo Fins (CPS30)

**Cement Baskets** consists of flexible steel spring bow welded to slip-on collars. Bows are hardened and tempered for maximum strength and uniformity. It is run on casing or liners above weak or porous formations to provide protection from hydrostatic pressure generated by the cement column. Its overlapping metal fins provide flexibility and fluid passages while maintaining optimum support characteristics.



Cement Baskets

**Spiral Blade Solid Centralizers (CPS27)** was developed in response to the need for better cementing in highly deviated and horizontal wells. Spiral Blade Solid Centralizers are designed to provide optimum flow area. The 360 degrees overlapping solid vane provides maximum wall contact and fluid swirl. Reduced flow area between the spiral blades produces a vortex motion of the fluids for more fluid velocity with direction. Made of high strength corrosion resistant cast aluminum and also non-sparking zinc alloy.

The 30-degree slope of the vane end reduces drag and aids the casing in reaching TD. This gentle flow from the body to the height of the vane will eliminate scraping, gouging or digging into the formation and consequently reduce balling between the vanes. Spiral Blade Solid Centralizer has high impact and shock resistance combined with tensile and yield strength as well as resist corrosion.



Spiral Blade Aluminum / Zinc Alloy Solid Centralizers (CPS27)

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