

HYDRAULIC STAGE CEMENTING COLLAR

DESCRIPTION

A-SSC-H A-310 - Hydraulic Stage Cementing Collar

The SSC is used for carrying our stage cementing applications where the well design or pump capacities prevent cementing in a single stage.

It features two internal sleeves, that can be shifted Hydraulically, depending upon the plug configuration used, to open the cementing ports.

When the Flexible Indicating Plug lands on the landing / float collar, it pushes the 1st stage cement into the column, increasing the pressure causes the screws in the internal sleeve to shear and shifts the cementing ports open. Enabling the second-stage cement to pass though the ports into the annulus above the tool.

The closing plug when released, wipes the casing ID clean of cement before bumping on a closing seat connected to inner sleeve. Increased pressure shifts the closing seat downward, releasing locking lugs and closing the tool. A snap ring locks the sleeve in position, ensuring the stage tool remains locked.





FEATURES

- Field adjustable shear values
- Interchangeability between Hydraulic opening and Mechanical Opening.
- PDC Drillable
- Reduced drill out times.
- Robust Locking Mechanism
- The pressure-relief design prevents fluid trapping and compression between the opening device and the closing plug during the closing phase of the tool's operation.

APPLICATIONS

• Stage Cementing operations.

BENEFITS

- Adjustable shifting pressures.
- The system is PDC-drillable with anti-rotation features on the plugs, stage tool, and landing collar to
 prevent rotation during drill out, simplifying drill out and saving rig time and associated costs.
- Robust construction.



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DIMENSIONAL SPECIFICATIONS

Casing Size	Opening Pressure	Closing Pressure
inch	psi	psi
4-1/2	750 / screw (4200 max.)	1500
5-1/2	440 / screw (3520 max.)	1500
7	340 / screw (3400 max.)	1200
7-5/8	600 / screw (3600 (max.)	1200
8-5/8	700 / screw (4200 max.)	1000
9-5/8	600 / screw (3800 max.)	1200
13-3/8	500 / screw (3000 max.)	1000

Note: Other sizes available on request.

Available in sizes for their respective weight ranges with varying standard or exotic material based on compatibility with the well environment and application requirement. In addition, these are furnished with different end connections (Standard API BTC, LTC, STC or premium thread connections), to meet customer's requirements

Also available in mechanical stage collar and for slotted liner application configuration.