MDV Stage Cementing Collar
Mechanical Type (two stage)

MDV Stage Cementing Collar is used to effectively cement upper sections of the casing string after displacing cement around the lower section.

The Multiple Stage Cementing Collar provides a means of opening and closing port holes for cement displacement and positive containment of the cement after displacement. All internal parts are easily drilled, and are firmly held from rotating during drilling.

The port closing sleeve is positively locked in position after cementing.

After running the Collar to setting depth, the lower section is cemented in the conventional manner except the cement is displaced with the flexible cementing plug furnished with the collar. This is bumped against the shut-off Baffle.

A slight pressure build-up of 300-400 P.S.I. will assure plug is seated in Baffle.

The port holes in the Multiple Stage Cementing Collar are opened for doing the second stage by dropping the trip bomb and applying approximately 800-1000 P.S.I. pressure.

The second stage is displaced with the closing plug which is also furnished with the Tool. When the closing plug bumps approximately 800-1000 P.S.I. pressure will close the port holes.
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Applications & Features

- MDV Stage Cementing Collar can be made from material grades up to 135,000 psi minimum yield, including material suitable for sour gas service.

- Common steel grades i.e. J-55, K-55, L-80, P-110 form standard manufacturing steel grades, however other grades are available upon request.

- API & Premium connections are available upon request.

- No welds are used on any portion of the tool.

- The reduced length of the tool minimizes the effect of bending stresses.

- The seals providing internal and external pressure integrity are housed in the stage collar body and remain stationary throughout operation, minimizing chances of their being damaged.

- 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.

- The closing sleeve is held in the closed position by an internal lock ring.

- Both the opening and closing sleeves lock against rotation for easy drill-out.

- A minimum amount of aluminum and rubber are the only materials encountered during drill-out.
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Two-Stage Cementing with MDV Stage Cementing Collar using:

I. First-Stage Sealing Plug
II. Free-Fall Opening Device, and
III. Closing Plug

- Float shoe and Float collar along with the MDV Stage Cementing Collar, are installed in the casing string and the casing is run to bottom.

- Circulation is established and first-stage cement is mixed and pumped.

- The first-stage sealing plug is launched and cement is displaced. At the conclusion of displacement, the first-stage sealing plug lands and effects a seal against the Float collar. **No baffle is required!**

- The free-fall opening device is dropped and allowed to gravitate to position. Pressure is applied to the casing and the stage collar is opened.

- Circulation is established and second-stage cement is mixed and pumped.

- The closing plug is dropped and cement is displaced.

- At the conclusion of displacement, the closing plug lands and effects a seal in the stage collar. Pressure is applied to the casing and the stage collar is closed.
## MDV Stage Cementing Collar
### Mechanical Type (two stage)

### Specification Tables

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