

ReAct™ Clean Out Valve (RCOV)

The ReAct™ Clean Out Valve (RCOV) is a time delay based device, which is run as an integral part of the completion string where sand screens are utilised. Its function is for unloading mud and cleaning up of the wellbore.

Certain sections of some wellbores, particularly laterals, require many sections of sand screens to prevent the influx of sand into the completion. The great cost associated with this hardware and rig time for installation of the completion can be dramatically reduced by only completing a short section of the motherbore with screens. However, the success of this may be jeopardized due to mud and solids unloading through the screens and permanently plugging them off.

The RCOV presents very large open flow ports for unloading drilling mud, solids or LCM. Following a delay of up to 150 days and once the well flow is clean and stable, a ReAct™ electronic timer system actuates a mechanism which allows well pressure to flood an atmospheric chamber and provide a large closing force to shut off these flow ports. A chamber containing a tracer fluid is opened at this time which gives a surface indication that the tool has functioned.

In so doing, the clean well flow is now directed through the sand screens in the main bore for the remainder of the lifetime of the well.

The device is an integral part of the tubing string and features premium-threaded connections. The timer features two electronic units, which are totally independent of each other for full redundancy.

A manual over ride feature is provided within the RCOV. This can be actuated by wireline/coil tubing intervention. A prong will unlock the ported sleeve from the hydraulic piston assembly allowing the ported sleeve to be positioned manually to the closed position.

Features

- Accurate time delay mechanism.
- Independent back-up electronics.
- Mechanical override.
- Large flow areas.
- Available with tracer pocket for activation confirmation.
- Field proven electronics.
- Delayed closure for up to 150 days.

Benefits

- Increased clean up of well bore.
- Enhances well production.
- Minimises plugging of Sand Screens.
- Reduces length of Sand Screens required in completion.

Applications

- Deployed with Sand Screens.
- Clean up across multi-lateral junctions.

Technical Data

Tool Size	6.625"
End Connections	6-5/8" Premium
Material	80 ksi
OD	7.675" max
ID	3.50" min*
Length	92.00"
Flow Area Through ports	48 in ²
Tensile Rating	465,000 lbs
Working pressure Rating	6,000 psi
Temperature Rating	Up to 150°C (Contact Omega)
Time Delay	Programmable up to 150 days.
Actuating Force Per 1,000 psi	14,800 lbs

*Larger ID can be supplied upon request.
Other sizes and rating are available upon request.

