Wired Double-Acting Hydraulic Jar Intensifier Tools

Capable of tackling the harshest conditions, NOV's Wired Hydraulic Drilling Jar Intensifier tools are engineered to make efficient work of difficult terrain. The Wired Intensifier tool maximizes the efficiency of jarring by storing energy as over-pull is applied, and then releasing this energy when the wired jar fires. This energy, especially at shallow depths, can greatly exceed the energy generated by the stretch in the wired drill pipe, greatly increasing the jarring impact force.

By adding more weight between the Wired Jar and Wired Intensifier tool, greater impulse force is applied to the wired drill string. If the mass between the Wired Jar and Wired Intensifier is increased, the impact forces are decreased, and the impulse is increased and vice versa. The mass between the wired jar and wired intensifier should be at least three drill collars. The double-action feature increases the efficiency of the overall jarring operation.

The maximum force to extend the wired intensifier differs from the maximum force to compress, providing optimum efficiency in both directions.

Technical data			
Series	4523	4529	4538
OD	4.75 in.	6.5 in.	8 in.
ID	2.25 in.	2.75 in.	4.06 in.
Max recommended Hole diameter	7.875 in.	12.25 in.	17.5 in.
Tensile yield strength	540,000 lbf	820,000 lbf	1,250,000 lbf
Torsional yield strength	18,600 lb.ft	41,000 lb.ft	82,000 lb.ft
Stroke up/down	12/12 in.	12/12 in.	12/12 in.
Axial load to fully Extend(up)/Compress (down)	90,000lbf/ 75,000	180,000lbf/ 150,000lbf	300,000lbf/ 125,000lbf
Length	40 ft. 6 in.	41 ft.	42 ft. 3 in.
Weight	1,500 lbs	2,960 lbs	4,520 lbs
Pump open area	5.41 sqin.	11.04 sqin.	15.9 sqin.
Connection types	wXT38	GPDS50, wTT550, XT57	DC58, XT57, wTT585, wGPDS65

Features

- Hydrostatically balanced unit is not affected by hydrostatic pressure
- Wired Intensifier tool acts as a reflection point for the impact wave travelling through the wired drill string
- Fluid Spring provides a significantly higher force than conventional springs
- Unit springs in both directions
- 100% integrated into the IntelliServ broadband network
- Connectivity and real-time data transmission through the wired jar intensifier, supporting high-speed, bi-directional downhole data transmission to surface with up to 57,600 bits/sec.
- State of the art and last generation V2 coils & armored coaxial cable for high-speed data transmission

Benefits

- · Reduces the force dissipated by friction
- Pump open force is neutralized aiding the jarring process in both directions
- Reflection keeps the impact force below the intensifier, maximizing the impact at the stuck point, and protecting surface equipment
- Only the Collars move with the stroke of the jar