



Coiled-Tubing Dual-Acting Jar Intensifier

Weatherford's coiled-tubing (CT) dual-acting jar intensifier is designed to amplify the acceleration of the CT jar action. The CT dual-acting jar intensifier is a hydraulic fluid spring that stores energy when compression or tension is applied to the running string. When the CT jar strokes, the stored energy is released, accelerating the weight bar and jar to produce an impact.

The variable impact of the tool is controlled by the degree of load placed on the intensifier and jar. The comparatively large ID of the tool enables the use of drop balls for tool operation below the jar intensifier.

The jar placement program provides information required to avoid excessively high-impact loads to either the bottomhole assembly (BHA) or the fish. Used as a guide to optimize the BHA, the jar placement program configures the appropriate mass required above and below the CT jar and CT jar intensifier.

Applications

- CT and slimhole applications
- Fishing and retrieval
- Shifting sleeves and rupturing disks

Features, Advantages and Benefits

- The jar placement program optimizes the BHA configuration to achieve the desired impact and impulse of the CT jar, avoiding excessively high-impact loads and possible damage to the fishing BHA.
- The CT jar intensifier has a rugged design with sealed internal chambers that provide constant lubrication to internal parts for dependable operation and longer wear life.
- The CT jar intensifier is easy to operate; it closes and opens with minimum weight, while providing the operator ample time to vary the load for the appropriate impact.





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Features, Advantages and Benefits (Continued)

- The CT jar intensifier is relatively short in length, making it easier to rig up, which can negate the need to pressure-deploy.
- The large ID enables a greater selection of drop balls to pass through the tool; it also enables higher tensile-strength tools to be run below the jar intensifier and jar.

Specifications

OD size (in./mm)	1-11/16 42.86	2-1/8 53.98	2-7/8 73.03
ID size (in./mm)	9/16 14.29	3/4 19.05	1 25.40
Standard connection	1 AM M.T.	1-1/2 AM M.T.	2-3/8 AM PAC
Overall length, neutral (in./mm)	76 1,930	87 2,210	104 2,642
Total stroke (in./mm)	6 152.4	7 177.8	8 203.2
Approximate weight (lb/kg)	33 15.0	54 24.5	108 49.0
Maximum overpull (lb/kg)	10,000 4,536	18,000 8,165	32,000 14,515
Maximum overpush (lb/kg)	10,000 4,536	18,000 8,165	32,000 14,515
Maximum lift after jarring (lb/kg)*	50,000 22,680	95,000 43,091	105,000 47,627
Torsion yield (lbf/lb, N•m)	330 447	700 949	2,700 3,661
Testing pull load (lb/kg)	8 to 10,000 3.6 to 4,536	11 to 14,000 5.0 to 6,350	25 to 30,000 11.3 to 13,608
Testing push load (lb/kg)	6 to 8,000 2.7 to 3,629	7 to 10,000 3.2 to 4,536	16 to 20,000 7.3 to 9,072

*Strengths listed are calculated theoretical yield points and are accurate within 20%.