



Coiled-Tubing Dual-Acting Jar

Weatherford's coiled-tubing (CT) dual-acting jar is rugged and relatively short in length, with a simplicity of design for easy and dependable operation, even in hostile environments. No setting or adjustment is required before tripping in the hole or after engaging the fish.

The CT dual-acting jar enables the operator to control the intensity of the jarring impact by varying the applied load. The CT jar can deliver a wide range of blows, from low to very high, for both impact and impulse forces. The comparatively large ID of the tool enables the use of drop balls for tool operation below the jar.

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.

Easy to close or reset, large ports in the cone assembly open to allow unimpeded flow; only sufficient weight to overcome the friction is required to close the jar.

Weatherford's CT dual-acting jar provides upward or downward impacts to help overcome the lack of CT tensile strength. This jar uses the patented combination of proven principles of hydraulics and mechanics. It is designed to be used with Weatherford's CT dual-acting jar intensifier tool for maximized impact to the stuck point.

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 has a rugged design with sealed internal chambers that provide constant lubrication to internal parts for dependable operation and longer wear life.





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Features, Advantages and Benefits (Continued)

- The CT jar 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.
- The CT jar is relatively short in length even when run with the CT jar intensifier, 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.

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.	2a AM PAC
Overall length, closed (in./mm)	69 1,752.6	68 1,727.2	84 2,133.6
Total stroke (in./mm)	9 228.6	10 254.0	12 304.8
Approximate weight (lb/kg)	33 15.0	49 22	96 44
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	195,000 88,451
Torsion yield (lbf/lb, N•m)	330 447	700 949	2,700 3,661
Testing pull load (lb/kg)	8,000 3,629	16,000 7,257	30,000 13,608
Testing push load (lb/kg)	4,000 1,814	10,000 4,536	20,000 9,072
Pump open area (in. ² /mm ²)	0.69 445.16	1.22 787.10	2.40 1,548.38

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

