

TRIDENT[®] System

Provides a single-trip, casing-recovery solution

Applications

- Slot recovery
- Well abandonment

Features and Benefits

- Cement plug dressing or bridge plug setting (both mechanical and hydraulic) capability in one trip
- Anchored centralization delivers knife longevity for multiple cuts
- Designed to cut in tension and verify the cut by a simple pick-up operation
- Anchor will set in 9-5/8 in. and 10-3/4 in. without having to trip to surface when used in a tapered string
- Same chassis used for 9-5/8 in. to 13-3/8 in. casing** – standard procedures for all sizes

Tool Description

The Weatherford Trident system is a rotary- or motor-driven, single-trip casing recovery system that incorporates several innovative trip-saving features including an integral tension-set packer and a hydraulically activated anchor in conjunction with the ability to either run and set a bridge plug or dress a cement plug prior to commencing the cutting and recovery of the target casing.

The integral on-demand tension-set packer allows pressure testing of installed plugs prior to cutting, casing integrity diagnostics and annulus circulation post-cutting.

The anchor allows the operator to ensure the casing is free post-cutting and reposition to the hanger and recover casing to surface, eliminating additional trips and stripping operations. When used in subsea applications, the anchor eliminates the requirement for a marine swivel, providing agility and reducing rigtime.



The Weatherford Trident system incorporates innovative features such as an integral tension-set packer and hydraulically activated anchor for a single-trip casing recovery solution.



TRIDENT[®] System

Specifications

Operational Specifications	9-5/8 in. System		11-3/4 in. System	13-3/8 in. System*
Casing Size	9-5/8 in.	10-3/4 in.	11-3/4 in.	13-3/8 in.
Max Working Pressure	5,000 psi (345 Bar)			
Max Tension	1,000,000 lbs. (453.6 tonnes)			
TRIDENT System Internal Connections Made-Up Torque	32,000 lb-ft (43,386 Nm)			
Max RPM	110			
TRIDENT Cutter Activation Pressure	1,400 psi (96.5 Bar**)			
TRIDENT Anchors (Lockable Chamber) Activating Pressure	800 psi (55.2 Bar)			
TRIDENT Anchors (Standard) Activating Pressure	800 psi (55.2 Bar)			
TRIDENT Anchors (Standard) Unlocking Differential Pressure	1,700 psi (117.2 Bar)			
TRIDENT Packer Collet Disengagement Differential Pressure	1,200 psi (82.7 Bar)			
Max Cutting Tension (TRIDENT Anchor Only)	77,162 lbs. (35 tonnes)			
Max Cutting Tension (TRIDENT System)	66,138 lbs. (30 tonnes)			
TRIDENT Cutter Ball No.1	1.625 in. (41.28 mm)			
TRIDENT Anchor Ball No.2	1.727 in. (43.86 mm)			
TRIDENT Anchor Ball No.4	1.807 in. (45.89 mm)			
TRIDENT Anchor Ball No.4	1.887 in. (47.93 mm)			
Packer Rating	3,000 psi (207 Bar)		2,000 psi (138 Bar)	
Temperature Rating	302°F (150°C)			

*13-3/8-in. systems can be configured for 16-in. casing applications.

**Cutting arms will not start to move before the conversion process.



TRIDENT[®] System

Specifications (continued)

General Specifications	9-5/8 in.				11-3/4 in.	13-3/8 in.	
Chassis	Common						
Casing Size	9-5/8 in.	10-3/4 in.			11-3/4 in.	13-3/8 in.	
Anchor Casing Range	53.5# to 60.7#				47.0# to 77.2#	68.0# to 72.0#	
Packer Range	53.5#	47.0#	85.3#	65.7#	60.7#	77.2#	68.0#
System Max OD	8.495 in. (215.77 mm)	8.995 in. (228.47 mm)	9.399 in. (238.73 mm)		10.345 in. (262.76 mm)	12.191 in. (209.65 mm)	
System Total Length	355.1 in. (9,019 mm)						
System Max Dry Weight	4,039 lbs. (1,832 kg)	4,167 lbs. (1,890 kg)	4,265 lbs. (1,935 kg)	4,599 lbs. (2,086 kg)	4,938 lbs. (2,240 kg)		
System Top Connection	NC50 Box						
System Bottom Connection (Cutter)	BOX 4-1/2 REG		BOX 6-5/8 REG				
Cutter Arms Max Range	10.24 in. (260 mm) 10.118 in. (257 mm)**	11.50 in. (294 mm) 11.36 in. (288.6 mm)**			12.16 in. (309 mm) 11.92 in. (302.7 mm)**	14.1 in. (358 mm) 13.82 in. (351 mm)**	
Cutter Max OD	8.495 in. (215.77 mm)	8.495 in. (215.77 mm)	8.495 in. (215.77 mm) 9.399 in. (238.73 mm)*		10.345 in. (262.76 mm)	12.191 in. (309.65 mm)	
Anchor Max OD	8.495 in. (215.77 mm)	8.495 in. (215.77 mm)	8.495 in. (215.77 mm) 9.399 in. (238.73 mm)*		10.345 in. (262.76 mm)	12.191 in. (309.65 mm)	
Anchor Tool (X-Over) Dry Weight	1,323 lbs. (600 kg)	1,323 lbs. (600 kg)	1,323 lbs. (600 kg) 1,367 lbs. (620 kg)*		1,521 lbs. (690 kg)	1,649 lbs. (748 kg)	
Anchor Bottom Connection (X-Over)	PIN 6-5/8 REG or PIN NC50						
Anchor Tool Total Length (X-Over)	MAX 122.7 in. (3,116 mm)						
Packer Max OD	8.495 in. (215.77 mm)	8.995 in. (228.47 mm)	9.399 in. (238.73 mm)		10.345 in. (262.76 mm)	12.191 in. (309.65 mm)	
Packer Tool Dry Weight	1,940 lbs. (880 kg)	1,948 lbs. (884 kg)	1,995 lbs. (905 kg)		2,130 lbs. (966 kg)	2,297 lbs. (1,042 kg)	
Packer Tool Total Length	160.8 in. (4,085 mm)						
Packer Bottom Connection	NC50 PIN						

*For special request available 9-5/8 in. (only) and 10-3/4 in. (only) version of the tools with additional features can be supplied.

**Commence of the pressure drop.

