



Super Cutters (1.1D) for 2.375-in and 2.875-in Tubing

MAN-REC-ASC (R02)

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Super Cutters (1.1D)
for 2.375-in and 2.875-in Tubing





Overview

Description

Super Cutters are designed for use in pipe recovery operations as a final solution. The cutter is undersized to get through tight restrictions where a conventional cutter is not an option or has not been effective.

Operation

Super Cutters should be used when restrictions prohibit the use of conventional tubing cutters. The cutter with the largest possible diameter capable of running in the well should be chosen to achieve maximum performance. A gauge run is recommended prior to running the tool to insure the cutter can get to proper depth. This will prevent any safety concerns like sticking a live cutter in the well or spudding with explosive tools. Super Cutters are designed to be shot in the tubular above the stuck point, but not in the collar. To maintain the maximum allowable performance from the cutter, it should be centralized. A de-centralized cutter may result in a partial cut and/or damage to the casing. It is also recommended that tension be applied to the tubing prior to detonation of the Tubing Cutter to assist in the removal of stuck tubulars.

Super Cutters utilize explosive technology and are designed to explosively sever tubular members when initiated by an Owen's Resistorized Bridge™ Detonator. Owen's electrical detonators adhere to API RP-67 specifications. All safety rules and regulations should be strictly followed when storing, handling, assembling, and using these cutters and/or detonators. Safety precautions should be taken in accordance with your company's safety policies, governmental regulations, and the American Petroleum Institute Recommended Practice 67 (API RP-67).

Super Cutters come standard with HMX explosive powder rated to 400° F (204° C) for 1 hour. Cutters are also available with HNS [500° F (260° C) - 1 hour] by special order.

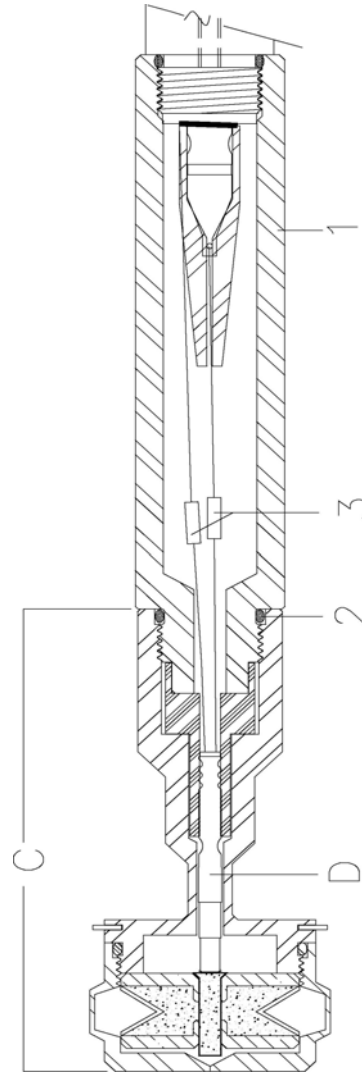
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Specifications and Schematics

1	Steel Extension Adapter	CUT-0100-087
	Aluminum Extension Adapter	CUT-0100-079
2	O-ring, Size -214	OOO-V569-214
3	Splice Boot	PUR-0210-001
D	Tubing Cutter Detonator	DET-3050-009L
C	1.437" Super Cutter	CUT-1437-405
	1.580" Super Cutter	CUT-1580-405
	1.687" Super Cutter	CUT-1687-405
	1.812" Super Cutter	CUT-1812-405
	1.875" Super Cutter	CUT-1875-405
	2.000" Super Cutter	CUT-2000-405
	2.125" Super Cutter	CUT-2125-405

- Items 1-3 and detonator must be ordered separately from cutter assembly.
- HNS Cutters are available by special order. Parts should be ordered by replacing the 405 with a 505, for example CUT-XXXX-505.
- Alternate arming assembly available using JRC style extension adapter with button contacts, CUT-0100-078, and detonator with spring contacts, DET-3050-009E.



Outer Dia. [in (mm)]	Temp [F (C)]	Pressure [psi (MPa)]	Explosive Weight [lb (kg) (g)]	Recommended Application	Part Number
1.437 (36.5)	400 (204)	8,000 (55.1)	.093 (.042) (42)	2 3/8", 4.7#	CUT-1437-405
1.580 (40.1)	400 (204)	15,000 (103.4)	.097 (.044) (44)	2 3/8", 4.7#	CUT-1580-405
1.687(42.9)	400 (204)	15,000 (103.4)	.110 (.050) (50)	2 7/8", 6.5#	CUT-1687-405
1.812 (46.0)	400 (204)	15,000 (103.4)	.110 (.050) (50)	2 7/8", 6.5#	CUT-1812-405
1.875 (47.6)	400 (204)	15,000 (103.4)	.110 (.050) (50)	2 7/8", 6.5#	CUT-1875-405
2.000 (50.8)	400 (204)	17,000 (117.2)	.150 (.068) (68)	2 7/8", 6.5#	CUT-2000-405
2.125 (54.0)	400 (204)	17,000 (117.2)	.150 (.068) (68)	2 7/8", 6.5#	CUT-2125-405

1.0 Arming Super Tubing Cutters



Warning: Only use DET-3050-009L!



Warning: Always follow API RP - 67 guidelines when arming electrical detonators!

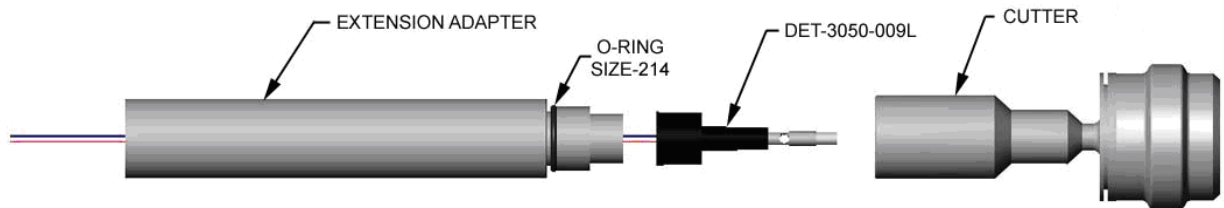


Figure 1: Arming Method for NT Super Tubing Cutters - Exploded View

- 1.1 Remove the detonator from its package.
- 1.2 Insert the detonator into a safety shield.
- 1.3 Measure the resistance of the detonator between the two lead wires with a blaster's multimeter. The detonator should read 51 Ohms \pm 5 Ohms.
- 1.4 Visually inspect the O-ring for cuts or cracks. Lightly lubricate the O-ring with grease.
- 1.5 Insert the detonator leadwires through the hole in the adapter.
- 1.6 Electrically connect the detonator leadwires to the wireline or toolstring.
- 1.7 Mechanically connect the Extension Adapter to the wireline toolstring.
- 1.8 Insure the wireline is shunted through the shooting panel.
- 1.9 Remove the detonator from the safety shield and install the booted portion of the detonator over the end of the Extension Adapter.

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1.10 Insert the detonator into the Cutter Mandrel and thread the Cutter onto the Extension Adapter and toolstring.

1.11 The tool is armed and ready to run in hole.