



Technical Bulletin

Engineering Department

Owen Oil Tools Division

Subject: **1.687" ACE Tubing Cutter Commercial Release**

From: **Jeff Wood**

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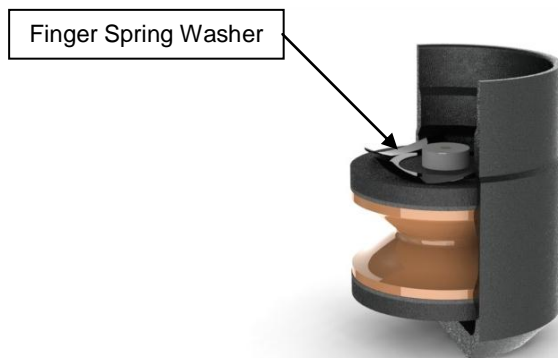
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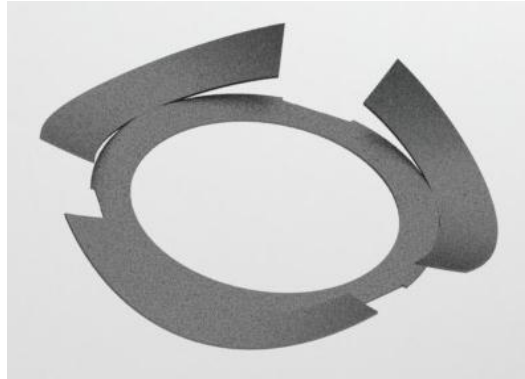
Owen Oil Tools is proud to announce the release of the new 1.687" ACE (Advanced Cutting Energetics) Tubing Cutter. This single new tubing cutter will be more cost effective and reduce inventory by replacing three tubing cutters that Owen currently offers - the existing CUT-1687-402, CUT-1750-402, and CUT-1812-402. The new part number will be CUT-1687-409 and it is recommended to cut 2.375" 4.7# - 5.95# tubing ranging from J-55 up to Q-125 as well as up to 22Cr-110. The HMX version is the only explosive type available at this time. This allows the jet cutter to function properly up to a temperature of 400F for one hour and up to 15,000 psi.

The 1.687" is the first of the new ACE Tubing Cutter product line. Several improvements have been made to assure this jet cutter will perform better and with a higher reliability than its predecessor.

- The initiation system has been revised to create a more focused initiation about the critical apex plane which is most directly responsible for performance.
- The cup has been given a unique interior profile aimed at reducing jet interference from explosive gases during detonation.
- The liner design takes direct HERO technology from Owens' shaped charges in order to increase performance with limited downhole resources.



Cutaway of 1.687" ACE Tubing Cutter



Finger Spring Washer

All of these unique features are patent-pending and will help future entries into this product line maintain a distinct level of performance and reliability.

Customers are advised to run a minimum of two separate bowspring centralizers, AES-AS60066, as a part of the toolstring when running this tubing cutter. The first should be as close to the tubing cutter as possible while the second should be as close to the CCL as possible. One difference with this new tubing cutter is the lack of any inherent centralizer that ships along with the assembly. Even though this cutter was tested eccentrically, the **customer should always run a jet cutter CENTRALIZED for best results.**

Another difference that you will see in this new tubing cutter is a finger spring washer placed on top of the explosive load as shown below. This finger spring washer is not secured by any type of adhesive and is free to move around. It must be installed when the system is assembled after electronic arming. There is no way to install it upside down.

If anyone has any questions regarding this new tubing cutter, please feel free to contact me.

Regards,

Jeff Wood
Design Engineer