

# DARC

## Downhole Autonomous Reciprocating Cutter

### Battery Powered, Electromechanical Pipe and Tubing Cutter

#### Applications

- ◆ Drill Pipe and Heavyweight Cutting for Pipe Recovery
- ◆ Tubing Cutting for Intervention and Abandonment
- ◆ Packer Release Cutting
- ◆ Internal Profile Milling

#### Features

- ◆ Memory Mode for Slickline Conveyance
- ◆ Surface Initiation Mode (with Feedback) for E-line and Digital Slickline Conveyance
- ◆ Alkaline Battery Pack
- ◆ Patented 3-Axis Cutting Technique
- ◆ Built in Safety Features for Retrieval Assurance
- ◆ Cuts:
  - in Tension or Compression
  - from 2 7/8" to 5 1/2"
  - Chrome & Exotic Materials

#### Benefits

- ◆ No Explosives or Dangerous Goods
- ◆ No Additional Surface Equipment Required
- ◆ Large Cutting Range for Through Tubing Applications
- ◆ CNC Quality Finish

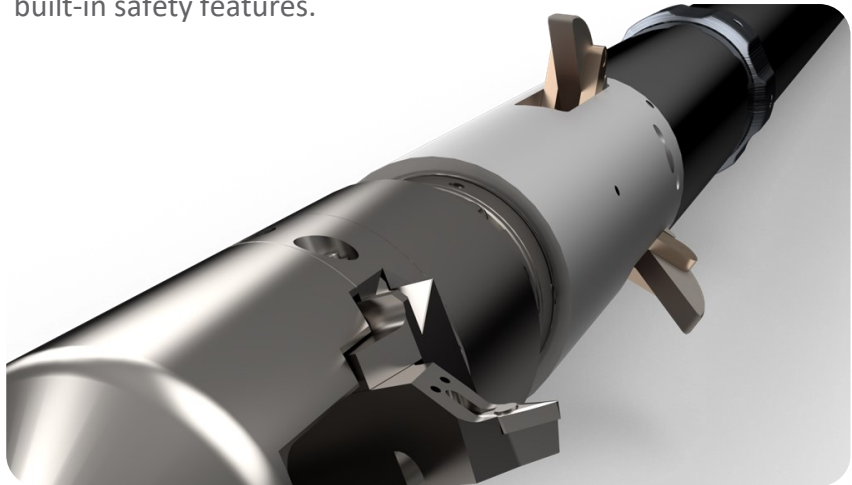


**ARKANE  
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#### Battery Powered Cutting

The DARC offers an innovative, patented solution for cutting downhole tubing or drill pipe regardless of conveyance method. It is a safer alternative to explosive pipe cutting and does not require the specialised surface equipment associated with E-line mechanical pipe cutters. Additionally, the DARC offers industry leading cutting depth, intelligent control and built-in safety features.



#### Conveyance and Activation

The DARC has a cutting solution to suit operations on Slickline, Digital Slickline or E-line. For conveyance methods with surface control, the tool can be set up to receive an activation command and provide feedback on cutting progress. For mechanical conveyance, like slickline, there is a proven programmable timer activation. With both options, a full log of the cut, including final cut OD can be generated.



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### Battery Powered, Electromechanical Pipe and Tubing Cutter

#### Battery Module

- ◆ Top connection:
  - Slickline: 15/16" (Sucker Rod)
  - E-line: 1 3/16" (Go)
- ◆ On-Board activation module with real time feedback (not utilised in timer cut mode).
- ◆ Field replaceable alkaline battery.
- ◆ High temperature lithium battery option planned 2024.
- ◆ E-line power supply option planned 2024.

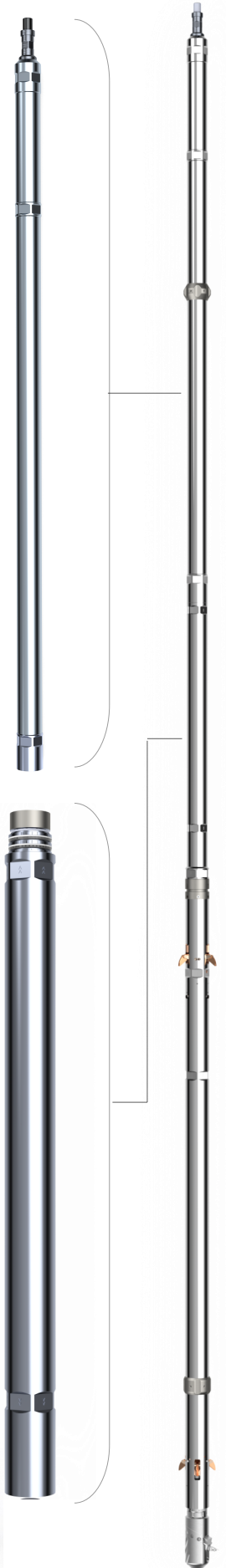
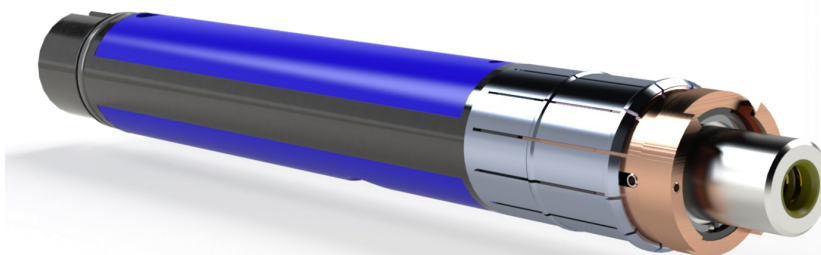
| Specifications:       |          |           |
|-----------------------|----------|-----------|
| <b>Tool OD</b>        | 63.5 mm  | 2.5"      |
| <b>Make Up Length</b> | 1.69 m   | 5.54 ft   |
| <b>Max. Pressure</b>  | 1034 bar | 15000 psi |
| <b>Max. Temp</b>      | 130 °C   | 266 °F    |



#### Electronics Module

- ◆ Contains removeable control module (shown below).
- ◆ Autonomous tool function is programmed by connecting control module to computer USB connection.
- ◆ After run, data is downloaded from control module and reviewed using Arkane Software to ensure successful cut.

| Specifications:       |          |           |
|-----------------------|----------|-----------|
| <b>Tool OD</b>        | 63.5 mm  | 2.5"      |
| <b>Make Up Length</b> | 0.88m    | 2.89 ft   |
| <b>Max. Pressure</b>  | 1034 bar | 15000 psi |
| <b>Max. Temp</b>      | 150 °C   | 302 °F    |



# DARC

## Downhole Autonomous Reciprocating Cutter

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### Cutter Module

- ◆ Upper and lower anchors centralise tool.
- ◆ Anchor extension range from 2 7/8" to 5".
- ◆ Configurable anchor emergency retract system to ensure safe retrieval.
- ◆ Sealed system requiring minimal maintenance between runs.
- ◆ Patented 3 axis cutting technique creates V-shaped cut in pipe wall.
- ◆ V-shaped cut allows pipe cuts in tension or compression
- ◆ Cutting Range from 2 7/8" to 5 1/2" with a maximum wall thickness of 1".
- ◆ Configurable cutting arm emergency retract system to aid retrieval.
- ◆ Field replaceable cutting tip.

| Specifications:       |          |           |
|-----------------------|----------|-----------|
| <b>Tool OD</b>        | 73 mm    | 2.875"    |
| <b>Make Up Length</b> | 2.10 m   | 6.87 ft   |
| <b>Max. Pressure</b>  | 1034 bar | 15000 psi |
| <b>Max. Temp</b>      | 130 °C   | 266 °F    |

