

### Tubing Cutter

Industry standard tubing cutters can be run using the Expro slickline trigger to cut tubing or casing as required, without the need for radio silence. Another application is the standard e-line operation with surface DC power for activation.

The tool mechanism consists of three main components: electronic trigger, surface safety switches and explosives tubing cutter.

#### Electronic Trigger

The electronics package controls the output from a battery pack. This initiates the detonator, only when all safety barriers are overcome, and downhole parameters are such that they satisfy the pre-programmed firing sequence.

#### Surface Safety Switches

Individual mechanical pressure and temperature switches form short circuits across the detonator to ensure surface safety. Well pressure and temperature 'open' the switches at a pre-determined depth and 'close' them on retrieval. These switches ensure that the device cannot fire on or near surface.

#### Explosive Tubing Cutter

Industry standard explosives are used which are designed to sever tubing or casing, depending on requirements. The explosives are focused into a 360° jet which is initiated by industry standard detonators. The explosive jet severs the pipe immediately adjacent to the cutter head.

#### Applications

- Severing tubing strings
- Tail pipe removal
- Tubing recovery
- Well abandonment
- Workover

#### Benefits

- Counts up after detonation to confirm firing time
- Records maximum pressure and temperature
- Can cut tubing which is not in tension
- Off line preparation for workover
- Radio safe accredited
- No requirement for a drilling rig to make the cut and the operation can be performed on a wireline deck
- No e-line required
- Reduced personnel

