

# Bridge Plug

Bridge plugs enable the lower wellbore to be permanently sealed from production or temporarily isolated. Any permanent, retrievable or high expansion bridge plug can be run on a standard pyrotechnic setting tool set using the Expro slickline trigger without the need for radio silence. Another application is the standard e-line operation with surface DC power for activation.

The tool consists of three main components: electronic trigger, surface safety switches and pyrotechnic setting tool and plug.

## **Electronic Trigger**

The electronics package controls the output from a battery pack. This initiates the pyrotechnic igniter, 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 predetermined depth and 'close' them on retrieval. These switches ensure that the device cannot fire on or near surface.

## **Explosive Set Plug and Setting Tool**

Industry standard pyrotechnics, setting tools and plugs can be initiated by the Expro slickline trigger. A slickline dummy rope socket can be used to allow for fishing of stuck assemblies. A full range of setting tools are available to suit a wide range of plugs and packers.

Expro can dramatically increase the efficiency and safety of your well abandonment strategy.



#### Applications

- Setting of bridge plugs, retainers and packers
- Zonal isolation, water shut off, abandonment or major plug-in work
- Well barrier during well maintenance and workovers

#### Benefits

- Saves time using an innovative approach which is tried and tested
- No specialist retrieval tools requires
- Provides increased debris tolerance
- Cost reduction and increased efficiency in multi-zone isolation
- Records maximum pressure and temperature
- Uses industry standard tools and pyrotechnics
- No e-line rig up required
- Ideal for rigless applications