

Drill and Drop Plug



Product Description:

The Drill & Drop Inflatable Plug is a sacrificial bridge plug designed to serve as a stable and reliable false bottom for cement plugs in boreholes. The system is deployed using standard drill rods and inflated from the surface to create a secure bridge plug. It features an integrated check valve that maintains inflation pressure after the rods are disconnected. A key element of the design is the external frangible deflation line. During the cement clean-out process, a standard drill bit shears this deflation line, which causes the packer to instantly deflate and drop. This mechanism allows for easy deflation as part of the cement milling operation and doesn't require any specialised fishing tools.

Applications:

- ◆ **Cementing and Grouting:** Acts as a reliable platform for setting cement plugs or grout in various borehole environments
- ◆ **Void Sealing:** Used to isolate and seal off underground cavities or fractures
- ◆ **Water Ingress Control:** Effective for managing and stopping water flow within a drill hole by grouting the production zones
- ◆ **Wall Stabilisation:** Provides structural support to stabilise borehole walls during geotechnical or mining operations
- ◆ **Drilling into Mine Gallery:** Ideal for holes drilled into underground mine galleries; once the packer drops, it can be retrieved from the gallery and reused if in good condition.

Benefits:

- ◆ **Milling-Free Removal:** Eliminates the need for expensive and time-consuming milling operations, as the unit is designed to deflate and drop after the inflation line is sheared
- ◆ **Reliable False Bottom:** Provides a secure, stable base for successful secondary grouting or stabilisation tasks
- ◆ **Operational Efficiency:** Significantly reduces rig time by streamlining the deployment and removal process
- ◆ **Simplified Logistics:** Does not require complex retrieval equipment or specialised fishing tools to clear the borehole
- ◆ **Ease of Removal:** The passive deflation mechanism ensures the tool can be cleared from the hole using standard drilling equipment

