Bridge Plugs

Reliable mechanical isolation for zonal control and well integrity operations.

Primary Function	*Permanent or Temporary zonal isolation*
Deployment	*Set inside casing or liner at planned depth*
Operating Mechanism	*Mechanical or Hydraulic setting system with elastomer and/or metal sealing elements*
Outcomes	*Secure pressure barrier for cementing, testing or abandonment operations*

Operating Principles:

Bridge plugs are deployed and set inside casing or open hole to create a positive pressure barrier that isolates sections of the wellbore.

- Once positioned, the plug is set using a mechanical or hydraulic mechanism.
- Sealing elements expand radially to engage the casing/bore ID.
- Slips or anchoring systems provide axial load resistance.
- The plug maintains isolation across differential pressure from above and/or below.

Technical Highlights:

- **High-pressure integrity:** Designed to withstand substantial differential pressures across the barrier.
- **Positive anchoring:** Slip systems resist axial movement during cementing or pressure testing.
- **Versatile setting options:** Mechanical or hydraulic setting to suit well conditions and operational preference.
- **Drillable designs available:** Enables efficient removal when permanent isolation is not required.

Typical Applications:

- Plug and abandonment (P&A) operations
- Section isolation prior to cement placement
- Pressure testing and well integrity verification
- Temporary isolation during remedial work
- Zonal isolation in multi-section well designs

Design & Configurations:

- Casing size & weight
- Plug OD
- Required Pressure rating and temperature
- Barrier duration (temporary or permanent)
- Desired setting mechanism (mechanical or hydraulic)
- Requirement for drill-out or retrieval

Operational Value

Bridge plugs provide a **robust and proven isolation solution**, offering predictable sealing performance where long-term or high integrity zonal isolation is required