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Dissolvable Frac Plugs

Temporary zonal isolation without the need for mill-out operations.

Primary Function	*Temporary zonal isolation during multi-stage operations*
Deployment	*Set inside casing as part of a staged fracking programme*
Operating Mechanism	*Mechanical setting with time-controlled material dissolution.*
Outcomes	*Reliable isolation during operations*

Operating Principles:

Dissolvable frac plugs isolate individual stages during stimulation, then degrade predictably over time, eliminating the need for post-frac milling.

- Plug is set mechanically to isolate the target zone.
- During stimulation, the plug withstands designed pressure and temperature loads.
- After operations, the plug body dissolves when exposed to well fluids.
- Dissolution restores full-bore access to the wellbore.

Dissolution **timing is engineered based** on material selection, fluid chemistry, and temperature.

Technical Highlights:

- **No mill-out required:** Reduces rig time, intervention cost, and operational risk.
- **Predictable dissolution behaviour:** Engineered to maintain integrity during stimulation, then degrade as planned.
- **High internal diameter:** Shorter plug length and larger ID improve post-dissolution flow efficiency.
- **Mechanical setting reliability:** Proven setting mechanisms similar to conventional frac plugs.
- **Reduced well intervention footprint:** Fewer trips and lower exposure to stuck-pipe risk.

Typical Applications:

- Multi-stage hydraulic fracturing
- Extended-reach and horizontal wells
- Operations where post-frac intervention time is critical
- Wells with high stage counts
- Projects targeting reduced completion cycle time

Design & Configurations:

- Casing size & weight
- Bottomhole temperature profile
- Well fluid chemistry (brine composition, salinity)
- Required pressure rating during stimulation
- Target dissolution window

Operational Value

Dissolvable frac plugs deliver **effective stage isolation without the time and cost penalties of mill-out**, supporting faster completions and cleaner wellbore access after stimulation.