



IntegraGuard™ Star

CEMENT SPACER SYSTEMS

APPLICATIONS

- Well circulating temperatures up to 325°F (163°C)
- Primary and remedial cementing operations
- Vertical, deviated and horizontal wells
- High-permeability, unconsolidated and fractured formation

FEATURES & BENEFITS

- Viscosity can be varied to optimize rheological hierarchy
- Effective mud removal and displacement efficiencies
- Cures or reduces cement lost circulation
- Reduces fluid filtrate losses and potential damage of the formation
- Improved mud/spacer and spacer/ cement compatibilities
- Can be batch mixed or dry blended and mixed on the fly
- Poses little or no risk to the environment (PLONAR)

OVERVIEW

IntegraGuard Star cement spacer system is a unique, well-proven solution for eliminating cement losses associated with cementing operations.

Cement losses, either during cementing or as fallback after cement placement, can cause expensive remedial work. Curing losses ensures planned cement tops and can save excess cement slurry costs and even eliminate the need for intermediate casing strings.

IntegraGuard Star uses advanced fluid and particulate technologies that create a barrier at the formation face, effectively strengthening the wellbore, minimizing fluid invasion and sealing fluid loss paths.

In extreme situations, additional sealant, IntegraGuard Star Plus, can be added to enhance the system sealing capability.

The lost circulation capability is provided without compromising the primary function of a spacer, effective mud removal and cement placement. The IntegraGuard Star spacer system provides temperature stability, fluid compatibility and the capability to design specific density and viscosity expected from a premium cement spacer. This system can also be used in stand-alone lost circulation situations.

TYPICAL PROPERTIES

TYPICAL DENSITY RANGE	8.5 to 18.0 ppg (1019 to 2157 kg/m ³)
TYPICAL TEMPERATURE RANGE	Up to 325°F (163°C) BHCT