SwellPlug LCM

TECH SPEC SHEET

OVERVIEW

Weak or fractured formations can result in fluid losses. TAQA has developed SwellPlug LCM a cost effective and low complexity solution designed to isolate formation damage and mitigate extremely high-loss zones. This enables zonal shutoff with a single, simple treatment.

SwellPlug LCM utilizes TAQA's patented, field-proven swelling elastomer technology, combined with activated fiber, to deliver a high-pressure seal.

HOW IT WORKS

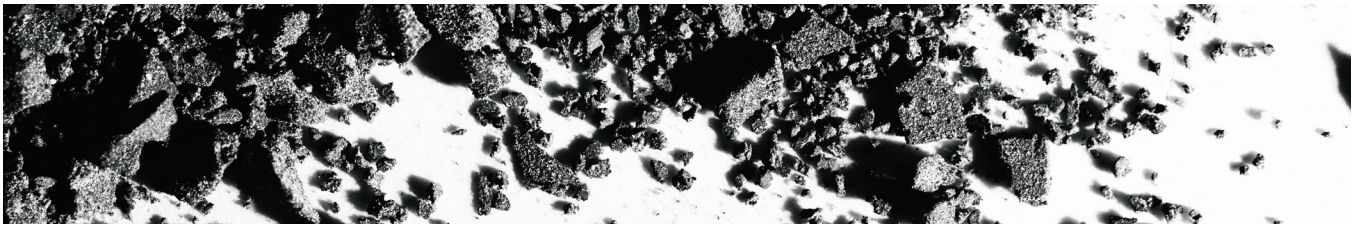
SwellPlug LCM integrates super absorbent elastomers with an osmotic swelling mechanism. The swellable elastomeric rubber and activated fibers work together to form a high-integrity sealing matrix. Upon contact with drilling fluid, SwellPlug particles expand and interlock, creating a three-dimensional network that conforms to fractures and voids. This results in a robust, reliable barrier capable of withstanding differential pressures up to 10,000 psi and enduring repeated pressure cycling over the long term.

APPLICATIONS & FLEXIBILITY

SwellPlug particulates are batch-mixed at surface and pumped downhole using standard cementing or mixing equipment. The design and volume of the particulate material are tailored to the specific size of the void space within the target zone.

Its simplicity and versatility make SwellPlug LCM suitable for a wide range of isolation challenges, including:

- **WATER CONTROL**
- **SUSTAINED ANNULAR PRESSURE**
- **CEMENTING AND CASING INTEGRITY SOLUTIONS**
- **FLUID LOSS CONTROL IN EXTREME DOWNHOLE ENVIRONMENTS**



FEATURES AND BENEFITS

- **PROPRIETARY** - osmatic swell mechanism
- **RESISTANT** - with chemical and temperature
- **CAPABLE** - of withstanding > 10,000psi differential pressure
- **OPERATIONAL** - up to 250°C (482°F)
- **400%** - up to 400% increase in size (multiple size options/blends)