Best practices based on field-proven solutions—combined with proprietary design software

The Baker Hughes, a GE Company (BHGE), Set for Life™ family of cement slurry systems ensures that each design isolates and protects the target zone for the life of your well. Best practices based on field-proven solutions—combined with proprietary design software—create a lifelong hydraulic seal between the well and the formation, even under challenging and variable conditions.

Set for Life cementing systems
Ensure zonal isolation for the life of your well
Bond the first time

Choose the right cementing system from a family of reliable and versatile products

For a lifetime of protection, the Set for Life family of integrated cement slurry formulations includes the following systems:

DeepSet cementing system
The DeepSet™ cementing system is used to control shallow water and gas flow in deepwater drilling environments. This system provides early compressive strength development at low temperatures with initial compressive strength that is set to the primary completion cement and the base cement for foamed lightweight cement.

DuraSet cementing system
Our DuraSet™ cementing system is specifically designed to provide improved tensile-strength and elastic properties while exhibiting enhanced mechanical properties. This system works in wellbores that are exposed to intense hydrostatics and thermal cycles, reducing the risks of wellbore deformation.

LiteSet lightweight cementing system
The LiteSet™ lightweight cementing system uses colloidal silica foaming base to achieve a lightweight density to produce a high-strength cement system that attains exceptional compressive strength with low-shrinkage density starters, providing high-effective performance in low fracture gradient environments and high-injected stress conditions.

PermaSet slurries
Our PermaSet slurries are fit for purpose, continuous compaction-activated cementing system designed primarily for CO₂ and hydrogen sulfide (H₂S)-containing environments. They exhibit cement longevity, and can provide excellent fluid control with resistance to corrosion and withstanding corrosive invasions.

XtremeSet cementing systems
The XtremeSet™ family of cementing systems includes slurries that can be formulated to accommodate a wide range of HP/HT well conditions. They achieve enhanced compressive strength as well as exceptional integrity in variable temperatures as high as 600°F (316°C) and pressures up to 40,000 psi (275.8 MPa).

FoamSet foam cementing system
Our FoamSet™ foam cementing system uses nitrogen or air to foam base to achieve lightweight density and ensures proper fluid control integrity, providing highэффективное performance in low fracture gradient environments and high-injected stress conditions.

EnsueSet cementing system
The EnsueSet™ cementing system provides a lightweight cement solution and minimal transition time. It also serves as the base cement for foamed lightweight cement.

Deepwater cementing system
Our Deepwater cementing systems can be fitted into the DuraSet™ lightweight cementing system to control shallow-water and gas flow in deepwater wells; and withstand CO₂ environments.

EcoSet cementing systems
Our EcoSet cementing systems are fit-for-purpose, environmentally sensitive cementing systems that provide enhanced mechanical properties.

XtremeSet cementing systems
Our XtremeSet slurries are fit for purpose, continuous compaction-activated cementing system designed primarily for CO₂ and hydrogen sulfide (H₂S) environments. They exhibit cement longevity, and can provide excellent fluid control with resistance to corrosion and withstanding corrosive invasions.

Bond the first time

Even in demanding and usted well conditions, BHGE’s Set for Life systems bond the first time, avoiding the expense and risks of remedial operations. And the systems continue to isolate and protect, reducing well maintenance cost while building economic improvements into every application.

Our cement slurry systems offer critical strength and durability in extreme-temperature, low-density, complex-chemical, high-stress, and ecologically-sensitive environments; combat shallow-water and gas flow in deepwater wells; and withstand CO₂ and other corrosive environments.

You can count on this superior approach in high-pressure/high-temperature (HP/HT) wellbores; in low-density, low-pressure weak formations. Because these conditions are somewhat self-correcting, we design each job for easy blending to produce the optimal cement slurry. Each base system can be individually applied or precisely adjusted, and can be combined for outstanding results, regardless of the specific wellbore condition.

Zonal is a key requirement for responsible oil and gas production. Our cementing best practices improve the performance of this primary protection barrier.

By custom blending each system for a specific well condition, we ensure optimal performance

Understand and predict performance throughout the life of the well

Accurate modeling is a critical component of our Set for Life systems. By applying several advanced tools, our experts can understand and predict how a cementing system will perform throughout the life of the well. The Set for Life process lets us:

Determine the best cementing system for your well
Baker Hughes’ IsoVision™ software analyzes long-term stresses on the cement deploy, forecasting the most appropriate slurry formulations. and assesses the cement's compressive and tensile behavior due to changes in wellbore and reservoir temperatures and pressures.

Understand downhole dynamics to optimize your approach
Our Baker Hughes IsoVision™ interactive cementing simulation software predicts optimal pump rates, rheological properties, centralized placement, and fluid displacement efficiency to improve success at your primary cementing job.

Plan your cementing operation with confidence
BHGE’s WellEye™ modeling software accurately predicts downhole temperatures, leading to more reliable slurry designs.

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Perform at the wellsite—from design to reality
Every Set for Life application starts with adherence to proven cementing best practices, from engineered spacer and centralization applications to pumping programs. State-of-the-art blending, mixing, measuring, and pumping equipment are essential to the performance of our cementing systems. Our pressure pumping service professionals employ these best practices, along with industry-leading mechanical and instrumentation technology, to provide reliable and consistent performance at your wellsite.