



1,000 ft  
2,000 ft  
3,000 ft  
4,000 ft  
5,000 ft  
6,000 ft  
7,000 ft  
8,000 ft  
9,000 ft  
10,000 ft

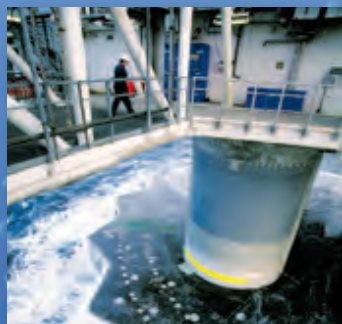


## Deepwater Cementing Technology

Ensuring zonal isolation and casing integrity

# Schlumberger has the most field-proven portfolio of cementing technologies in the industry.

## Deepwater Cementing Technology



[www.slb.com/cementing](http://www.slb.com/cementing)

Engineered, high-performance well integrity solutions from Schlumberger can help you overcome your deepwater challenges. Our cementing software and technologies

- mitigate shallow water flow hazards
- improve job success rate
- continuously ensure foam quality during foam job execution
- ensure long-term zonal isolation
- actively preserve casing integrity
- extend well life
- fill channels previously too small to repair
- reduce costly remediation
- resist high temperature, high pressure, and corrosion.

In every environment, our innovative cementing technologies help you cement right the first time, proactively identify problems, and protect your investment. This results in higher production, fewer workovers, and ultimately, more cost savings throughout the life of the well.

### DEEPWATER CEMENTING SOFTWARE

- **FoamAdvisor\*** simulation software  
Predict foam quality during and after placement—and predict equivalent circulating density (ECD)—by taking fluid compressibility into account.
- **CemFOAM\*** foamed cementing equipment, data acquisition, and control system  
Use pump rate, cement volume, density, solids fraction, and pressure data to control nitrogen rate and obtain preset foam quality.
- **PlugAdvisor\*** cement plug placement and optimization software  
Visualize and predict slurry contamination during placement at all times, optimize the job to achieve the required top of cement.
- **CemSTRESS\*** cement sheath stress analysis software  
Quantify the risk of wellbore cement sheath failure by applying stress analysis and sensitivity criteria.
- **CemCADE\*** design and evaluation software  
Design and optimize cementing job parameters to ensure well integrity at all times.

### DEEPWATER CEMENTING SYSTEMS

- **CemCRETE\*** high-performance cement systems  
Improve cement strength, reduce cement permeability, and increase resistance to corrosive gas and fluids—with less water than conventional cement systems.
- **FlexSTONE\*** advanced flexible cement technology  
Customize mechanical properties to the downhole stress environment—even for deep, hot wells and hard rock formations.
- **FUTUR\*** self-healing cement system  
Heal cement sheath damage during drilling, stimulation, production, and even abandonment, within hours—eliminating the need for intervention.
- **Losseal\*** lost circulation fiber pill  
Bridge thief zones, control fluid losses, extend well life, and reduce NPT.

Ensure environmentally sound, profitable wells—even in hostile environments or remote locations.

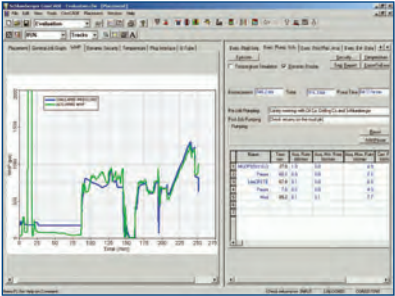
# Deepwater Cementing Software

Ensure well security and verify job success

With Schlumberger software, you can evaluate critical parameters for zonal isolation in all types of wells and most string configurations. You can optimize mud removal, calculate pressures, evaluate and mitigate the risk of annular fluid migration, and assess contamination levels during plug placement.

Customer Input

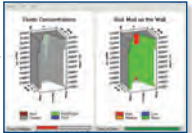
CemCADE\* Design and Evaluation Software



The cementing software systems from Schlumberger can be customized to meet your needs. You can use CemCADE\* cementing design and evaluation software alone—or combine it with specific advisors and software applications—to optimize treatments.

Unconventional cases are sent to our specialized technology centers. There, a dedicated team of scientists and engineers use an engineering version of our software to simulate and evaluate complex cementing scenarios.

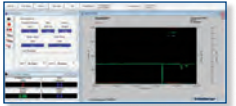
WELLCLEAN II\* Simulator



CemSTRESS\* Software



CemCAT\* Software



WellBook\* Software

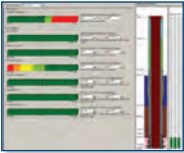


CemFOAM\* System



Schlumberger Recommendations

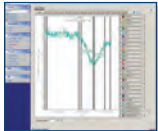
GasMigration Advisor\* Software



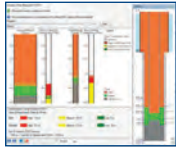
FoamAdvisor\* Software



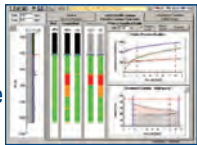
Lost Circulation Control Advisor\* Software



PlugAdvisor\* Software



WELLCLEAN II\* Advisor Software



# Deepwater Cementing Technology



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**Schlumberger**