

IntegraStar™ Vision

ADVANCED CEMENTING FLUID DISPLACEMENT SIMULATOR

APPLICATIONS

- Primary cementing operations

FEATURES & BENEFITS

- Facilitates optimization of a cement job design for maximum wellbore integrity
- Provides a detailed analysis of cement placement efficiency to enhance zonal isolation
- Allows a comprehensive study of top of cement positioning
- Supports multiple muds, spacers, cements and displacement fluids
- Allows for the input of multiple pump rate schedules
- Includes Newtonian, Bingham Plastic, Power Law and Herschel-Bulkley fluid modeling
- Integrates complex wellbore geometries and pipe eccentricity

OVERVIEW

The IntegraStar Vision software is a pseudo-3D computational fluid dynamics (CFD) simulator that evaluates mud displacement and fluid intermixing during cement placement.

The program considers pump rates, fluid properties, wellbore geometries and casing eccentricity to determine the fluid mixing and fluid flow profiles during a cement job. The graphical and numerical output is used to study fluid displacement, cement contamination and cement placement efficiency to maximize cement coverage, improve zonal isolation and identify expected top of cement depth.

IntegraStar Vision can also be used to analyze or predict output from cased hole cement bond sonic logs. To facilitate the interpretation of the data computations, IntegraStar Vision uses advanced 2D and 3D graphical visualization displays.

