

## Drilling Software | Sophisticated Yet Simple



# CentraDesign

## Centralizer Placement Model

### Overview

Casing centralization is one of the key elements in ensuring the quality of a cementing job. It does so by preventing mud channeling and poor zonal isolation. While centralizers are used extensively, well problems continue to arise due to poor cementing jobs. The challenge that both operators and service companies face is to choose the right type of centralizers and place the correct amount of them in the optimum position on the casing to achieve a good standoff profile.

CentraDesign optimizes the centralizer placement, predicts casing standoff and torque and drag for ERD or deviated wellbores. It determines the number and placement of centralizers using one of the four modes: "specify spacing", "specify location", "specify standoff" and "optimum" for bow-spring, rigid, semi-rigid, and mold-on centralizers.

With extensive knowledge in engineering mechanics as well as extensive collaboration with centralizer vendors, Pegasus Vertex provides both service companies and operators with the most sophisticated yet easy-to-use solutions to ensure the quality of a cementing job.

### Benefits

#### Comprehensive Reporting

- Provides detailed reports on centralizer placement, standoff, torque, and drag, facilitating better communication and documentation throughout the drilling and cementing process.

#### Enhanced Efficiency

- Streamlines centralizer planning, automates the centralizer placement process, saving time and resources.
- Offers reliable predictions for casing standoff, torque, and drag, aiding in drilling and completion planning.

#### Cost Reduction

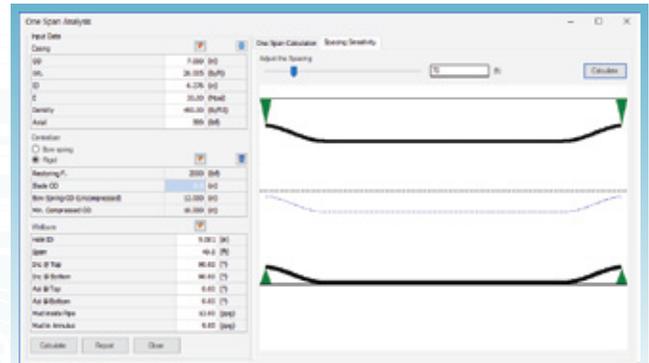
- Minimizes wellbore problem by improving cementing job quality, helps to reduce the risk of costly re-work or well failures.
- Optimizes centralizer usage and prevents over- or under-use of centralizers, leading to cost savings.



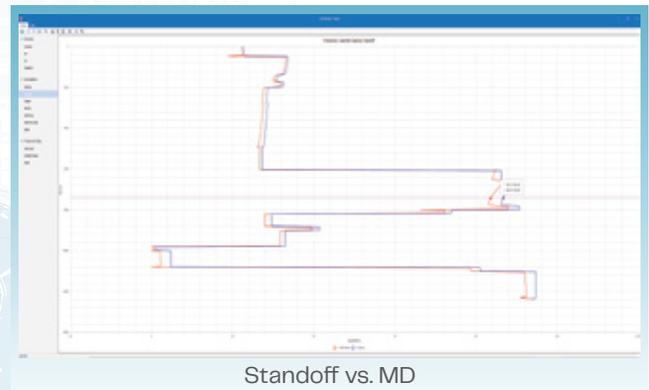
# CentraDesign—Centralizer Placement Model

## Features

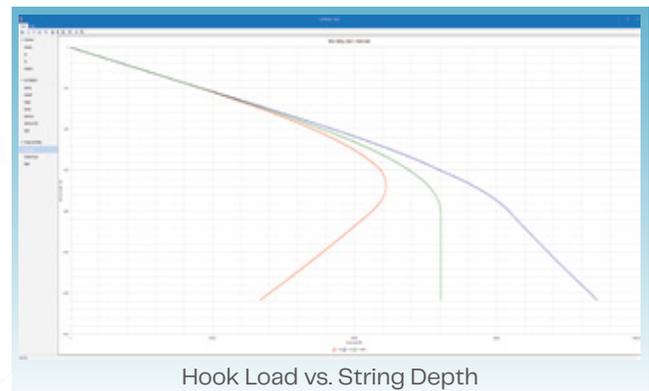
- Survey import from Excel®, text or PDF® file
- Bow spring or rigid centralizers
- Tubular and centralizer database
- Standoff profile prediction
- Centralizers placement recommendation
- Sensitivity analysis on spacing
- Tripping animation
- Casing flotation
- Torque and drag calculation
- Running force change with a hole ID
- Centralizer washout sensitivity analysis
- Microsoft Word® and Excel® reports
- US oil field, SI, and customized units
- Multi-language: English, Spanish, Chinese, and Russian



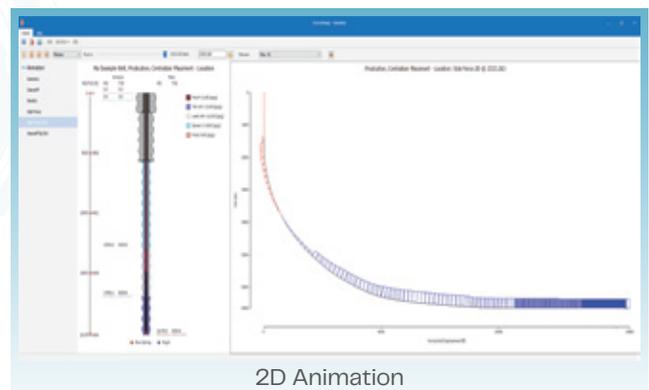
Spacing Sensitivity



Standoff vs. MD



Hook Load vs. String Depth



2D Animation

## System Requirements

- Microsoft Windows® 10 or above
- Microsoft Office® 2016 or above
- Dual-core Intel or AMD processor, 1.4 GHz or higher. Quad-core CPU recommended. Not compatible with ARM processor
- 4 GB RAM (8 GB Recommended)
- 200 MB of free disk space for installation
- 1,280 x 768 display resolution

