

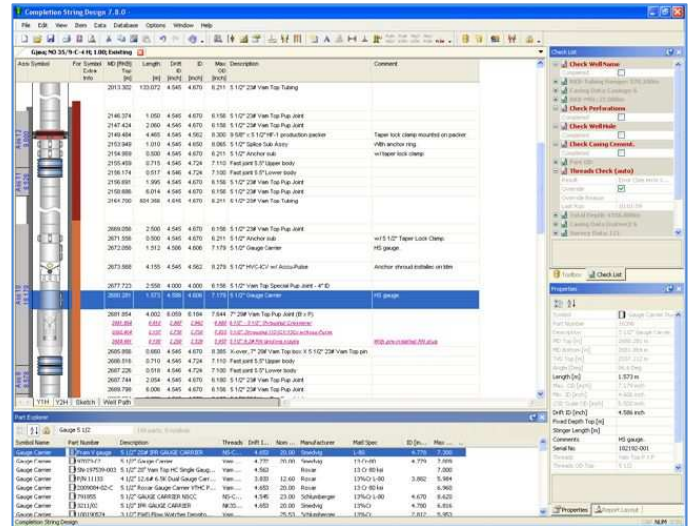


CSD - Completion String Design, is an advanced Norwegian made software solution for the design and presentation of completion strings and well history tracking. CSD allows you to quickly and accurately create a **well schematic** and provides the engineers and staff with a comprehensive set of tools for planning and implementing completions and well interventions!

Completions Services acknowledge the importance of gathering all your well documentation in one place for easy access, easy retrieval and easy update. CSD offers intuitive visualization and reporting, as well as real time quality assurance and information protection tools.

CSD BENEFITS

- Build Single, Dual and Multilateral completions
- Well Schematic diagrams – onshore / offshore wells
- Drag & drop string construction
- Built in equipment symbol package
- String inside string functionality
- 3D well trajectory visualization
- Completion data export / import / integration
- Revision control / well history / approve & finalize
- Customizable Excel reports
- Real time well schematics QA verification



Design to Completion

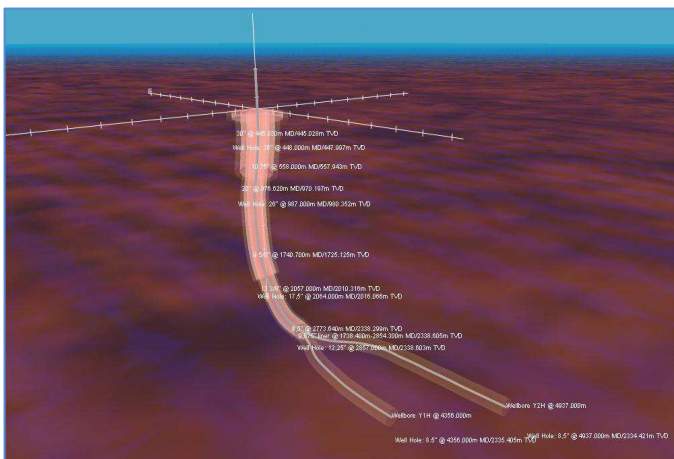
You begin by entering the well conditions, directional profile, and casing/cement configurations, either directly from our WITSML integration module or through CSD's intuitive data entry dialogs. Parts and equipment information are held centrally within an inventory, and can be tracked over the lifetime of the well. CSD displays all components by description, and equipment symbols are fully customizable. CSD comes with an extensive symbol package, as well as standard reports to Excel and a real time QA check module.

Design Features

Drag & drop string construction along with intelligent component editing, enables you to optimise completion strings for all well scenarios. CSD provides a range of other features for use on advanced well completions. Revision control of plan and tally data ensures that engineers have the most up-to-date information at their fingertips.

Reporting and Graphical Outputs

CSD's extensive graphics and reporting facility is designed to present the most useful information at the touch of a button. The Cdim8 (CSDWeb) module can be enabled to view your CSD completion string schematics through a web browser.



Well Conditions

- Drilled sections
- Casings and cementing
- Casing restrictions
- Open hole sections
- Perforation intervals
- Under reamed sections
- Formation/zone information
- Radioactive markers
- Junk/Fish
- Cement plugs
- Survey visualization

String Design Capabilities

- Parts inventory
- Toolbox library / Part Explorer
- Revision tracking
- Part/equipment assemblies
- Plan, tally and finalized mode
- Dual string, ML completions
- Inserted element and string within string
- Custom report templates
- Downhole equipment and control lines

Computing Features

- Drag & drop string construction
- Full MDI (Multiple Document Interface)
- Multi-user, Client/Server environment
- Full database/user security
- Customizable units systems
- User access control & restrictions
- CSD Web Viewer – Cdim8