CYCLE pipe management software

Reduce risk by managing the coiled tubing life cycle

CYCLE™ pipe management software provides an on-site assessment of the entire coiled tubing string. The software is designed to accurately manage and assess the life span of coiled tubing strings based on fatigue, ballooning, and corrosion. All activity and maintenance that the coiled tubing has been exposed to is recorded in a string file, and is constantly updated to prevent fatigue-related pipe failures.

In predicting the fatigue of a string, CYCLE software tracks the jobs completed, job types, the effect of sour environments, the movement of the string during the job, the internal pressure during the string movement, the fluids and abrasives in the string, the flow rate of fluids in the string, and the effects of shipping, cutting, storage, and maintenance activities. With this information, the number of cycles, ballooning, wall-thickness, corrosion, damage, and fatigue are determined along the string.

These calculations are fed directly into **CIRCA™ Real-Time (RT) software** to track pipe fatigue in the operator's cab during coiled tubing operations. Extensive testing and decades of field data from Baker Hughes have been used to build and update the algorithms used in CYCLE software to ensure accuracy. The software also incorporates fatigue test data supplied by manufacturers. The result is a mature software set that enhances coiled tubing operations and reduces risk to personnel and equipment.

For more information about how CYCLE software can help you manage pipe fatigue, go to bakerhughes.om/CIRCA or call your representative.

Applications

Coiled tubing pipe management

Features and benefits

- Pipe management
  - Predicts remaining safe working life in trips or cycles
  - Displays incremental fatigue during a job
  - Extends coiled tubing life to reduce costs
  - Offers the industry's only H_2S-related pipe fatigue modeling
- Included with CIRCA RT software
  - Provides onsite safe working life monitoring for coiled tubing
  - Eliminates pressure cycling fatigue incidents
- Prejob planning and inventory management
  - Provides reliable job performance and ongoing quality control