COILED TUBING SERVICE LIFE, DESIGN AND PROCESS PARAMETERS

Background
Research of service life growth of coiled tubing’s used in the oil industry is a highly relevant task.

Aims and Objectives
Analysis of the influence of geometrical characteristics and the mechanical properties of the tubing material on its reliability in various environments related to coiled tubing technology.

Methods
Analytic interpretation of laboratory studies of low-cycle fatigue of metals and metal structures related to use of long pipes in coils in the coiled tubing units.

Results
It was established theoretically, that service life of the pipes in low-cycle loading depends on the structural and technological parameters, stipulating the use of long pipes in the coiled tubing units. The results, obtained from the theoretical analysis are confirmed by a large amount of experimental studies.

Key words: steel long pipes in coils, low cycle fatigue, coiled tubing technology, oil industry

References
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