ABSTRACT
Flexible risers for oil and gas fields are typically connected to floating production facilities. The support and latching mechanism for the bending stiffener at the vessel entrance point is a key component. The present paper describes a bending stiffener latching mechanism, the Clawloks™ system, which has been designed and developed by LICengineering A/S during the last 10 years. The mechanism transfers the bending moments and shear forces from the riser to the vessel via the bending stiffener. The latching mechanism allows for automatic connection. Disconnection is possible without diver access. The system is presently in operation at a number of offshore oil and gas fields supplied with various sizes of NKT flexible riser systems installed worldwide. The paper includes a description of the functional requirements and design of the mechanism. The actual layout is presented including examples of practical implementation, fabrication, testing and operational experience.

KEY WORDS: bending stiffener latching mechanism; subsea steel components; flexible riser support; diverless automatic connection; remotely operated disconnection; floating oil and gas production.

INTRODUCTION
The riser and bending stiffener support arrangement at the bottom of the production vessel is an important component for flexible oil and gas risers connected to a FPSO (Floating Production, Storage and Offloading Vessel) or other floating facility. A new support and latching mechanism, the Clawloks™ system, is described in this paper. The system is in operation on a number of NKT flexible risers worldwide. The special features includes that latching during pull-in of the flexible riser takes place automatically without ROV or diver intervention. Two claws lock automatically the male part in place energized by robust rubber springs, saving valuable offshore installation time.