

## Specialist Equipment Design

### Detailed Design and Verification

Bennett Associates was contracted by BEL Valves to assist with the design of a 42" ANSI class 1500 sub sea split gate valve for Statoil, Norway. The valve was intended for use in Statoil's Europipe II and Asgard transportation pipelines, both of which have become significant pipelines within the oil and gas transmission infrastructure.

Statoil's approach, recognising the significance of the engineering challenge, was to instigate a design competition with BEL Valves being one of the competitors.

A valve of such size presents many challenges not least the practicality of manufacture. Approaching 5 meters height without its actuator and weighing almost 95 tonnes the valve was to be the largest to be made.

Bennett Associates worked closely with BEL Valves own design team to provide layout drawings and detailed manufacturing drawings supported by all verification activities including calculations, finite element analysis and heat transfer analysis.

Bennett Associates (originally founded in 1984) was acquired in 2008 by Atkins; bringing their proven technical expertise to the UK's leading engineering consultancy.

