

**James Walker**

**Unilion**<sup>®</sup>

**Product success:** Unilion in extreme temperatures

Operating in such extreme temperatures, the customer turned to James Walker for technical advice on requirements to ensure reliability for the stem seal within the trunnion ball valve. Due to the nature of the application, the pressure and temperature, PEEK back-up and back pressure rings were included in the seal configuration.



- Application: Cryogenic trunnion ball valve stem seal
- Operating conditions: Static / intermittent dynamic
- Temperature: -196° to +200°C
- Pressure: 460 bar
- Media: Liquid natural gas
- Unilion<sup>®</sup> profile: J01
- Material: Fluolion<sup>®</sup> 22
- Spring: Heat treated and double wrapped Phynox
- Back pressure: Yes
- Back up ring: PEEK DBC