

NASeBOP Emergency BOP Acoustic Control System

Imenco Nautronix Emergency BOP acoustic control system (NASeBOP) is specifically designed to meet the demanding needs of mission critical BOP control. NASeBOP provides a comprehensive, fully redundant system, including complete emergency backup, to perform an Emergency Disconnect Sequence (EDS) if required. Whether an EDS has been executed via NASeBOP or the umbilical, NASeBOP offers the key advantage of being able to monitor the BOP status after an EDS has been carried out.

At the heart of NASeBOP is ADS² (Acoustic Digital Spread Spectrum) signalling technology. The key advantage of ADS² is the coding technology, which is optimised for long range, high integrity control and monitoring of subsea assets. ADS² ensures there is no interference from unwanted sources such as other acoustic noise or the environment. The handshaking protocol used within NASeBOP maintains the highest level of system integrity.

In the event that control from the Master Station is not possible, NASeBOP can be controlled from NASeBOP Portable Unit(s), normally located at the vessel lifeboats. An additional Emergency Response System (ERS) is also offered, which is designed to be kept onshore, available to be flown out if required.

Features & Benefits

- Operate up to 16 functions with readbacks
- Read up to eight sensor inputs
- 4000m depth rating
- Control from multiple locations including ATEX Zone 1 for driller operation
- Can be integrated with NASDrill RS925
- Emergency Response System (ERS) stored off installation for emergency backup
- Dual redundancy throughout
- Ensures monitoring of well integrity post EDS
- PBOF hoses ensure continued operation even when flooded by seawater
- Supports the well safety case by providing an additional independent method to shut in the well
- Potentially saves rig time in the event of failure of one of the other well control methods
- A more flexible alternative than the activation of a dead man
- Meets all current requirements of API 16D and 17E, NORSOK D-001 and Petrobras GTD
- High level of certification with DNV Type Approval, ABS CDS and ABS ISQM
- Subsea equipment is compliant with ISO 13628-6



Smart Solutions

nautronix@imenco.com

www.imenco.com

NASeBOP Technical Summary

Surface system	Master station including DCU, SPU and dual redundant PLC modules Driller's EDS control panel (ATEX Zone 1) Dual Power Amplifier Dual Transducers NASeBOP portable unit (including power supply, transducer, cable and reel)
Subsea system	Dual subsea control units plus transducers PBOF hoses
Depth rating	4000m
Battery life	2 years, based on operational scenario of system tests every 6 hours
Function drives	8/16, configurable EDS, 24V (2A) or 48V (1A)
Sensor interfaces	2 x 4-20mA analogue, 6 x configurable (serial or analogue)
Features	Emergency disconnect sequence Periodic status reporting for acoustic link, battery, accumulator pressure, solenoid status etc. Operator selection of status polling rates Event/data logging for post incident analysis Full alarm monitoring, logging and reporting Acoustic performance logging and statistics
Compliance	DNV type approval; API 16D and 17E drilling standards; ABS CDS and ISQM. ISO 13628-6; Petrobras drilling rig unities GTD; NORSOK D-001
Options	Emergency Response System (ERS) 6000 msw depth rating Uninterruptible Power Supply (UPS) Driller's intrinsically safe operator station Remote Operator's Station (ROS) - touchscreen Remote transducers with 50/100 metre cable

