



ERBAS

EXTENDED REACH BREATHING APPARATUS SYSTEM

Workscope

Stork was approached by a major Operator to supply a complete breathing system for work required inside the platform leg on a North Sea asset.

The workscope included the supply of a breathing apparatus (BA) system to allow four NASA operatives to work at the bottom of the leg while they performed cell mapping operations. Operations required access to live cell pipes which could involve a potential gas release. Furthermore, this was more challenging as the operatives had no previous BA experience.

Solution

Stork deployed its specialist leg entry kit which for the first time included the Extended Reach Breathing Apparatus System (ERBAS). ERBAS greatly simplified the leg entry operations with its compact design and easy single hand use.

All NASA leg entry personnel were given BA training by Stork's BA specialists to ensure they were fully competent working with the new equipment. The equipment was also commissioned, maintained and monitored daily by two experienced Stork BA technicians.



Results & benefits

Essentially, ERBAS is easier to use and quicker to operate ensuring a safer and more efficient method of refilling essential air supplies.

ERBAS proved to be quick to deploy and easy to use. Evacuation was greatly improved with its ease and speed. Airline trip hazards were eliminated when moving between floors and the deployment of the equipment was safer with all cylinders being protected in a robust protective case.

Once in place, there was no requirement to remove cylinders for refilling unlike traditional exchange systems which involve winching equipment. This improved safety and saved time on the workscope. Costs were also reduced with minimal maintenance requirements.

During this very successful deployment, several areas for improvements were identified which has resulted in further development of the system, including a major breakthrough in reducing the refill time from 60 to 20 seconds making the system even faster.

Project overview:

- **Where:**
North Sea Asset
- **When:**
December 2013 – May 2014
- **Safety:**
Project delivered safely with no lost time incidents (LTIs)

" I have a very positive impression of Stork's breathing system and ERBAS refill stations. I found the harness comfortable and the composite cylinder was so lightweight and small that I didn't really notice I was wearing it. I found the hi-pressure connector to be very intuitive and easy to find and use during evacuation. Although I didn't use the backup bottles contained in the ERBAS unit, it was comforting to know that there was a backup if needed "

Shaun Azimi
Engineer - Robotics System
Technology Branch
Johnson Space Centre, NASA

