Forum AMC Delivers Innovative Tailored Solution for Containerized Workshops That Allow for Efficient Remote Operations

The Challenge

An industry-leading service company needed to safely and efficiently assemble drilling tools in remote locations, such as Africa and the Middle East. It was also necessary for them to be able to respond to regional changes and move their base, within days, to meet ever-changing operational demands. Rather than build a traditional facility with the need for heavy infrastructure, they wanted to create a transportable workshop, which incorporated all of the operational benefits that a fixed workshop delivered, along with quick deployment and commissioning.

The challenge was to develop equipment that met the freight industry’s standard shipping dimensions and requirements, as this would allow trouble-free sea and road freight transportation to any global location. It was key that the equipment retain full functionality and operating capability, while providing a safe working environment for personnel.

Because of their long track record and success of providing specially engineered products, the Forum Energy Technologies AMC team was asked to develop a tailored solution that would align with the customer’s engineering, manufacturing and timeline requirements at a competitive price.

The Solution

The Forum AMC team worked extensively with the customer to ensure that the mobile workshop was compact yet robust. Throughout the process, the teams made a great deal of design changes to miniaturize existing products. For example, they needed to fit an overhead crane and a torque machine inside the container, along with the hydraulic power unit (HPU) and a space for a person to safely operate the machinery.

In the end, eight containers (a mixture of 40 and 20 ft) were designed and manufactured incorporating the client’s unique operational challenges and requirements. The containers were fitted out with radiation source workshops, torque machines, cranes, stores, generators and chain vices. They also included lighting, power sockets, air conditioning, and CCTV operated from a central control room.

The Benefit

After taking receipt of the products, the customer was able to easily move their small-footprint workshops from one location to the next, minimizing cost and eliminating shipping restrictions. No further capital expenditures were required, per deployment, since the layout was designed fully self-contained and the ISO containers were fitted out with individually tailored equipment installed to allow ease of transporting.
Additional cost savings were realized over alternative solutions, such as building temporary structures to house the equipment, and also packing up equipment to transport each time. The service company was pleased with the final containers and has purchased additional containerized solutions since.