

# Arming a workforce for change

Targeting safe working practices on a global level has become a key focus of **ABB Turbocharging** in recent years. One major aim has been employee safety when working on customer sites.

ABB Turbocharging is present with its service business in over one hundred locations, in more than forty countries. Each of these sites has a highly skilled and dedicated workforce, trained to carry out all levels of service on ABB Turbocharging products. But what happens when a product is not in the controlled environment of a factory or workshop? How can the same level of service and short engine downtime be ensured when a turbocharger is installed in an engine room with limited lifting possibilities, or positioned on an engine two to three meters off the ground? These challenges are something which are faced by ABB Turbocharging personnel on a regular basis.

To target high risk activities and assist its global service employees in conducting safer and more efficient field service operations for customers, ABB Turbocharging has implemented two new training programs. Called "Safe Lifting" and "Working at Height", these programs are delivered to more than six hundred service personnel worldwide.

### Skill set for service personnel

Up until the release of the programs this year, most certified training schemes for safe lifting and working at height have been conducted by outside parties. These ensure a basic standard for each of the before mentioned activities, and are mostly focused on the risks or dangers foreseen in the building / construction industry. ABB Turbocharging has now developed measures that prepare service personnel with the necessary skill set and procedures required when conducting difficult field operations on customers' sites. Examples of such operations are navigating and manipulating turbocharger components around the engine rooms of power plants, transferring components from a shoreline to an offshore vessel, or safe multiple lifting sequences in restrictive environments, such as smaller fishing vessels or submarines.

During the preparation of the courses ABB Turbocharging committed to ensuring that only the latest state-of-the-art equipment and working procedures would be used in the training programs provided for its employees. Here, ABB Turbocharging was aided by the guidance and recommendations of specialist companies. These assisted in the development of the training programs, and helped with the simulation of the specific tasks faced by service personnel during field operations. Over the duration



**ABB Turbocharging's training targets safe operations.**

of the training courses – after first learning the theory underlying each subject – participants are required to demonstrate their practical competence. This involves being able to assess and plan safe lifting operations, i. e. to calculate the correct loading factors for the equipment used, identify adequate anchor points to support these loads for safe lifting and for attaching life lines for working at height. And they must understand the dangers of overloading or incorrect usage/ installation of their equipment.

### Safe training environment

The training program makes use of modular training apparatus, constructed out of scaffolding and engineered to withstand the various loading forces required during the practical exercises. This gives participants the advantage of being able to gain work experience in a safe, controlled environment in one of ABB Turbocharging's global training hubs rather than on the job, as was historically the case. With these new programs being delivered worldwide, ABB Turbocharging's customers not only benefit from more efficient and safer work practices on future jobs. They also have the opportunity to contribute to the program's success by contacting their local ABB Turbocharging service provider for an assessment of their facility before their next overhaul is due, and therefore further reducing the risk of an incident on site.



In 2012 Paul A. Thomas joined ABB Turbo Systems Ltd as the Head of Network Standards & BU Service Network OHS Advisor to the Global Network Support Department. Leading up to this he held multiple positions between 2007 and 2012 in ABB Turbocharging in Dubai, where his final position was that of service manager. He originally began his career as a service engineer in Melbourne, Australia, in 2004. He holds a global MBA with Hult International Business School and a certificate in Mechanical Engineering from the Victorian University of Technology, Melbourne, Australia.

**ABB Turbocharging**

**“Working at Height”  
is one of ABB Turbocharging’s  
training programs for service personnel.**

