





Pit stop in the dry dock

Roberto Ongano, project manager for an Azipod® service team, prepares for drydocking in much the same way as a Formula One pit-stop team.

The operation is carefully planned in advance. Every team member knows exactly what to do and everyone is focused on getting the machine back in operation as soon as practically possible. These are the similarities facing a Formula One pit-stop team and an Azipod® team servicing a ship's electric propulsion system. But there are some big differences. First of all, the tasks are much more complicated than changing tires. Secondly, the focus is on cost as much as on quality.

"I think a comparison to the ground crew servicing an airliner is more relevant than the Formula One crew; we have much more in common with the aviation service technicians," argues Ongano. His challenge is to stay competitive in the rough and tough ship repair business, where there is no lack of people offering their services – and at a very good price as well.



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There are certain service tasks a customer would never hand over to non-ABB engineers, but ABB is not even close to being in a monopoly situation. “We have to provide quality services at the right price. Our customers trust the brand and might be willing to pay a little bit more for having the ABB team service the Azipod®, but driver number one in the repair business is cost,” says Ongano. Azipod® service costs have come down compared to 10 years ago, according to Ongano, who attributes this to improved training and tools as well as to cost cutting in logistics.

Learning from Airbus

The Azipod® service team has adopted some techniques used by Airbus service technicians in a pilot project. That entails preparing for specific jobs, and all possible repair scenarios, using training and tool kits. There is no time to run around looking for the right piece of equipment; the technician brings with him a toolbox with all the right tools laid out ahead of time.

The safety of passengers, the criticality of keeping the time schedule and the competitiveness of the entire aviation industry apply also to the cruise industry, which accounts for a large chunk of the Azipod® service team’s business. Until the Azipod® unit can be turned on again, the ship cannot leave the repair site.

The technicians responsible for overhauling the propulsion equipment on a cruise ship are under tremendous pressure. But this is even more the case for the person Ongano plans his activities with – the ship’s superintendent who is responsible for coordinating all dry-docking activities.

Waiting to get on board

Imagine a cruise ship for 4,000 passengers that has already been marketed as refurbished – tickets have been sold, but cabins and restaurants are still being rebuilt, carpets are being ripped out and replaced, new equipment is being installed, and rewiring and piping is going on. As many as 500 contractors are on site trying to get their job done in just a few days.

Coordination between each team is essential and any of them could be the bottleneck that delays the ship. Servicing the propulsion system used to be one of those tasks that was completed closest to the deadline. That is no longer the case, according to Ongano, who worked on the operator side seven years ago and has seen servicing turn into a highly effective turnkey solution.

The complete package

“We can move in with as many as 30 men to get the job done in a minimum amount of time,” says Ongano. “Improving from this point on is more a question of improving the process than adding more people.” His crew arrives on site with all the tools and consumables they will need, making them entirely self-sufficient. Ongano has prepared the job in advance and is on site with the ship’s superintendent to avoid any surprises.

“When the service crew arrives they are ready to attack the job not from not day, but from hour one. There is no time for ‘politics’; every man knows what to do, and we work shifts around the clock until it’s done,” says Ongano. The service team agrees on the scope of the work and sequence of tasks in advance to avoid causing any delays or interruptions for other teams under similar pressure to carry out their tasks. In parallel with the actual service work, the needs of the class society must also be served and this of course goes through the ship owner. However, the Azipod® service team ensures documentation and quality controls are taken care of and that they are available throughout the process for any inquiries the class society may have.

On contract or ad hoc

The more the service team can provide a complete package, the better for the supervisor in charge of the entire operation. Some ship owners have a 5-year or even a 20-year service contract to make sure that the performance of the Azipod® units is entirely ABB’s responsibility. This is especially the case in the cruise industry, where minimizing time in the dry dock is of the essence. On the other hand, the operator of a commercial freight ship might prefer enlisting ad hoc services.

When a ship needs to be in dry dock for a longer period, a smaller Azipod® service team can do the job and even work normal shifts with Saturdays and Sundays off. However, the basic approach is still the same, Ongano says: “The most cost-effective solution is to send in people with the right training and the right tools to do the job well the first time so we don’t have to go back and redo anything later.”

Servicing the Azipods on a cruise ship

