

CASE STUDY

Sulzer appointed to repair compressor after OEM failed to meet expectations

Routine refurbishment of important rotating machinery is vital for continued, reliable operation but if the original equipment manufacturer (OEM) fails to deliver an optimum service, what other options are available? For one oil company in Nigeria, issues with a gas compressor following an overhaul led to the maintenance team looking for an alternative solution. Sulzer was then selected to support the oil company, not only for its extensive experience in this equipment, but also its local service center that offered a tailored approach.



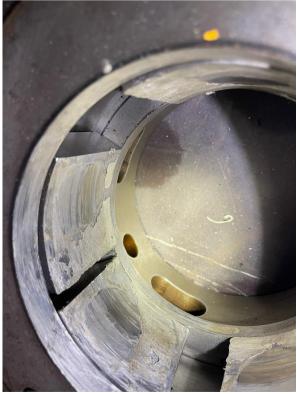
Regular maintenance is essential to ensure the performance of any equipment and OEMs are often trusted with this task because of their knowledge and expertise. However, their locations may be hundreds or thousands of miles away, so keeping track of any repairs can be difficult.

Resolving issues quickly

In Nigeria, an oil company was experiencing some maintenance issues with one of its gas compressors. To deliver a quick and lasting solution, Sulzer, as a leading independent service provider, was called in to support the project and resolved some electrical issues as well as replacing a mechanical seal. The quality of the work was appreciated by the customer and shortly after, Sulzer was invited to tender for the overhaul of another compressor. This machine, which was approximately 20 years old, had recently been serviced by the OEM. However, shortly after recommissioning, the compressor had suffered significant issues, and the OEM had instigated an investigation. During this period, operations at the site continued with a standby compressor being brought online for the duration of the repairs.

It was suspected that the rotor was incorrectly aligned during installation, which led to the impellers making contact with the casing and causing damage to the seals. Having lost faith in the OEM to complete the project to the required standard, the company called in Sulzer to help. The OEM had already partially disassembled the compressor and completed an initial inspection. Sulzer has considerable experience with this particular compressor and therefore was able to make a very knowledgeable estimate based on the photographs and the preliminary report supplied by the customer. Sulzer's expertise in turbomachinery from so many different manufacturers offers customers an almost unique service capable of an in-house, turnkey solution to repair any damage return the equipment to normal service.





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Turnkey solutions from global team

The customer accepted the initial project scope and the compressor was transported to Sulzer's local service center in Port Harcourt, Nigeria. These facilities were another reason for Sulzer being selected; local field service personnel can be on-site quickly and the customer can visit the workshop to review progress.

In this case, the compressor was stripped down further in Port Harcourt and a specialist engineer from Sulzer's location in Venlo, the Netherlands, came to Nigeria to complete a more in-depth assessment. This resulted in the need for additional work being determined, but the customer was able to see all the evidence first-hand and a revised project was initiated.

The damage to the compressor was such that the rotor needed to be re- engineered and new components manufactured. Sulzer has a well-practiced procedure that uses 3D laser scanning to create digital reconstructions of all the components to enable precision parts to be produced in-house. Additional support was provided by the turbomachinery team in Houston, TX, which also has considerable manufacturing capabilities and expertise. Wijnand Hemsen, Area Sales Manager for Sulzer, concludes: "From this point, our turbomachinery experts will manufacture new parts for the rotor, repair damage to the casing, reassemble the compressor and ship it back to the customer. Local field services from Sulzer will complete the installation and commissioning. Having experienced a sub-par service from the OEM, which has no local facilities, the customer chose Sulzer based on our reputation as an independent service provider and after successfully delivering repairs to similar equipment. In the coming weeks, the compressor will be completely overhauled with all damaged parts replaced before our field service personnel reinstall and recommission it."



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