SULZER

Sulzer Turbo Services

Case Study

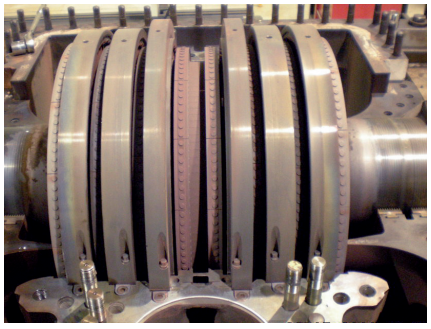
Fast Turnaround for a Fertilizer Plant

Sulzer Turbo Services Canada was called upon to assist in a major turnaround for a fertilizer plant. The company was requested to perform an emergency dissasembly and inspection on a hot gas expander that was not performing correctly after a rebuild by the OEM.

The customer called upon our location in Edmonton to expedite a complete disassembly, inspection and evaluation of the expander. The Field Service Division of Sulzer Turbo Services Houston was included in the turnaround project and they were overseeing all the

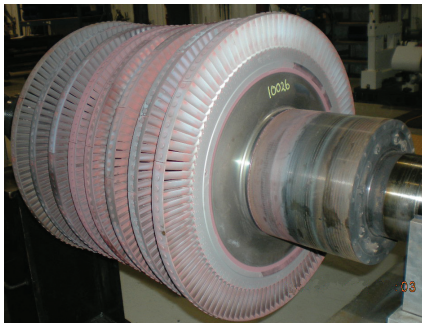
Unit set up for disassembly.

field operations, which included initial inspections and removal of the units from the field. The Edmonton shop committed all its efforts and went into action to assist the customer,



Disassembly of the expander.

working a 24-hour day to get the inspections completed and to diagnose any problems that were present. Technical representation from Sulzer Turbo Services in La Porte was called upon and was present at the Sulzer Edmonton facility the following day. A customer representative was also dispatched to the Edmonton facility to follow the progress of the project and to work with Sulzer Turbo Services' employees. Initial inspections indicated excessive thrust running clearance, along with expansion settings on the case not to specification, galling on the inner case fits to the diaphragms, and improperly manufactured locking fasteners on the inner main case. The disassembly and inspection of case parts and the rotor, including Non-Destructive Testing, was performed in two days, which was a substantial feat considering the scope of work to be performed. All incoming inspection findings were reviewed with all parties involved. Numerous conference calls to discuss the issues at hand and a scope of repairs were agreed upon by all parties. Scheduling was of the utmost priority, with three companies of Sulzer working together, plans were



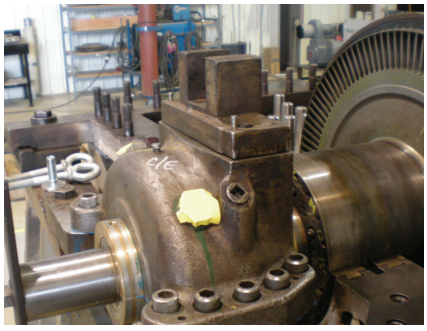
Rotor inspections being performed.

discussed to complete the repairs needed, re-build the complete unit, and get the unit back to the customer as quickly as possible, with the standard Sulzer quality and professionalism the customer had experienced with past

Checking seal clearances during re-assembly.

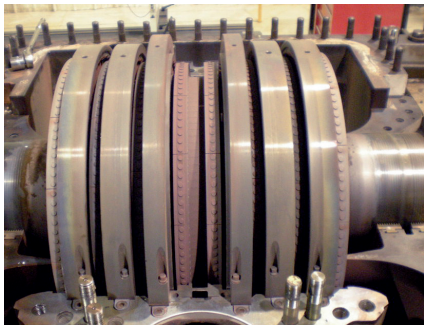
Sulzer projects. The Edmonton facility continued to work around the clock to facilitate the repairs needed. Working closely with the customer, the repairs and re-build of the machine were completed in four days which was two days ahead of the originally estimated completion date.

All parties involved played an important role in completing the project ahead of schedule.



Coupling end bearing housing after re-build.

Seamless communications and technical discussions between the Sulzr companies once again proved the excellent cooperation to the benefit



Re-built machine on shippin skid - ready for transport

of the customer who enjoyed our undivided commitment to produce a quality product.

Mike Higginbotham
Sulzer Turbo Services Canada