

10 ENGINE OVERHAUL PROGRAM IN TANZANIA

MAJOR PREVENTIVE MAINTANCE SERVICES FOR 10 WARTSILA 18V38B GENERATORS

In January 2012, Goltens signed a service agreement with Independent Power Tanzania (IPTL) for the overhaul of 10 Wartsila 18V38 engines.

The main challenge was to carry out the extensive 36,000 hour overhaul scope within the timeline committed to. The plant had a limited window available for the completion of the maintenance during the planned engine / plant shutdown. To accomplish this, Goltens deployed a team consisting of a Diesel Supervisor, an Electro & Automation Specialist and four mechanics to the plant in Tanzania to complete the 36,000 hour PMS following the maker's defined scope within the 30 days allotted per engine.

Goltens disassembled the engine and completed an inspection of the shaft and a change out of the main bearings. Completed inspection of all subcomponents as well as inspection of the upper and lower liner landing surfaces. Inspection of these surfaces revealed that some wear had occurred requiring In-Situ machining of both surfaces on some cylinders and the insertion of prefabricated rings. Goltens had anticipated this requirement and had brought its in-situ machining tools and the required ring inserts to site.

THE MAJOR OVERHAUL OF EACH OF THE 10MW ENGINES CONSISTED OF:

- Completion of the full 36,000 hour PMS scope
- Engine block liner pocket in-situ machining repair and insertion of rings to renew the sealing surface
- Checking & replacement of out of tolerance cushion mounts

RESULTS:

Goltens has successfully completed the overhaul of 7 of these generators to date with the remaining 3 scheduled for the next 12 months.

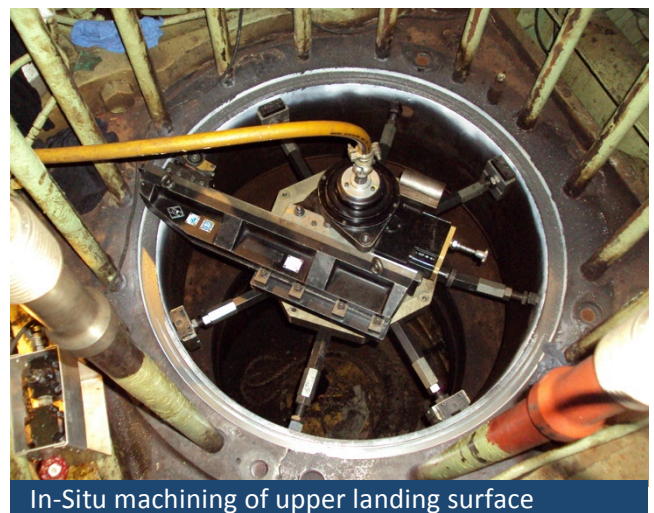
All have been delivered within the agreed timeline and completed full operational testing of the engines prior to handing it back over to IPTL for return to operation.

PROJECT FACTS: IPTL TANZANIA

Total Plant Capacity:	100 MW
Engine / Equipment:	Wartsila 18V38B
Engine Output:	10 MW



Installation of cylinder head and calibration checks on big end bearing housing



In-Situ machining of upper landing surface