

IN-SITU CRANKPIN GRINDING - PAKISTAN POWER STATION SULZER 16ZA40S CRANKSHAFT

Goltens received an inquiry from the management company of a power station in Pakistan to complete a 50,000-hour inspection of their Sulzer 16ZA40S Diesel Generator.

During the inspection, Goltens' specialists opened the main journal bearings and crankpin bearings and found that the No.1 crankpin journal and fillet radius of generator No.3 were damaged and required repair.

To get the generator back in service as quickly as possible, the owner requested that Goltens mobilize In-Situ tools and machinists immediately. Goltens technicians quickly arrived onsite and began work immediately after.

The detailed repair procedures and respective work scopes were drafted and approved after customer advisors discussed the process with Goltens' Senior In-Situ Supervisor.

REPAIRS CONSISTED OF:

- Full cleaning and Magnetic Particle Inspection (MPI) of all 8 crankpin journals
- Full cleaning and MPI inspection of 9 main journals
- Grinding the fillet radius of crankpin journal A1 & B1
- Grinding of No.1 crankpin journal to undersize 5.00mm (345.00mm)
- Finish polishing of No.1 crankpin journal
- Polishing of No.2-No.8 crankpin journals
- Final Inspection of crankpins

RESULTS:

Goltens' In Situ machinists completed the grinding and polishing job within 18 days, restoring the generator to full operation.

PROJECT FACTS:

ENGINE TYPE:	SULZER 16ZA40S
OUTPUT:	10,500 KW
ORIGINAL CRANKPIN DIAMETER:	350.00 MM
FINISHED CRANKPIN DIAMETER:	345.00 MM
CRANKPIN LENGTH:	270 MM

