

IN-SITU “IN A BOX”

6RT-FLEX-50B CRANKSHAFT RENEWAL

As the inventor of in-situ crankshaft grinding, Goltens has a long history of taking on the most challenging in-situ crankshaft repairs – but these repairs almost always take place inside the engine. However, When a 6RT-FLEX 50B crankshaft had two 600-mm diameter main journals damaged in handling in Shanghai, Goltens branches teamed up to undertake these repairs while the crankshaft was still in the packing crate.

No Goltens station had ever undertaken a repair in the shipping crate before and this presented unique challenges not present inside the engine. But having recently performed all of the technical and mobilisation planning for a similar job in Houston, Goltens had all of the required technical and logistics plans laid out and ready to put into practice.

Goltens handled the local mobilisation and logistics for all of the tools and related equipment necessary for the job and mobilised leading in-situ technicians to the yard, located about 250 KM north of Shanghai.

REPAIRS CONSISTED OF:

- Assessment of fillet radii (which are normally out of line due to the shaft manufacturing process)
- Grinding of four new fillet radii for reference
- Grinding one main journal to undersize 0.50 mm
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- Manufacture of bluing and lapping dummy at specific size
- Super polishing by machine

RESULTS:

Goltens technicians completed this complex job in close association with the maker relative to the finite tolerance requirements in only 11 days of onsite work and returned to their home stations for a brief break before setting off for their next job.

CRANKSHAFT FACTS: Wartsila 6RT-FLEX 50B

Weight:	55 tons
Crankshaft Length:	7560 mm
Throw:	2850 mm
Journal Diameter:	600 mm
Crakpin Diameter:	600 mm

