



Connect with SKF Supergrip bolts to drive uptime and profitability

Benefits

- Cut mounting/dismounting times dramatically
- Reduce outage downtime
- Improve planning and scheduling
- Increase safety and serviceability
- Improve system reliability
- Increase system availability

Typical applications

- Steam turbine couplings
- Gas turbine couplings
- Generator couplings

Time-saving solution slashes turbine coupling dismounting/mounting costs

After years in service, conventional fitted coupling bolts can seize, making removal difficult and dangerous. As maintenance personnel work to free the bolts, man-hours and lost power generation costs can skyrocket.

Reassembly can involve hours of fitting bolts, honing holes and “mauling” bolts into place with a sledgehammer, setting them up for eventual stress and vibration problems – and another time-consuming removal.

No more uncertainty about outage downtime

SKF Supergrip bolts remove the risk of adding hours or days to scheduled outages. Designed for insertion and removal with an initial clearance fit, SKF Supergrip bolts eliminate seized and jammed bolts. Once tension and expansion pressure is released, the bolts slide out as easily as they slide in.

SKF Supergrip bolts also simplify hole machining and require no bolt grinding, eliminating re-reaming and re-honing. They also eliminate coupling slippage, help simplify shaft alignment, and can be used repeatedly for the life of the turbine.



Get back on the grid up to 90% faster

A Swedish State Power Board study compared service times for SKF Supergrip bolts and conventional fitted bolts. SKF Supergrip bolts reduced the time required to disassemble and reassemble two turbo sets (eight couplings) by 90%. The plant reconnected to the power grid 48 hours earlier than they did with conventional bolts, for a total savings of 19 200 000 KWH (48 hours × 400 Mw).

Available with SKF installation support

SKF Supergrip bolts are supplied with a set of hand-portable, manually operated installation tools. If necessary, SKF can handle installation services, including precision alignment, line boring for initial precision fitting of the Supergrip bolts, and bolt installation and training.



For more information about the SKF solutions for the power generation industry, visit www.skf.com/power or contact your SKF representative.



Increase the return on your maintenance investment with SKF

The whole idea behind the SKF 360° Solution is to help you get more out of your plant machinery and equipment investment. This may mean lowering your maintenance costs, raising your productivity, or both! Here's an example of the SKF 360° Solution at work in the electric power generation industry.

SKF helps power plant cut scheduled outage time by 20 hours

The challenge

About to undergo a major steam turbine overhaul, a 650 MW power generating unit in China wanted to reduce the outage time the project would require.

During a previous LP turbine coupling procedure, a stuck bolt led to extended outage time and coupling hole damage. The hole required repairs, while the extra outage time reduced power generation. Looking to avoid similar delays and costs for the overhaul, the plant looked to SKF.

The SKF solution

SKF engineers suggested SKF Supergrip bolts. SKF performed a turnkey service on the turbine unit that included a precision alignment of the turbine train, precision line boring of all coupling holes, and the installation of an alignment bolt along with all SKF Supergrip bolts.

The result

SKF helped reduce the project's outage schedule by 20 hours (critical path time), saving the plant 562 900 Euros in the process. Along with a significant reduction in the time needed to dismount and mount the coupling bolts, the plant was able to improve worker safety and get the unit back on line in record time.



Savings summary

Outage schedule time savings (critical path time)	20 hours on coupling dismounting/mounting
Wholesale power revenue costs	0,0433 Euro/Kwh
Power generating unit capacity	650 000 MW
Total savings	650 000 × 20 × 0,0433 = 562 900 Euros

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