

A technician in a workshop, wearing a dark shirt and pants, is kneeling and working on a large, complex industrial turbine component. The technician is using a tool to adjust or inspect a part of the machinery. The background shows a well-lit industrial environment with various tools and equipment. The entire image has a blue color overlay.

PERFORMANCE BEHIND YOUR ENERGY

**GAS AND STEAM TURBINE
SERVICE AND SUPPORT SOLUTIONS**

IMPROVE RELIABILITY AND EFFICIENCY FOR YOUR GAS
AND STEAM TURBINES WITH REPAIRS, RETROFITS
AND EXTENDED LIFE UPGRADES

SOLUTIONS FOR A HIGHER LEVEL OF RELIABILITY

With a heritage of supplying products to virtually all major turbine OEMs, the operators of gas and steam turbines have relied on Moog aftermarket service for over 20 years.

We offer Back-to-Base Service for many types of gas and steam actuators, with our flexible fully trained and focussed team meeting your scheduled outages or breakdown requirements at our facility in the UK. With our crange capacity at 5 tonne, spacious workshops, and project management skills, not only can we deal with the largest and most demanding actuator repairs and upgrades, but with fast turnaround times.

Around the world, Moog experts help customers achieve their operational goals with a robust line of aftermarket products and services. We are committed to delivering innovative solutions within your defined outage cycle. Our goal is to deliver the expertise and products that maximise your technology investment today - while building a solid foundation for future productivity.

WHY CHOOSE MOOG AS YOUR SERVICE PARTNER

- All Moog installed products such as Servo Valves, Servo Drives tested to original equipment specifications for both static and dynamic response
- Only original equipment specification parts used
- Assurance of having back up engineering staff available as support
- The security of a major international partner
- Capability extended to inspect, repair and functionally test non Moog servoactuators
- The ability to understand your systems beyond the servoactuator
- Full dynamic performance report available - option
- 12 month warranty on repaired products
- Extended warranty - option
- Specific upgrade programs available

A PROACTIVE APPROACH TO SERVICE KEEPS THE POWER ON

When a top European provider of electricity for residential customers began to experience leakage on their Moog J085 hydraulic actuators on their steam turbines, they realised that if they didn't address the problem immediately, the long-term cost implications could soar. The company turned to Moog for a comprehensive and time-sensitive maintenance program that would help them to avoid expensive, unforeseen downtime beyond the scheduled shut-down time.

The Request

Improve the reliability and efficient performance of the steam turbines by minimising service-related downtime, extending duty cycles of the actuators, and providing virtually on-demand service to meet customer requirements.

The Solution

To meet the customer's needs, Moog assembled a global team of experts from Italy, the United Kingdom, Japan, China and the United States, and committed to a service touch-time of just 72 hours.



This unsurpassed level of support required Moog to establish a dedicated workshop in Europe with specialised tools and equipment, trained technicians, and expedited repair protocols to ensure peak performance from the serviced actuator units. In addition, Moog proactively produced detailed documentation that incorporates valuable information such as on-receipt and final acceptance tests, unit photography, and recommendations on improving equipment performance.

The Result

Moog's solution delivered significant savings by dramatically reducing the risk of downtime of the steam turbines and minimising the customer's maintenance shutdown time when servicing the hydraulic actuators. The customer was delighted and surprised by the Moog service team's ability to work around their somewhat unpredictable schedules. Furthermore, the customer's reliance on Moog actuators means extended cycle times despite rugged operating conditions.

YOUR MOOG SERVICE TYPICAL PROCESS

YOUR MOOG SERVICE

Our engineers work with you to plan your outage and to make sure your actuators are with us for minimal time



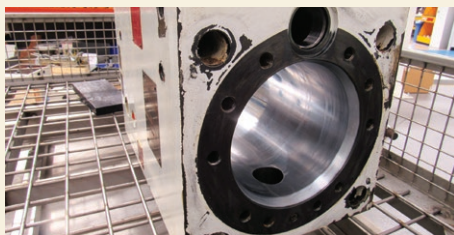
Your actuators are received by Moog trained technicians who carefully transfer your actuators to our building, unpack and crane them to purpose built pallets, ready for on receipt inspection reports.



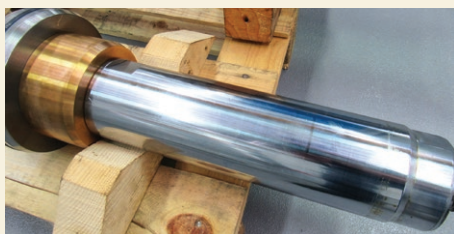
Once the actuator is craned into position, oil is drained out and replaced with clean oil and we perform an on receipt test to original specification.



Special care is taken as the spring is decompressed prior to strip down, following a detailed inspection of components, looking for wear, corrosion, physical damage and lacquering.



Any Moog valves are sent to our onsite service centre for repair, and any other parts identified as above and beyond the initial briefing are sourced and the remaining components are cleaned.



Parts requiring us to use Moog Certified partners are sent offsite such as the re-chroming of piston rods and those requiring painting are transferred to our in-house spray booth.



Once all the components are ready, highly skilled Moog trained technicians reassemble the actuators using authentic OEM parts including new seals, bearings, piston rods and body, and perform full load and performance testing.

THE MOOG FACTORY REPAIR ADVANTAGE

Key reasons so many maintenance managers rely upon Moog Factory Repair to stay productive:

AUTHENTIC MOOG PARTS

Moog does not sell parts for servo valves, actuators, pumps, drives and other Moog products to independent repair centres. Moog is the only repair facility that replaces defective parts with new authentic Moog parts.

Moog frequently updates older components to the latest configuration to ensure that your systems are operating at maximum reliability and efficiency. Often times your repaired item leaves our facility better than when originally manufactured.

MOOG EXPERTISE

Moog works to determine the root cause of the failure. We then make recommendations aimed at decreasing downtime, minimising repair costs and increasing productivity. Through close collaboration with you, Moog and your authorised distributor can tailor a valve and actuator preventative maintenance program that meets your specific needs.

REPAIR QUALITY AND REPORTING

Moog standard inspection reports identify physical damage, contamination and other observations. Moog will replace these parts and report any findings that allow your Moog authorised distributor to solve issues with your hydraulic system.

Moog provides a full test report with test data and performance charts, not just a certificate stating the valve was tested. Most products are tested on automated equipment with data acquisition systems, so you can be assured the information is accurate and professional.

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MOOG WARRANTY

Moog is so confident in our craftsmanship that we provide the same warranty on a repaired component unit we would for a brand new one. In the case of servo valves, actuators and process valves that currently means 12 months.

OUR APPROVALS

Moog customers benefit from the following standards and approvals.

British Standards Institution

BS EN ISO 9001:2008. Registration number is FM 13218

ATEX

BASEEFA approved for the supply of components used in "POTENTIALLY EXPLOSIVE ATMOSPHERES". Manufactured in accordance with BS EN ISO/IEC 80079-34:2011.

Authorised Economic Operators (AEO)

Approved by H M Revenue and Customs as an Authorised Economic Operator including Security and Safety. Certificate Number GB AEOF 00092/08.

Environment

Moog Industrial Group Tewkesbury is registered as complying with the requirements of BS EN ISO 14001:2004. Registration number is EMS 576922.

Please contact us for a full copy of our Company Profile.

