Repair Services for Servo and Spindle Motors

Servo and spindle motors are very specialist machines. They consist of precision mechanical parts and electronic components. Sulzer has the skillset and experience in electronic, electrical and mechanical repair along with dedicated test facilities to expertly and efficiently carry out repair, overhaul and testing of your equipment.

Our fully audited quality assurance system ensures your machine is in the safest hands throughout the whole process. Sulzer provides a full turnkey service solution, offering great value for money and return on your investment at a fraction of the cost of new equipment.

Service offering
Our fully integrated electro-mechanical and electronic repair facilities offer you the complete solution, including:
- Repair and overhaul services
- Electrical fault finding, repairs and rewinds
- Mechanical repair and overhaul
- Demagnetising and re-magnetising
- Testing on drive – closed loop
- Feedback set up and test
- Load test facilities
**Assessment**
The initial assessment comprises of the following processes and tests:
- Electrical tests, drop tests, megger, hi-pot, and surge tests
- Mechanical assessment - state of fittings, shafts, covers, stator, etc.
- Determining feedback device and its pin out - testing via scopes, Mitchell TI 5000 - EX test unit, and other OEM specified equipment
- Operation of brakes and clutches checks, inspection of any incorporated gearbox as well as dynamic and stall torques checks
- Vibration analysis and thermography where applicable

**Strip down**
The motor is stripped and further detail taken:
- Any tooling required can be fabricated in house
- We have specialised fitting facilities with significant capacity
- Our job tracking system allows all notes, technical information and photographs to ‘follow’ the job and offers internal visibility
- Demagnetisation and re-magnetisation facilities are available
- All shafts, housings, and seatings are checked against specification

**Cleaning**
All components are carefully tended to and cleaned to suit the application.

We offer in-house steam cleaning, wet and dry glass blasting, “safe cleaning” with the use of enzyme-rich detergents. Solvents such as Isopropanol are used for the cleaning of electronics.

**Repair and overhaul**
- All faulty components are replaced or refurbished including seals, bearings, o-rings, plugs, sockets and mechanical fittings
- We have OEM support for most types of feedback devices
- All machining / mechanical work and electrical winding is undertaken at our facilities to ensure a complete, timely and high quality service

**Testing**
Once all repair and refurbishment work has been completed, all equipment is tested in our own comprehensive test facilities to ensure a quality repair.
- Feedback devices are re-aligned to OEM specification
- We have the capability to load test where applicable
- A run test is performed to specified speed on OEM drive, or using the Mitchell TI 3000 EX programmable run test system, testing all functions of the motor and its feedback device
- Finally, the motor is re-sprayed to previous colour or to customer request – and readied for despatch

**Equipment**
- AC and DC servo motors
- Spindle motors
- Stepper motors

**Applications**
- CNC machining centers
- Packaging and manufacturing machines
- Robotics

---

*Sulzer Dowding & Mills*

**Aberdeen (Dyce) Service Centre**
Unit 3/4 Kirkton Avenue
Pitmedden Road Industrial Estate
Dyce, Aberdeen
AB21 0BF
Phone: +44 (0) 1224 427 200
service.aberdeen@sulzer.com

**Falkirk Service Centre**
Lochlands Industrial Estate
Larbert
FK5 3NS
Phone: +44 (0) 1324 556 511
service.falkirk@sulzer.com

**Glasgow Service Centre**
Unit 1, Glasgow East Trade Park
Clydesmill Place
Cambuslang, Glasgow G32 8RF
Phone: +44 (0) 141 646 5020
service.glasgow@sulzer.com