Certificate No: LR2591107REP
Issue Date: 01/07/2025
Expiry Date: 30/06/2028

Certificate Of Thermal Spraying Approval

Manufacturer Sulzer Rotating Equipment Services

Address Clifton Moor, York Service Centre, Amy Johnson Way, York, YO30 4WT, United Kingdom

Process Plasma & HVOF

This certificate is issued to the manufacturer named above who has been approved in accordance with the requirements of Lloyd's Register for the reclamation by thermal spraying of specified components using the above processes in accordance with the approved procedures listed in this certificate.

Scope of Approval

Plasma and HVOF Thermal Spraying in accordance with the approved procedures listed below.

Plasma Spraying - Process 2000

- **Cylinder Liner Outer Diameter - Bescote 2401P**
- **Damper Units - Bescote 2606P**
- **Gearbox Bearing Housing Bore - Bescote 2604P**
- **Flange Mating Faces - Bescote 2604P**
- **Rotating Shaft Bearing and Seal Areas - Bescote 2604P or 2606P**
- **Circulating Pump Shaft Seal Areas - Bescote 2403 or 2410**

HVOF Spraying - Process 3000

- **Stern Tube Sleeves - Bescote 3604 or 3611B**
- **Hydraulic Rams, Piston Rods - Bescote 3303C and 3604**
- **Rudder Crosshead Pin - Bescote 3610**
- **Rotating Shaft Bearing and Seal Areas - Bescote 3604 or 3703**
- **Tail Shafts - Bescote 3602C**
- **Aquamaster Steering Tube Sleeve - Bescote 3604**

Lloyd's Register repair approval reference No. Rep 091.

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APPROVED

Clive Arnold

Metallurgy Team - Lead Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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Limitations

Lloyd's Register will consider thermal spraying for surface applications to improve resistance to wear and corrosion, and to restore worn or inaccurately machined parts to original dimensions. Approval is based, however, on the condition that no dependence is placed on the coating for tensile of torsional strength, and that machined preparations do not produce dimensions below rule requirements.

This approval is subject to compliance with the requirements of Lloyd's Register. Each application is to be separately approved by Lloyd's Register and carried out to the satisfaction of the Surveyor.

Lloyd's Register will consider thermal spraying for surfacing applications to improve resistance to wear and corrosion, and to restore worn or inaccurately machined parts to original dimensions. Approval is based, however, on the condition that no dependants is placed on the coating for tensile or torsional strength and that machined preparations do not reduce dimensions below Rule requirements.

Lloyd's Register is to be notified of any change of plant, formulation or quality control routines introduced during the validity of this Certificate.

This Certificate is issued to the above company and, subject to regular audits to ensure continued implementation of the thermal spraying procedures and quality system, is valid until the date given above.

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