

QUALITY SPECIFICATION 40-554

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Rev: 2
Date: 08.07.23

Requirements for Mechanical Seals Requiring Certified Material Test Reports

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Date 18.02.13
Amendment Details Initial Issue

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Amendment Details Purchasing Quality requirements detailed

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1.0 Scope

This specification details the minimum inspection, testing and certification requirements for mechanical seals requiring certified material test reports of chemical composition, mechanical properties and heat treatment and additional non-destructive examinations.

Unless otherwise specified, where Sulzer client's equipment specifications conflict with the requirements of this document, the client's requirements shall take precedence.

2.0 References

This specification makes reference to the following:-

ISO 9001	Quality Management Systems – Requirements
BS EN 10204	Metallic Products – Types of inspection documents
Global Directives	As applicable

3.0 Materials

Material type specification and grade shall be as stated in the Sulzer Purchase Order & documents referenced therein.

4.0 Quality System

- 4.1 Suppliers are required to implement Quality Management Systems meeting the requirements of [the latest edition of ISO 9001](#) or recognised international equivalents as appropriate to the supply of goods or services detailed in the Sulzer Purchase Order.
- 4.2 Suppliers are responsible for passing on the appropriate quality assurance requirements to their sub-suppliers.
- 4.3 Sulzer reserves the right to request review and retain for the duration of the Purchase Order a controlled copy of the supplier's Quality Manual or equivalent document and also to perform audits to verify satisfactory implementation of the Quality System.

5.0 Certification

- 5.1 The following documentation shall be provided as appropriate:
 - a) Certified material test reports (e.g., EN 10204 type 3.1) for Sleeve and Gland Plate.
 - b) Heat Treatment details
 - c) NDE reports on completion of surface examination (if applicable)
- 5.2 All documentation shall be in the English language, legible and suitable for reproduction.

6.0 Inspection

- 6.1 [All non-destructive examinations \(NDE\)](#), when applicable as shown within the ITP or customer specifications, shall be carried out on completion of the quality heat treatment [of the material and after finish machining of the components](#). [The supplier's NDE procedures shall be submitted for review and approval by Sulzer and/or the customer.](#)
- 6.2 The equipment and/or materials specified in the Purchase Order may be subject to inspection by Sulzer and/or their client's representatives. Such inspections do not relieve the supplier from obligations to ensure compliance with specifications/purchase order requirements.
- 6.3 Minimum witness inspection requirements shall be as detailed in the Purchase Order.
- 6.4 Sulzer and/or their client's representatives shall be afforded access and assistance at all reasonable times

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throughout the duration of the Purchase Order to carry out inspection and tests at the supplier's and/or sub-supplier's premises.

- 6.5 Where "Witness" or "Hold" points have been assigned, the supplier shall notify Sulzer giving the full notification period stated within the Purchase order (or associated documentation).

Notification may be given prior to the actual supplier internal inspection / test, however, a minimum of three working days shall be given between successful supplier internal test / inspection (where applicable) and witness inspection to allow for cancellation if required (unless agreed in writing with Sulzer).

During the notification period the supplier will ensure any issues that could affect the witness inspection date are discussed and communicated to Sulzer.

Notification for inspections shall be advised to Sulzer [as per the instructions in the Purchase Order](#) detailing:-

- a) Sulzer Purchase Order and Reference Numbers
- b) Location and date of proposed inspection/test
- c) Name of contact
- d) Inspection/test activity to be carried out

- 6.6 Suppliers shall be liable for all costs incurred by Sulzer associated with late cancellation or aborted inspection visits.

- 6.7 When required, it shall be the responsibility of the supplier to liaise with a Certifying Authority, providing information and access to works and personnel so as to satisfy the requirements of the applicable codes.

7.0 Product Marking

- 7.1 To provide traceability between the material and the documentation, each piece of material/component shall be individually marked, at a prominent location with the following:

- a) Melt/heat number
- b) Material grade and class
- c) Sulzer Purchase Order number, line item number and material number

8.0 [Global Directives \(UKCA, EU etc.\)](#)

- 8.1 All equipment and services supplied to Sulzer must be in accordance with all applicable [Global Directives](#) and supplied with appropriate declarations.

It is the responsibility of the supplier to identify those directives applicable to the equipment and services supplied.

9.0 Documentation

- 9.1 Documentation requiring submission for review and/or approval by Sulzer and/or their client shall be identified in the purchase order equipment specifications.
- 9.2 Documentation/Certification required shall be identified in the Purchase Order equipment specification and/or standard to which the equipment is to be manufactured.
- 9.3 Original or verified copies of original test reports or certificates are required in all cases unless agreed otherwise in writing by Sulzer Quality Assurance Department. All test reports and certificates shall be complete, legible and suitable for [reproduction](#).
- a) An original test report or certificate is defined as the face document with original signature, stamps and endorsements where applicable
 - b) A verified test report or certificate is one that is signed and dated by a responsible person in the supplier's Quality Department, verifying the document as a true copy of the original manufacturer's

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certificate

- c) Where Independent Inspection Authority endorsed certificates are required, copies of such certificates shall be re-endorsed by the same inspection authority

- 9.4 Unless otherwise specified, all documents shall be in the English language or, if this is not possible, accompanied by a certified English language translation.
- 9.5 The supplier's quality representative shall endorse each test report or certificate to signify compliance.
- 9.6 The supplier shall have sole responsibility for ensuring that all documents provided by their sub-suppliers are in accordance with the requirements of this specification.

10.0 General Notes

- 10.1 All certification and delivery advice documentation shall include the Sulzer Purchase Order number, line item number and material number.
- 10.2 All documentation shall be provided on or prior to delivery of the material.
- 10.3 Acceptance of the material shall be on satisfactory compliance to the purchase order requirements.
- 10.4 All standards referenced shall be current issues unless stated otherwise.
- 10.5 Failure to comply with the above requirements could result in rejection or delayed payment of invoices.