TEST REPORT

8175

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Technical Approval:	**Mark Powers**
Date:	**27th February 2025**
	Ingress Protection Test Report
	LabTecta Bearing Isolator
	AESSEAL plc
Report No:	**CML-IPTR18483-A**

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Contents

1. Introduction

Test Report Number:	CML-IPTR18483-A
Carried out by CML on behalf of:	AESSEAL plc Mill Close Rotherham South Yorkshire S60 1BZ

This report confirms compliance of the sample tested against the agreed test plan.
Compliance of other samples cannot necessarily be inferred. It refers to the performance of the test sample that has been tested in accordance with IEC 60529:1989+A2:2013 in relation to the Ingress Protection Code IP66.

The tests were completed under the scope of Eurofins E&E CML Limited's UKAS accreditation to ISO/IEC 17025.

Manufacturer:	AESSEAL plc
CML Sample Reference:	S18483-1
CML Internal Test Report:	20250123.13 (IP6X) 20250205.14 (IPX6)
Model Identification:	LabTecta Bearing Isolator
Standard:	EN 60529:1991+A2:2013 IEC 60529:1989+A2:2013
Standard Deviations:	None
Test Classification Aim:	IP66
Test Dates:	6th February to 17th February 2025

2. Sample Description

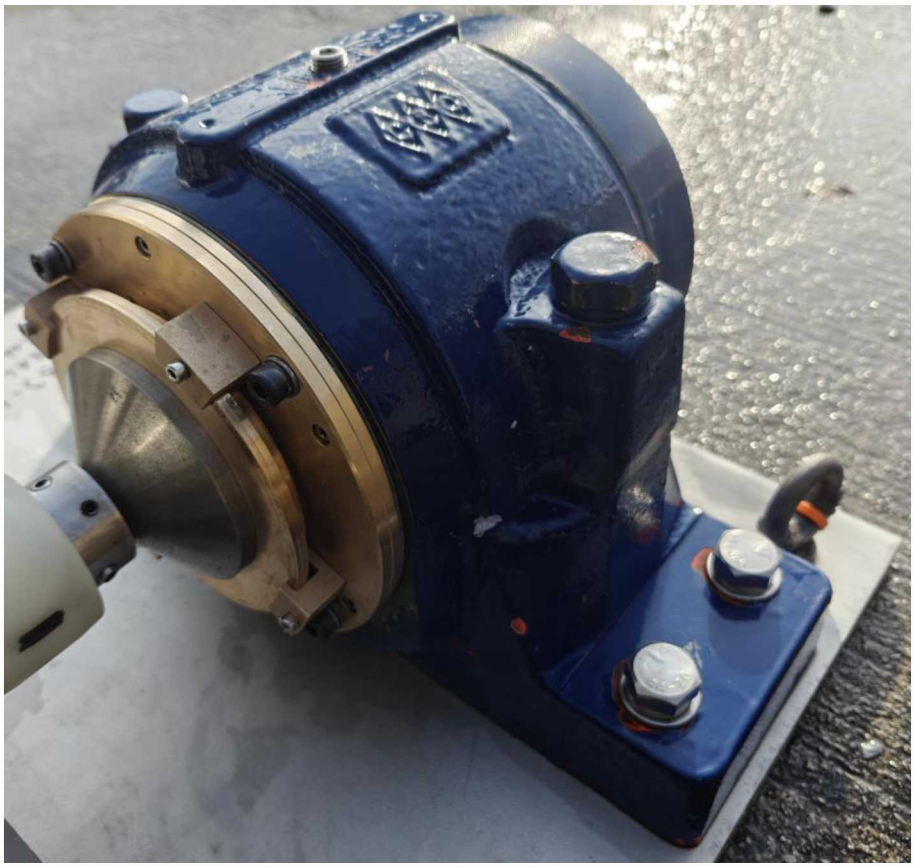

Figure 1 – Image of LabTecta Bearing Isolator

Figure 2 – Image of LabTecta Bearing Isolator

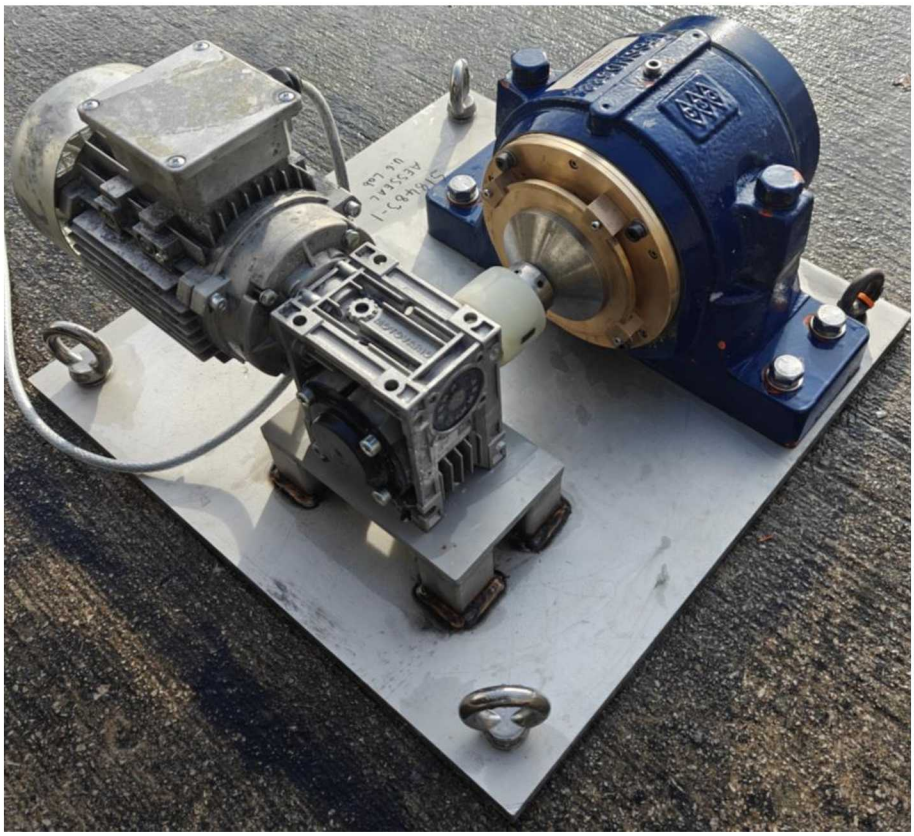

Figure 3 – Image of LabTecta Bearing Isolator and test bed shaft rotation apparatus setup

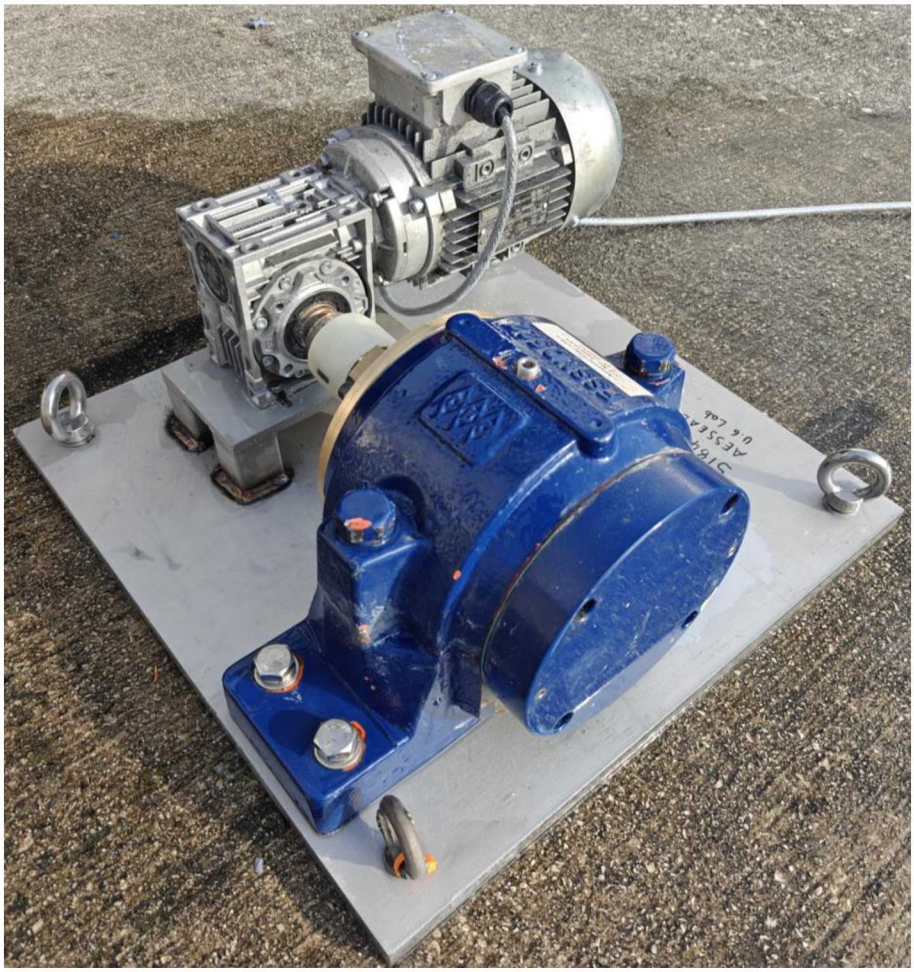

Figure 4 – Image of LabTecta Bearing Isolator and test bed shaft rotation apparatus setup

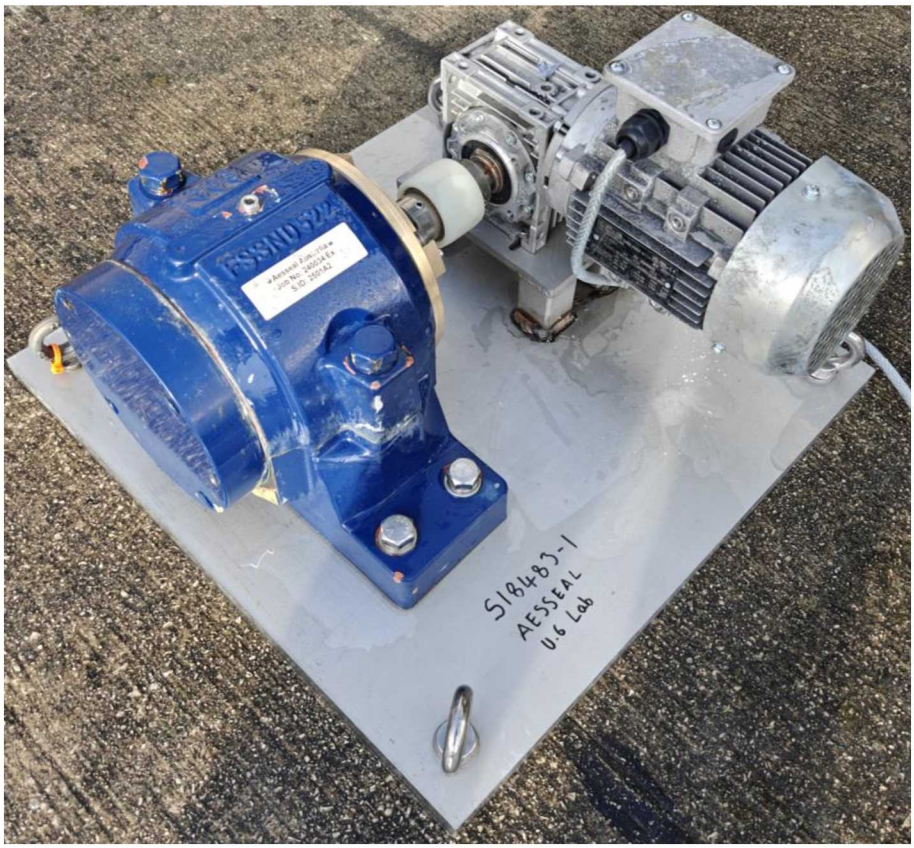

Figure 5 – Image of LabTecta Bearing Isolator and test bed with shaft rotation apparatus setup

Figure 6 – Image of LabTecta Bearing Isolator and test bed with shaft rotation apparatus setup

Figure 7 – Image of LabTecta Bearing Isolator and test bed with shaft rotation apparatus setup

3. Tests for First Characteristic Numeral 6

Tests were carried out on S18483-1

3.1 Test for protection against access to hazardous parts

Reference IEC 60529:1989+A2:2013 clause 12.

A rigid test probe with a diameter of 1.0mm and a length to a stop face of 100 mm was pushed against all openings of the test sample with a force of 1N ±10%.

The test probe did not enter the enclosure nor come in to contact with any hazardous parts.

3.2 Test for protection against solid foreign objects – Rotary.

Reference IEC 60529:1989+A2:2013 clause 12.

The sample was placed inside a chamber that was fitted with a powder circulation pump and contains approximately 2kg of powder per cubic metre with a maximum particle size of 75µm. The shaft of the sample was energised to a rotational speed of 150 RPM and remained in the energised state until the completion of the test. The sample was connected to a vacuum pump to draw air into the sample. The test duration was 8 hours.

After the test had concluded, an internal inspection was carried out. No ingress of dust was evident.

3.3 Test for protection against solid foreign objects – Stationary.

Reference IEC 60529:1989+A2:2013 clause 12.

The sample was placed inside a chamber that was fitted with a powder circulation pump and contains approximately 2kg of powder per cubic metre with a maximum particle size of 75µm. The shaft of the sample was stationary for the duration of the test The sample was connected to a vacuum pump to draw air into the sample. The test duration was 8 hours.

After the test had concluded, an internal inspection was carried out. No ingress of dust was evident.

4. Test for Second Characteristic Numeral 6

Tests were carried out on S18483-1

4.1 Test for protection against water – Rotary.

Reference IEC 60529:1989+A2:2013 clause 14.2.6.

The sample was mounted horizontally and the shaft of the sample was energised to a rotational speed of 150 RPM and remained in the energised state until the completion of the test. Water from a standard IPX6 water spray nozzle was directed at the sample from all practical directions. The sample was subjected to a flow rate of 100 L/min ± 5 % from a distance between 2.5 to 3 metres for 3 minutes.

After the test had concluded, an internal inspection was carried out. No ingress of water was evident.

4.2 Test for protection against water – Stationary.

Reference IEC 60529:1989+A2:2013 clause 14.2.6.

The sample was mounted horizontally and the shaft of the sample was stationary for the duration of the test. Water from a standard IPX6 water spray nozzle was directed at the sample from all practical directions. The sample was subjected to a flow rate of 100 L/min ± 5 % from a distance between 2.5 to 3 metres for 3 minutes.

After the test had concluded, an internal inspection was carried out. No ingress of water was evident.

5. Conclusion

The test sample described in sections 1 and 2 of the report was subjected to the tests outlined in sections 3 and 4. The tests and the outcome of the tests met the requirements of IEC 60529:1989+A2:2013, for the ingress protection classification of IP66 in both rotary and stationary states.

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