[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Component Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3] EU-Type Examination Certificate Number: **DNV 25 ATEX 53844U** **Issue 0**

[4] Component: **MAGDRIVE magnetic coupling**

[5] Manufacturer: **Specialist Tooling Technologies Ltd**

[6] Address: **Unit 2 Park 32, Park Road, Pontefract, WF8 4PS West Yorkshire United Kingdom**

[7] This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 and Article 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in confidential reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018, EN ISO 80079-36:2016 and EN ISO 80079-37:2016**

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10] The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This partial certification may be used as a basis for certification of an equipment or protective systems.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified component in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

[12] The marking of the component shall include the following:

Ex **II 1 G** **Ex h IIB Ga**

Date of issue:
2025-10-21

NORSK AKKREDITERING
PROD 021

Ståle Sandstad
For DNV Product Assurance AS
The Certificate has been digitally signed.

[13] **Schedule**

[14] **EU-Type Examination Certificate No:** DNV 25 ATEX 53844U Issue 0

[15] **Description of Component**

The MAGDRIVE is magnetic coupling intended to be incorporated as in a fan for use in Zone 0.

It consists of top flange plate, flanged bearing housing which is bolted to the underside of the top flange plate and sealed, and drive shaft.
Drive shaft has a pulley mounting to it with magnets embedded around the face. These magnets interacts with the motor pulley magnets (mounted outside the flange plate) to create a magnetic lock between the 2 pulleys.
The bearing housing has upper and lower deep groove ball bearings with rotating lubricant flingers / reservoirs underneath, bearing spacer sleeves incorporating the upper flinger lock nut.
End of the tube vs drive shaft is sealed by primary and secondary radial seals (made from conductive material) sandwiched between stainless steel plates together with a gasket seal and secondary 'O' ring. The bottom end of drive shaft is threaded for fan impeller mounting.

Type designation: MAGDRIVE

Rating
Max. speed: 1461 RPM

Routine tests
N/A

[16] **Report No**.: PRJN 654693/00
Project No.: PRJN-654693

[17] **Schedule of Limitations**

1. Fan impeller isn't part of magnetic coupling and must be assessed together with the MAGDRIVE acc. to EN 14986:2017
2. Max allowed rotational speed of the magnetic coupling is 1461 RPM.
3. Coupling is intended for vertical position with the shaft facing down.
4. Maximum allowed axial and radial load of the bearings must not be exceeded.
5. Ignition prevention system (IPS) type b1 shall be applied to prevent the unsatisfactory vibration level (normal value: <2.5 mm/s, critical value: 7 mm/s). Clauses 6.1, 6.3, 6.4, 6.5.1, 8.2.2 and 9.2 of EN ISO 80079-37:2016 must be evaluated.
6. The coupling must be connected to earth or mounted on the part which is in contact with the earth.
7. Max. service temperature range: -20°C to +150°C. Maximum surface temperature rise determined to ΔT=30K at the ambient temperature: -20°C to +40°C.
8. Bearings, Grease, Seals and wave spring should be replaced after 5500 h running or after two years, whichever occurs first.
9. Manufacturer's instructions for incorporation into Ex products must be considered.

[18] **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

[19] **Drawings and documents**

Number	Title	Rev.	Date
41005-01	MOTOR PULLEY	C	2025-06-05
41005-02	MOTOR PULLEY BOTTOM	B	2025-06-04
41005-09	SEAL END GASKET	C	2025-05-08
41005-10	TRANSFER PLATE SEAL	A	2025-06-04
41005-101	FLANGE PLATE	C	2025-06-08
41005-102	MOTOR MOUNTING RING	D	2025-06-08
41005-103	DRIVE TRANSFER PLATE	C	2025-05-08
41005-104	FLANGE SEAL	C	2025-05-08
41005-105	STOP WASHER	A	2021-07-31
41005-106	BEARING HOUSING	F	2025-06-08
41005-107	SEAL CLAMP	D	2025-05-15
41005-108	SEAL CLAMP PLATE	D	2025-06-03
41005-109	SHAFT NUT	C	2025-06-03
41005-110	BEARING SLEEVE	D	2025-06-03
41005-112	SHAFT	D	2025-06-03
41005-117	M6 OVERSIZED WASHER	A	2025-05-08
41005-118	COUPLING KEY	A	2025-07-29
41005-900	MAG DRIVE ASSEMBLY	F	2025-08-09

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2025-10-21	PRJN-654693/00