An-Institut der TU Bergakademie Freiberg

[1] **EU-TYPE EXAMINATION CERTIFICATE** - Translation

[2] Equipment or protective systems intended for use in potentially explosive atmospheres, Directive 2014/34/EU



[3] EU-type examination certificate number IBExU20ATEX1112 X | Issue 0

[4] Product:

Magnetic Separator SECA/MA

Sizes:

- 200 mm x 200 mm
- 300 mm x 300 mm.
- 400 mm x 400 mm.
- 600 mm x 400 mm,
- 800 mm x 400 mm.
- 1000 mm x 400 mm

The "X" are used as placeholders for different designs. The "X" encode both numbers and capital letters. An overview of the permissible designs is given in [15] of this EU-type examination certificate.

[5] Manufacturer:

Goudsmit Magnetic Systems

[6] Address:

Petunialaan 19 5582 HA Waalre THE NETHERLANDS

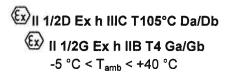
- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] IBExU Institut für Sicherheitstechnik GmbH, Notified Body number 0637 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product 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.

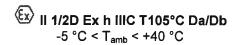
The examination and test results are recorded in the confidential test report IB-20-2-0058.

- [9] Compliance with the essential health and safety requirements has been assured by compliance with: EN ISO 80079-36:2016 EN ISO 80079-37:2016 except in respect of those requirements listed at item [18] of the schedule.
- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule to this certificate.
- [11] This EU-type examination certificate relates only to the design and construction of the specified product. Further requirements of the directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

An-Institut der TU Bergakademie Freiberg

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





IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

By order

Dipl.-Ing/Willamowski



Tel: +49 (0) 37 31 / 38 05 0 Fax: +49 (0) 37 31 / 38 05 10

Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail,

Freiberg, 2020-11-02

An-Institut der TU Bergakademie Freiberg

[13] Schedule

[14] Certificate number IBExU20ATEX1112 X | Issue 0

[15] Description of product

The magnetic separators mentioned in [4] consist of a main housing and a disposal housing. Depending on the type of explosion hazard, the side walls of the housings are made of PETG (dust Ex) or stainless steel (gas Ex and dust Ex).

The main housings contain 2 to 10 magnetic bars, depending on the housing size. Each magnetic bar consists of a magnetic package (length and diameter depend on the size), which is inserted into a thin-wall tube. The back and forth movement of the magnetic bars and the removal of the magnetic package occur pneumatically.

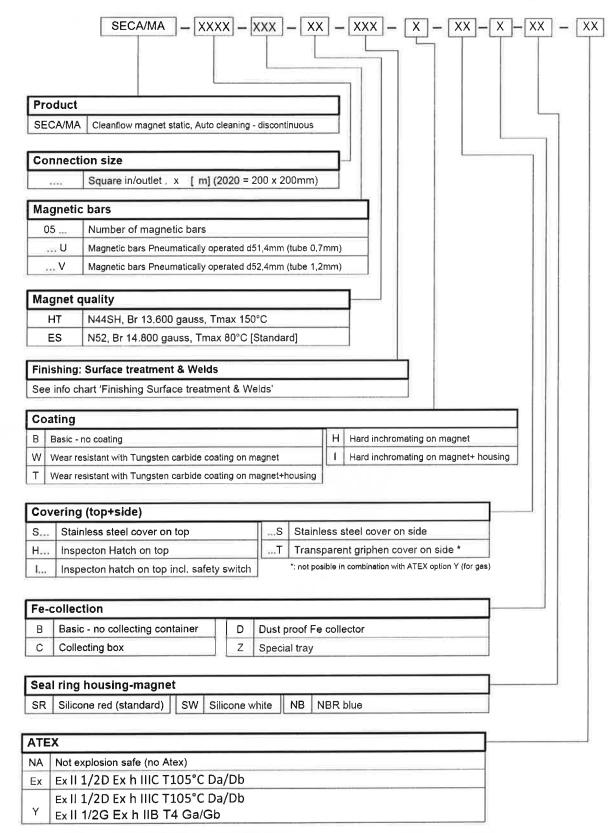
Unless otherwise specified, the main material of the magnetic separators is stainless steel.

More details to the construction of the magnetic separators can be found in the manufacturer's documents and the test report IB-20-2-0058 of 30 October 2020.

Page 3/5 IBExU20ATEX1112 X | 0

An-Institut der TU Bergakademie Freiberg

The product key SECA/MA-XXXX-XXX-XXX-XXX-XXX-XX-XX is decoded as follows:



[16] Test report

The test results are recorded in the confidential test report IB-20-2-0058 of 30 October 2020. The test documents are part of the test report and they are listed there.

An-Institut der TU Bergakademie Freiberg

Summary of the test results

The product mentioned in [4] meets the requirements of explosion protection for equipment of Equipment Group II, Category 1D or 1G inside and 2D or 2G on the outside in type of protection "c" (constructional safety, marking with "Ex h") for use with explosive dust atmospheres caused by flammable substances of Explosion Groups IIIC, IIIB and IIIA and explosive gas atmospheres caused by flammable gases / vapours / mists of Explosion Groups IIB and IIA.

[17] Specific conditions of use

- 1. A definite type designation must be created for each device. This type designation must be applied to the type plate on the device and included in the respective EU-declaration of conformity for the device. It is not permitted to use the product key with "X" as placeholders on the type plate and in the EU-declaration of conformity.
- 2. When operated in explosive gas atmospheres, the gases must have ignition temperatures of > 135 °C (corresponds to Temperature Classes T1 to T4).
- 3. The devices may only be operated in explosive atmospheres with gases / vapours / mists of Explosion Groups IIB and IIA.
- 4. The devices may only be used for bulk materials as specified in the operating instructions. The smouldering temperature (minimum ignition temperature of a dust layer with 5 mm thickness) of the dusts must not be less than 180 °C. The ignition temperature (minimum ignition temperature of a dust cloud) of the dusts must not be less than 158 °C.
- 5. Insulating coatings on the outer surface of the device must not have a layer thickness of > 2 mm. The inner surface must not be provided with any coating.
- 6. The temperature of the product to be processed must not be higher than +80 °C.
- 7. Before longer standstill, the device must be emptied.
- 8. The devices must be integrated into the equipotential bonding of the entire plant.
- 9. The free fall height of the product must not exceed 10 m.
- 10. It must be ensured that no particles greater than 10 mm can enter the devices together with the product flow.
- 11. Entry of glow nests and other ignition sources into the devices must be avoided.
- 12. If explosive gases, vapours or mists are present in the device, the entry of bulk materials which are capable of becoming effective as an ignition source for the gases, mists or vapours due to their own electrostatic charge must be prevented (e.g. rechargeable plastic granulates with solvent vapours).
- 13. The safety measures specified in the operating instruction must be observed.

Issue

[18] Essential health and safety requirements

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report:

Clause

Subject

[19] Drawings and Documents

Number Shee

Sheet

Date

Description

The documents are listed in the test report.

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

By order

Dipl.-Ing. Willamowski

Freiberg, 2020-11-02