



(1) **EC-TYPE-EXAMINATION CERTIFICATE
(Translation)**

(2) -Directive 94/9/EC-
Equipment intended for use in Potentially Explosive Atmospheres



(3) **No. FSA 05 ATEX 1556 X**

(4) **Comil®**

of the company

(5) **Quadro Engineering**
(6) **613 Colby Drive, Waterloo, Ontario N2V 1A1
CANADA**

- (7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) FSA GmbH Certification Service, notified body number 0588 in accordance with article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential report number G-15-05 07 Z .
- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:
- EN 1127-1, EN 13463-1, EN 13463-5**
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- (12) The marking of the equipment shall include the following:

CE₀₅₈₈ Ex II 1GD (internal) / 2GD (external)
IIB 135°C (T4)
FSA 05 ATEX 1556 X



Mannheim, 15. 09. 2005

Manager notified body

Certificate provider

FSA GmbH
Dynamostr.7-11
68165 Mannheim
Tel: + 49 (0) 621 4456 1555
Fax: + 49 (0) 621 4456 1554



(13)

Schedule

(14) EC-TYPE-EXAMINATION CERTIFICATE

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(15)

Comil®

The Quadro Comil is a conical screen, size reduction mill. Product enters the top of the mill and is forced through a cone shaped, perforated screen by a rotating impeller. The product is size reduced as it passes through the screen and it then exits the bottom of the mill. The Comil is used to reduce the particle size of products. It is produced in an underdriven design and in an overdriven design. All types are available in a pressure resistant and pressure shock resistant design.

(16) Test report no. G-15-05 07 Z consists of 19 pages and contains 0 drawings.

(17) **Special conditions for safe use:**

This certificate concerns the types

Comil Modell 193, 197, 194, 196, 198, 199 und

Comil Modell U3, U5, U10, U20, U30

with the below given protective measures.

The allowable operating parameters are given in the Technical Bulletin.

Devices in Category 1 meeting the designation in (12) achieve their very high protection level only in conjunction with at least one of the two following protection measures: "pressure shock resistant / pressure resistant design" or "Inerting". These measures shall be assured by adhering to the minimum requirements cited in Chapter 11 and 12 of the ATEX Technical File – Comil.

The overdriven Comil is rated at T4 (135°C) for product temperatures up to 70°C for higher product temperatures (up to 120°C) it is rated at T3 (200°C). The underdriven Comil is rated at T4 (135°C) for product temperatures up to 60°C for higher product temperatures (up to 120°C) it is rated at T3 (200°C). Other values may be necessary for the identification of the Comil if the electrical components have higher maximum surface temperatures.

(18) **Essential Health and Safety Requirements:**

They are fulfilled by standards listed above.

FSA GmbH
Dynamostr.7-11
68165 Mannheim
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