(1) # EC-Type-Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 94/9/EC**

(3)	**Certificate Number**	**TÜV CY 15 ATEX 0205636 X**
(4)	for the equipment:	MILLS FOR POWDER COATING
(5)	of the manufacturer:	SBS Steel Belt Systems Srl
(6)	Address:	Vla Roncaglia, 14 20146 Milano ITALY
	Order number:	0205636
	Date of issue:	2015-12-17

(7) The design of this equipment or protective system and any acceptable variation thereto are specified in the schedule to this EC-Type-Examination Certificate and the documents therein referred to.

(8) TÜV CYPRUS Ltd, notified body No. 2261 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential report No. 15 0205636.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 13463-1:2009 **EN 13463-5:2011**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment which are not covered by this certificate.

(12) The marking of the equipment or protective system must include the following:

II 1/3 D IIIC T135°C
II 1/- D IIIC T135°C

TÜV CYPRUS Ltd (TUV NORD Group),

The head of the notified body

notified body Member of TÜV Nord 2261

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(13) SCHEDULE

(14) EC-Type-Examination Certificate No. TÜV CY 15 ATEX 0205636 X

(15) Description of equipment

The product, obtained after the working phase of the tape cooler (flakes, chips) will be ground in order to obtain a particle size appropriate to the type of application and market demand. This process is carried out by a machine called Micronizer Mill.
The granulated "chips" or flakes are then fed through a grinding mill. It consists of a rotor, fitted with pins, which rotate inside a chamber with serrated walls.
The chips, that are brought inside the grinding chamber by an air flow, collide violently with the pins and the wall and they are pulverized into a fine powder.
For a successful application, it is important that the particle size distribution (PSD) of the powder is closely controlled. This is achieved by introducing air into the grinder, which carries the powder particles up towards a fast-rotating wheel called "classifier".
The only particles below a certain size can be discharge. The parameters of air flow and the speed of the grinding chamber and classifier can be adjusted to vary and improve the PSD.
The powder still contained in the air flow passes through the bag filter and deposits on the external surface of the cartridge filter, while the "clean" air is expelled to the outside.
Successively the remaining powder that is deposited inside the bag filter is expelled and collected for disposal or recovery.

Technical data:

Type	Production capacity (Kg/h)
M10-XX	60-80
M20-XX	200-300
M30-XX	400-500
M40-XX	600-700
M50-XX	800-1000

XX = 01, 02.

01= Outdoor-rated due to the discharge of dust not quenched / or outdoor area classified Atex;

02= Outdoor -rated due to the discharge of dust quenched / no outdoor area classified Atex;

Physical and chemical characteristics of the paint dust

Max pressure in a closed vessel during the explosion of an explosive atmosphere	Pmax [bar]	9,5
Explosivity index	Kst [bar*m/s]	100-200
Minimum ignition energy	MIE [mJ]	5
The lowest temperature of a hot surface on which most flammable mixture of powders with the air turns on under specified test (MIT)	Tcloud [°C]	400
The lowest temperature of a hot surface at which ignition occurs in a layer of dust in the test conditions specified (5mm)	Tlayer [°C]	280
Mean diameter of the powder particle	Dm [µm]	50
Lower Explosive Limit	LEL [g/m^3]	15
Humidity	[%]	Negligible
Class of the dust	ST 1-6	ST 1-2
Maximum concentration of oxygen	LOC [%]	10-15%

All components installed already ATEX certified comply with the marking of the mill.

(16) Test documents are listed in the Assessment Report No.15 0205636

(17) Special conditions for safe use

The following interlock to the mill functioning shall be set before operation:

High Temperature in the grinding chamber	+75 °C
High Vibration in the grinding chamber	2g

(18) Essential Health and Safety Requirements

No additional ones.