

(13) **SCHEDULE**

(14) **EU-Type-Examination Certificate No. TÜV CY 23 ATEX 0206850 X**

(15) Description of equipment

The automatic bags-emptying units type EX-SVR **** are machineries designed for the opening and emptying of bags made of different materials, e.g. paper, polyethylene, paper with polyethylene layer, raffia, jute. The bags may contain powder or granules.

The pristine bags are loaded into the feeding inlet and cut (bag loading and cutting area). Different types and number of saw blades and cutting tools can be used, depending on the application (size and weight of the bag and the general characteristics of the handled product) and the type of material the bags are made of. After being opened, the bag is then loaded into the rotary drum. The product is separated from the bags and conveyed into the discharge hopper, while the empty bags are removed from the drum by passing through a special discharge outlet.

The inner volume of the bag-emptying unit is classified as hazardous area Zone 20 (EPL Da); the volume around the unit either as hazardous area Zone 21 (EPL Db), or Zone 22 (EPL Dc), or as non-hazardous area.

The feeding inlet, the case containing the rotary drum, the discharge outlet and the discharge hopper are made of painted carbon steel or stainless steel (AISI 304L or AISI 316L). The rotary drum is made of stainless steel (AISI 304L or AISI 316L). The cutting tools and blades can be made of different metals or metal alloys depending on the application, as specified in technical documentation. The rotary drum is supported and driven by wheels made of conductive polymeric material. The wheels are placed on shafts connected to a chain drive. All bearing units on moving shafts (wheels, cutting tools/blades, rollers) are provided with an air flushing system to prevent dust ingress.

All main parts, and the insulated metallic parts, of the bags-emptying unit are equipotential connected by means of copper braids, bonding jumpers and/or ground conductors.

This certificate covers the mechanical fixed and moving parts of the assembly, as specified in the technical documentation attached to the certification report.

Only the accessories (different types of cutting inlets, hoppers, and rotating drums) that are specified in the technical documentation attached to the certification report can be installed on the machinery.

EX-SVR **** main dimensions:

Model	Drum	
	Diameter (mm)	Length (mm)
150	700	1676
300	1050	1998
600	1050	2468
1000	1050	2958
1300	1300	2958

Characteristics of the combustible dust that could be processed by the bags-emptying unit:

Minimum ignition energy (MIE):	≥ 3 mJ
Minimum ignition temperature (cloud):	$\geq 210^{\circ}\text{C}$
Minimum ignition temperature (5 mm layer):	$\geq 210^{\circ}\text{C}$
Material resistivity:	$\leq 10^{10} \Omega\text{m}$, or $> 10^{10} \Omega\text{m}$ and $W_{\text{cone discharge}} \leq 3$ mJ
Product temperature at machinery inlet	$\leq 40^{\circ}\text{C}$

Warning labels:

None.

Allowable ambient temperature range:

Ambient temperature: $-5^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$

(16) Test documents are listed in the test report No. 23 0206850

(17) Special conditions for safe use

- The end user shall refer to the use and maintenance manual for the periodic check, and related maintenance, of the equipotential bonding and grounding systems of the rotary drum.

- If the unit is installed in zone 21 or 22, the end user shall clean the equipment to prevent the build-up of dust on the surfaces (the maximum thickness of the dust layer shall be less than 5 mm) and to prevent the accumulation of dust in the gaps of the moving parts.

- The end user shall prevent the introduction of foreign metallic objects weighing more than 1 kg.

- Grounding of the bags-emptying unit and related accessories must be done by the end user, according to the instructions provided in the use and maintenance manual.

(18) Essential Health and Safety Requirements

No additional ones.