

EX-PROTECTOR SYSTEM FOR OSCILLATING SCREENING MACHINES

Flameless explosion venting for highest operational safety





Explosions and their devastating effects are one of the most feared risks in woodworking plants.

Many precautions can be reasonably undertaken to avoid both explosive atmospheres and ignition sources: all these measures will reduce the probability of an explosion, yet they can't prevent it from occurring!

The implementation of suitable venting systems is an indispensable, complementary means of protection.

«EX-PROTECTOR» systems for flameless explosion venting on screening machines, featuring REMBE «Q-BOX», have been conceived by CMC TEXPAN with the specific purpose of reducing the safety distance to be kept around the machine, enabling a smoother and easier installation also in indoor applications.

The main components of an «EX-PROTECTOR» unit are:

- the connection system on the inlet and outlet hoppers;
- the REMBE "Q-Box unit";
- the locating structure.

The connection system on the inlet and outlet hoppers has been designed as a replacement for traditional textile sleeves. It consists of a flanged connection, provided with spring suspensions to compensate the slight movement in height of the screening machine, as well as of a sliding shoe out of a special low-friction plastic material, which follows the horizontal displacement of the machine during the vibratory motion.

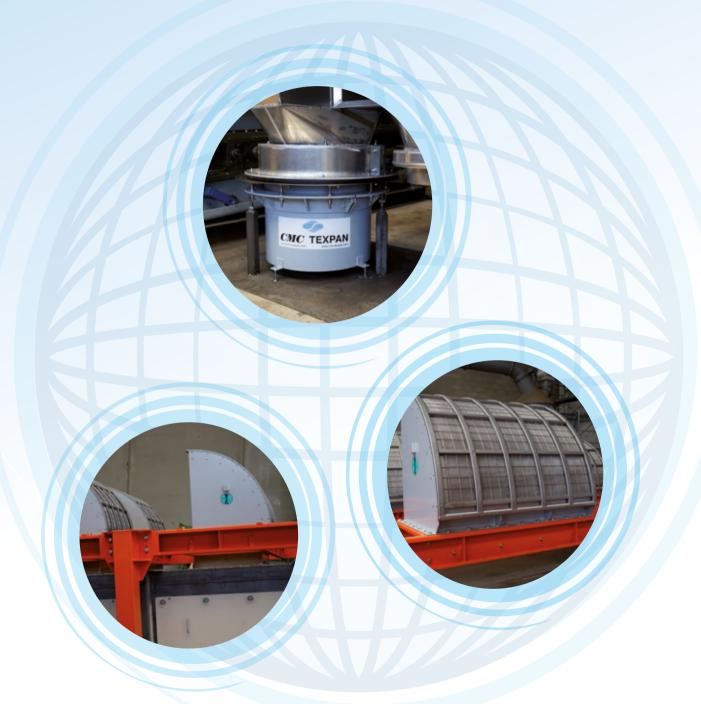






A group of REMBE "Q-Box units" is located on the upper section of the screening machine, instead of the traditional bursting panels. Their function is: to allow gradual venting in case of an explosion and to mitigate the pressure wave arising from the explosion itself. In this way, the flames and pressure wave will be reduced to non-critical-effects inside buildings, and the safety distances to be kept around the machines will decrease as well.

The REMBE "Q-Box unit" is installed on a frame with a particular fastening arrangement, whose function is to discharge the weight of the whole unit on the legs of the screening machine and not on the roof of the machine itself. In this way, the whole system becomes an independent structure, that's to a say a structure not resting on the roof of the screening machine; consequently, it can be retrofitted to existing screening machines as well.



Advantages:

- Flameless explosion venting: no heat, dust or pressure emerge from the machine
- -> high operational safety for equipment and personnel
- Reduction of safety distances to be kept around the machine:
- -> optimization of plant layout and space requirements
- Add-on structure, suitable for different applications
- -> optimal solution for retrofitting and upgrade projects

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