Dust Removal System

ROTOstream
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System description

The ROTOstream surface cleaner has been specially developed for dust removal on cardboard and corrugated applications and can be used on sheets as well as webs. Our special fast rotating brush, which turns against the substrate direction, when combined with a generated high velocity air flow will efficiently remove loose and slightly attached particles. It is positioned over the free web and as close as possible prior to the problem zone. ROTOstream adopts a revolutionary approach to improving quality, reducing down time and boosting profitability.

The development of this system is based on technology used in aviation and aerospace research where, through the use of specially shaped edges and profiles, the air is forced in a certain direction at extremely high velocity.

The ROTOstream is available for use on web widths from 200mm up to 3.5 metres in either a single or a dual side surface cleaning configuration. The compact design minimizes the space requirements for installation.

Our experienced application engineers can evaluate your machine and propose a solution for the implementation of ROTOstream into your production process.
Technology

The special brush technology of the ROTOstream, in combination with a vacuum air flow before and after the brush contact point, is brought into contact with the substrate surface. This mechanical as well as vacuum force loosens the particles and the air flow catches them and transports them into a filter system.

Ionisation

In many cases electrostatic charge present on the substrate surface is a major factor in increasing contamination and makes particle removal more difficult. It is well known that insulating materials such as film generate static charges by friction. This electrostatic charge also increases the bond between the particles and the substrate surface. The electrostatic charge can attract additional particles which are in close proximity to the substrate surface. The smaller the distance between particle and substrate surface, the greater is the force of the electrostatic field holding the particle down. This is why our static control system is always installed prior to the cleaning process to guarantee a neutralised substrate surface and therefore facilitate easier removal of all particles by the ROTOstream.

ROTOstream

System advantages

Application:
• Removes > 85% of loose particles > 35 µm
• Can be retrofitted to all machine types
• Minimised maintenance
• Low investment cost
• Easy installation

Economical:
• Increased profitability
• Reduced waste and down time

Ecological:
• No consumables, no washing liquids
• 40% lower energy consumption compared to other systems in its class