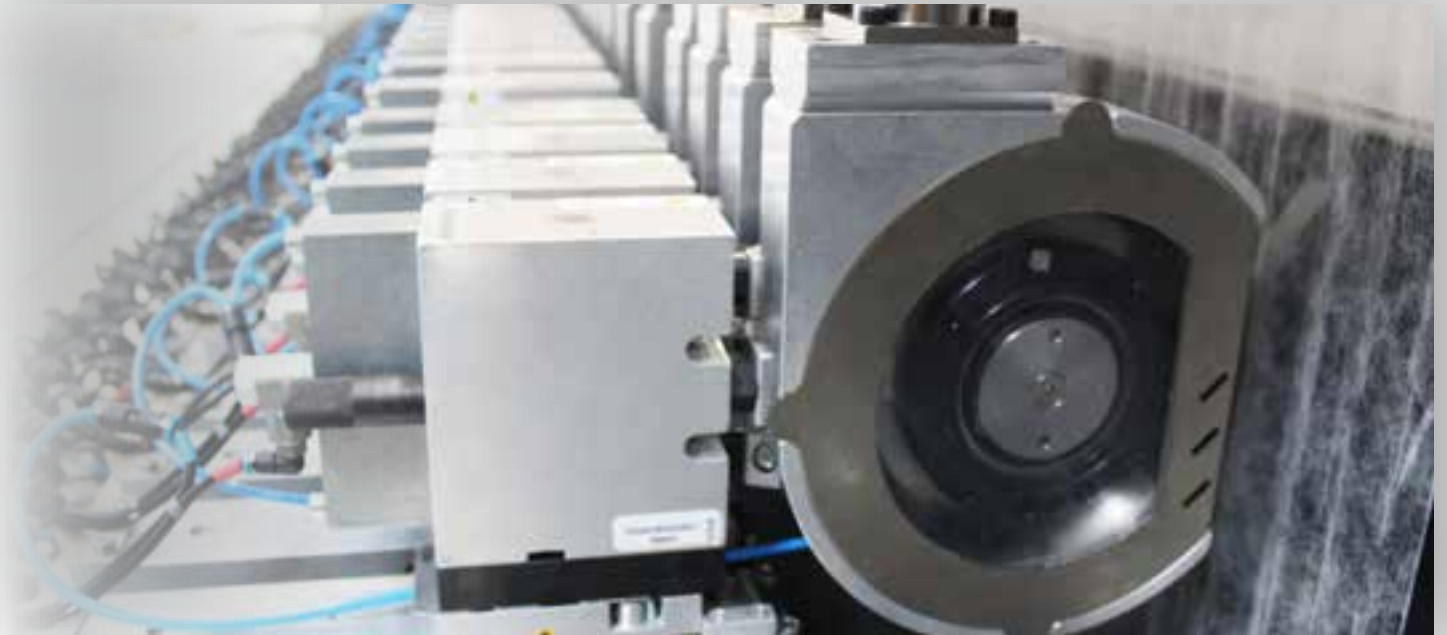


High efficiency slitting dust removal system

SLITstream SLITstream-N

6 / 12 kV **AUTO**^{DC} Technology



PROCESS
Analytics

INTUITIVE
Visualisation

industry
4.0

INTELLIGENT
Network

INTERACTIVE
Communication

SMART
Product

DATA
Logging

Slitting dust removal

System description

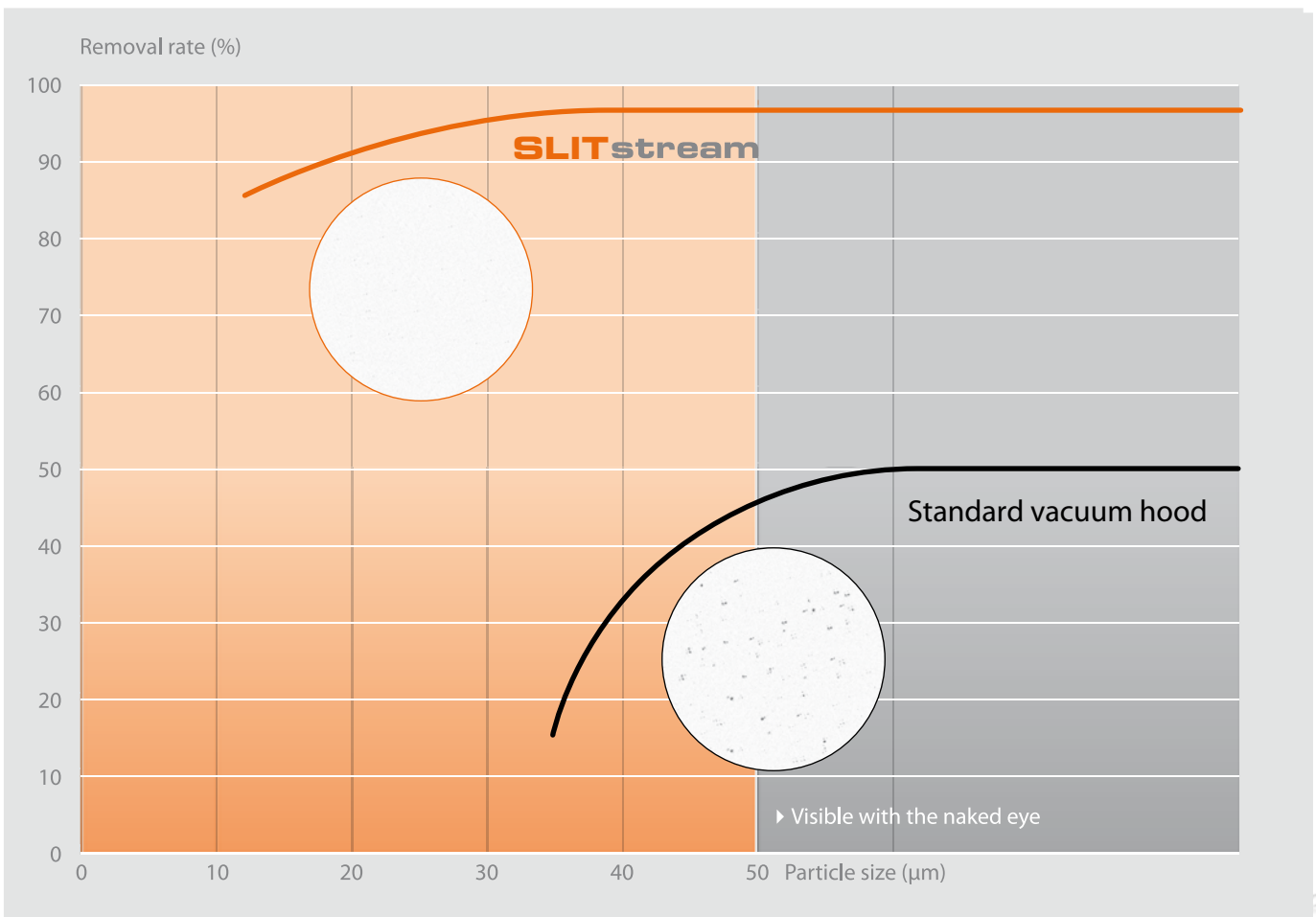
The **SLITstream** dust removal system, for shear cut knife units, was developed especially to remove the cutting dust generated at the knife's point of contact with the substrate. The specially designed dust extraction hood utilises the high velocity air flow generated within the system, which is directed at the top knife, to remove even the smallest of particles. The dust extraction is automatically engaged while the knife unit is energized. When the knife unit is switched off and in its rest position the hood completely encloses the knife. No manual adjustment is necessary. The system is available for new machine builds as well as for retrofit to knife units on existing machines. Old knife unit guarding can be upgraded by fitting a **SLITstream** system. The development of the **SLITstream** 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.

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



- > Tool free knife access
- > Full view of the complete slitting knife area
- > Side-Flow automatic self cleaning technology



System cleaning efficiency comparison

Technology

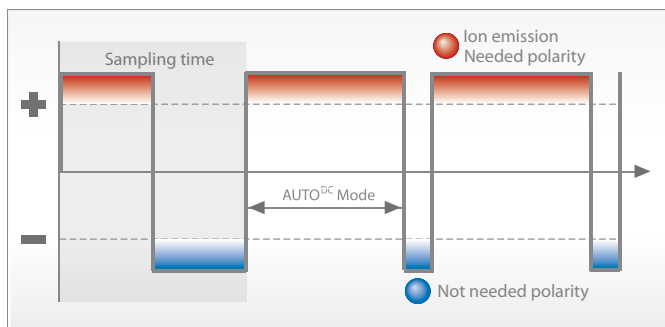
Research has shown that utilising a vacuum system in the knife hood efficiently removes dust at the cutting point. The applied air flow volume, speed and direction are the key parameters which dramatically influence the dust removing efficiency. The high performance **SLITstream** technology generates an air flow of **> 30 m/sec** parallel to the knife against the web/sheet run direction. To achieve this we have developed an air channel inside the hood, in line with the knife.



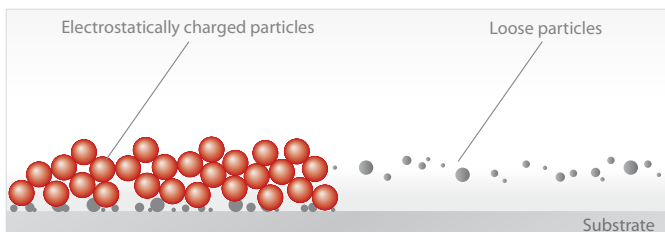
AUTO^{DC}® ionisation

Principle of function

In most 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 **AUTO^{DC}®** 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.



AUTO^{DC}® method



Particle behaviour without and with ionisation

SLITstream System advantages

Application:

- Removal rate > 95% of loose particles
- Side-Flow technology for automatic self-cleaning of the hood
- Tool free opening and knife access
- Can be retrofitted to all knife types
- High safety, low maintenance
- Low investment cost
- Easy installation

Economical:

- Drastically reduced cleaning times
- Prevention of claims due to dust

Ecological:

- No consumables
- 60% lower energy consumption compared to other systems



Applicable in many areas

The **SLITstream** and **SLITstream-N** slitting dust removal systems are positioned in close proximity to the knife and can be used in many different applications. Their modular design allows the installation of these systems onto almost any available knife holder types in the market today. This guarantees minimised investment cost at the highest possible level of dust removal efficiency close to **100%** cleaning.



SLITstream
Printing / Packaging printing of paper or cardboard

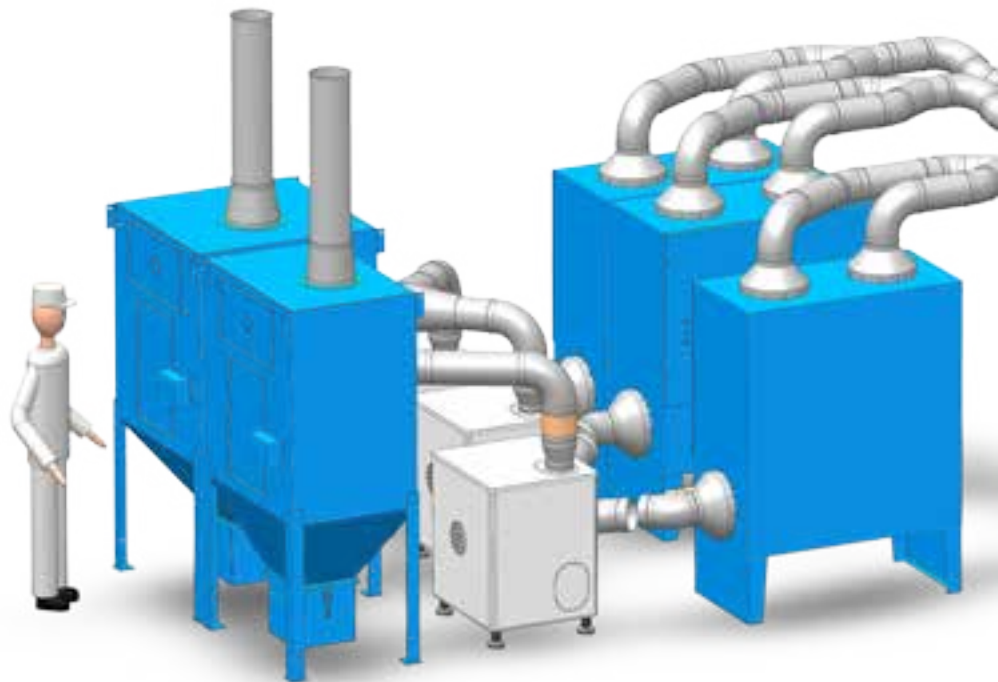


SLITstream-N
Production and converting of textil or tissue

Monitoring & communication

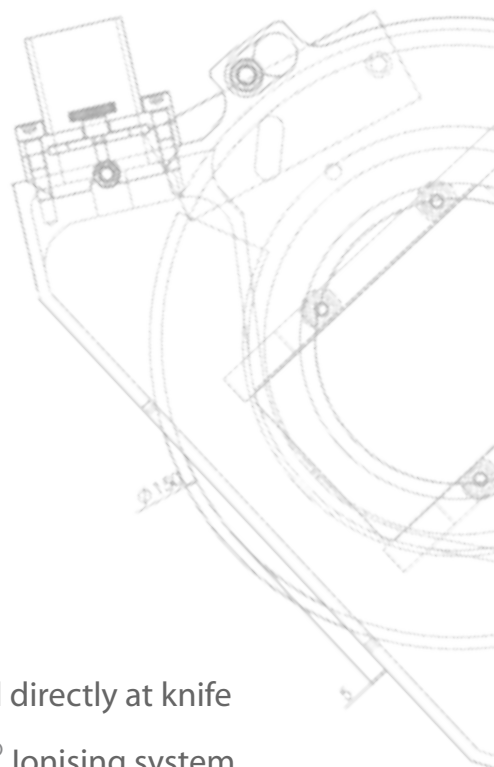


Access via **IONpilot** APP for Smart Devices, Tablet etc. or via Webbrowser.

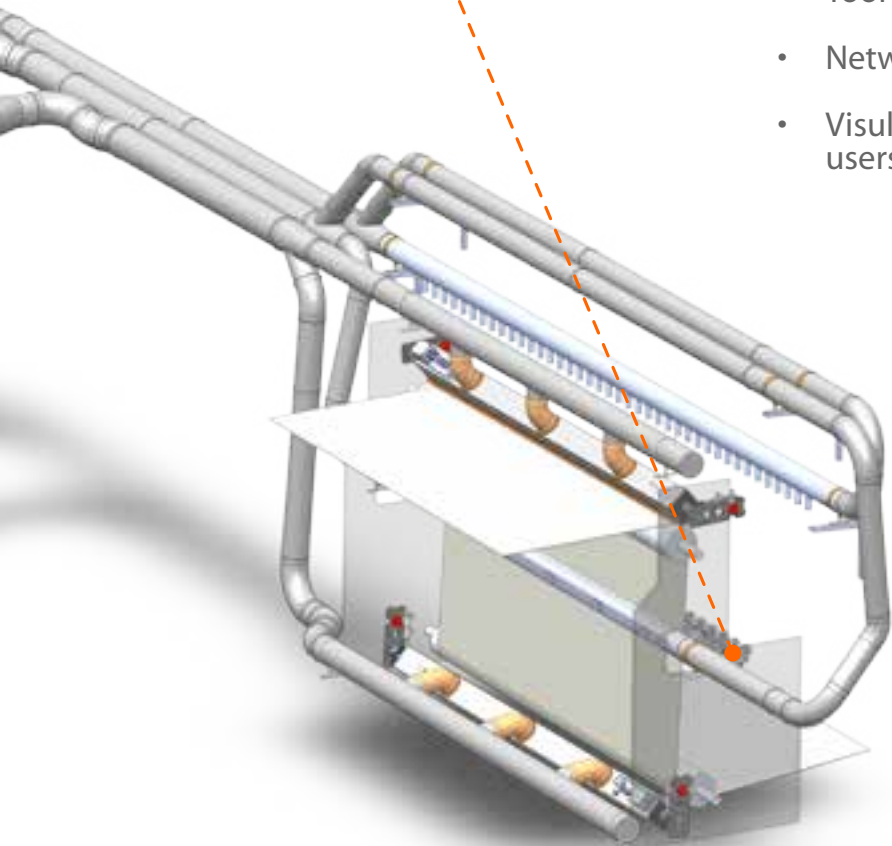


Complete Systems

We offer a comprehensive and professional project process through installation to commissioning for either new or retrofit machines from any manufacturer.



- Dust removal directly at knife
- **AUTO^{DC}**® Ionising system
- Tool free knife access
- Network compatibility
- Visualisation and access to all network users





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Surface Dust Removal • Electrostatic Neutralising • Electrostatic Charging • Measurement Systems

