
Ionising Typhoon Blower Driven Airknife

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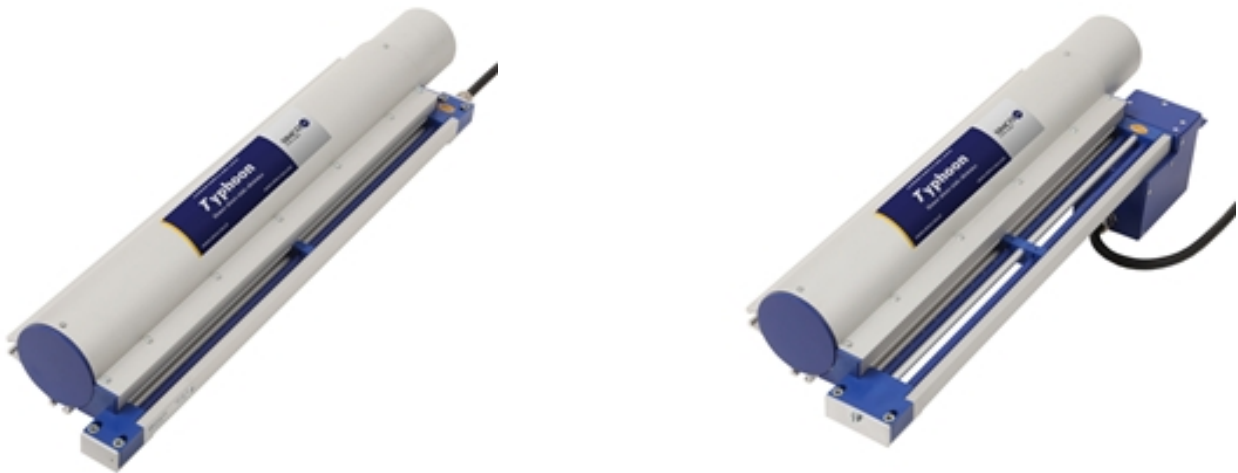
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1 Ionising Typhoon Blower Driven Airknife

Ionising Typhoon Blower Driven Airknife

1.1 Overview

A shockless anti-static bar with airknife combine the effects of air amplification and ionisation.



1.2 Benefits

- This combined effect can be used for static neutralising and dust removal in a single operation, for instance in the automotive finishing, printing, packaging, plastics and textile industries.

1.3 Applications

A shockless anti-static bar with airknife combine the effects of air amplification and ionisation to produce a high-velocity "sheet" of ionised air (amplification ratio as high as 25:1). The airknife is very compact and does not have any moving parts.

2 Models

2.1 Ionising Typhoon Blower Driven Airknife

SIMCO's Typhoon airknives eliminate static and remove particulate from flat or contoured surfaces. Typhoon incorporates a high-velocity blower with a deep penetration airknife. This system provides a continuous stream of clean ionised air for removal of surface particulate and contamination. The Typhoon is adaptable to large halo systems used for auto and truck body cleaning prior to painting. It is also extremely suitable for smaller pre-paint cleaning systems for plastic parts and fascia. By using blowers instead of compressed air, Typhoon can reduce operational costs by 30 to 70%. The system is constructed of extruded aluminium. This design provides flexibility and precise air volume control. Its static elimination bar EP-SH-N (or for use in hazardous zones the P-SH-N-Ex), breaks the electrostatic bond holding particulate to the material. The high-velocity air flow then easily removes the particulate from the product surface. Several sizes of direct-drive, low maintenance blowers are available to meet the requirements of your application.

EP-Sh-N: Typhoon with Anti-static bar

The airknife is constructed of extruded aluminium with incorporated mounting grooves. This design provides a precise air volume over the entire width of the airknife. In the airknife tube a high air pressure appears and is flowing out of the airknife narrow outflow opening. The anti-static bar produces positive and negative ions which are blown onto the surface by the airknife. The electrons will now be exchanged, which causes the surface to be neutralised and the impurities to be removed. For use in hazardous zones, the Typhoon with the P-Sh-N-Ex anti-static bar is approved.

Airpressure sensor

Each Typhoon system is supplied with an airpressure sensor which can measure the air pressure inside the airknife. If the pressure drops under the required level, the system does not work optimal. A system check is then necessary, often it appears that the air filter needs to be cleaned.

Power unit A2A7M

Typhoon systems with EP-Sh-N anti-static bars incorporate a power unit type A2A7M. This unit contains an additional 12V power source for connection of the airpressure sensor.

| | |
|-----------------------|----------------|
| Model | EP-Sh-N |
| Working distance | 2000 mm max. |
| Working width | on demand |
| Housing material | aluminum |
| Ionizing bar material | PVC |
| Emitter pin | special alloy |
| Cable | metal shielded |
| Weight | 4 kg/m |
| Ambient temperature | 0 - 55° |
| Use circumstances | industrial |
| Operating voltage | 7 kV AC |
| Air connection | 75 mm diam. |



P-Sh-N-Ex: Typhoon with Anti-static bar

The airknife is constructed of extruded aluminium with incorporated mounting grooves. This design provides a precise air volume over the entire width of the airknife. In the airknife tube a high air pressure appears and is flowing out of the airknife narrow outflow opening. The anti-static bar produces positive and negative ions which are blown onto the surface by the airknife. The electrons will now be exchanged, which causes the surface to be neutralised and the impurities to be removed. For use in hazardous zones, the Typhoon with the P-Sh-N-Ex anti-static bar is approved.

| | |
|-----------------------|----------------------|
| Model | P-Sh-N-Ex |
| Working distance | 2000 mm max. |
| Working width | on demand |
| Housing material | aluminum / steel |
| Ionizing bar material | PVC |
| Emitter pin | special alloy |
| Cable | Neoprene |
| Weight | base 2 kg + 4,3 kg/m |
| Ambient temperature | 0 - 40° |
| Use circumstances | industrial |
| Operating voltage | 7 kV AC |
| Air connection | 75 mm diam. |



2.2 Typhoon Blower

Dependent from the required air pressure the capacity of the blower can be determined, and SIMCO can offer the right blower.

Typhoon: Blower for airknife

A Typhoon system consists of a blower with one or several air knives and tubes. Each system will be tailored specifically for a customer's application. A checklist can be completed by the customer with all specific data. If needed SIMCO can supply a trial system so the customer can determine the air pressure (blow off force) needed to eliminate static charges and/or removing impurities. Dependent from the required air pressure the capacity of the blower can be determined, and SIMCO can offer the right blower.

Model

Typhoon



3 Technical data

Ionising Typhoon Blower Driven Airknife

| Model | Working distance | Working width | Housing material | Ionizing bar material |
|-----------|------------------|---------------|------------------|-----------------------|
| EP-Sh-N | 2000 mm max. | on demand | aluminum | PVC |
| P-Sh-N-Ex | 2000 mm max. | on demand | aluminum / steel | PVC |

| Model | Emitter pin | Cable | Weight |
|-----------|---------------|----------------|----------------------|
| EP-Sh-N | special alloy | metal shielded | 4 kg/m |
| P-Sh-N-Ex | special alloy | Neoprene | base 2 kg + 4,3 kg/m |

| Model | Ambient temperature | Use circumstances | Operating voltage | Air connection |
|-----------|---------------------|-------------------|-------------------|----------------|
| EP-Sh-N | 0 - 55° | industrial | 7 kV AC | 75 mm diam. |
| P-Sh-N-Ex | 0 - 40° | industrial | 7 kV AC | 75 mm diam. |

Typhoon Blower

| |
|---------|
| Model |
| Typhoon |