

D-Line

Sword Blower®



Precise air-assisted cleaning of surfaces with complex geometries



Tornado nozzles Janus



Adjustable nozzle diameter



Robot flange with quick exchange mechanism

Option:



Ionizing bar

The **Sword Blower®** uses compressed air only to clean surfaces with complex geometries. It may also be used as a pre-cleaning device for a cleaning with brushes. The machine has nine rotating tornado nozzles, type Janus 50 D, that emit compressed air at high speed.

Both the nozzle diameter and the discharge angle of the cleaning nozzles may be adjusted. These features provide effective cleaning performance while minimizing compressed air consumption. As an option, you may install ionizing bars on both sides. This is especially recommended when cleaning plastic surfaces.



Wide range of applications

Easy integration

The Sword Blower® can be easily integrated into both existing and new systems.

The connecting flange may be adapted to all current types of robots. The Sword Blower® is ideal for cleaning complex moulded plastic parts prior to painting, printing or converting.



Adaptation to the geometry

Adjustable nozzles

No tools are necessary to adjust nozzle heads to the common **nozzle diameters** (0 / 0.8 / 1.1 / 1.4 / 1.6 mm). This allows minimization of compressed air consumption.

The **discharge angle** is set to 90° before shipment. To maximise cleaning effectiveness, discharge angles may be infinitely adjusted.

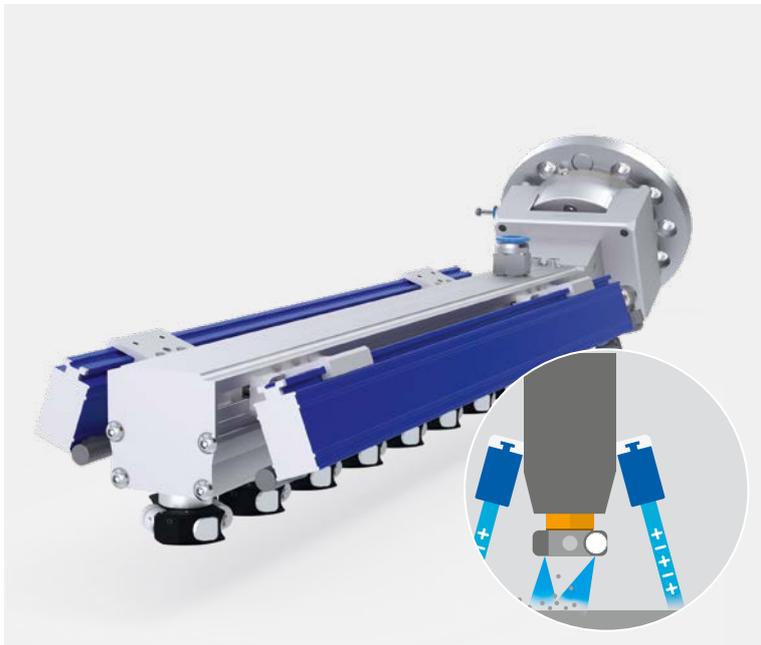


Option

Electrostatic charge

Ionizing bar

As an option, ionizing bars may be installed at both sides of the Sword Blower®. This is recommendable especially if plastic surfaces need to be cleaned. An ionizing bar, if installed at the infeed and at the outfeed, enhances cleaning effectiveness by reducing electrostatic attraction that causes particles to adhere to the subject surfaces.



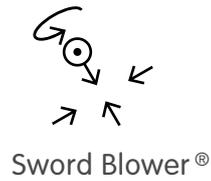
Maximum efficiency

Tornado nozzle, type Janus

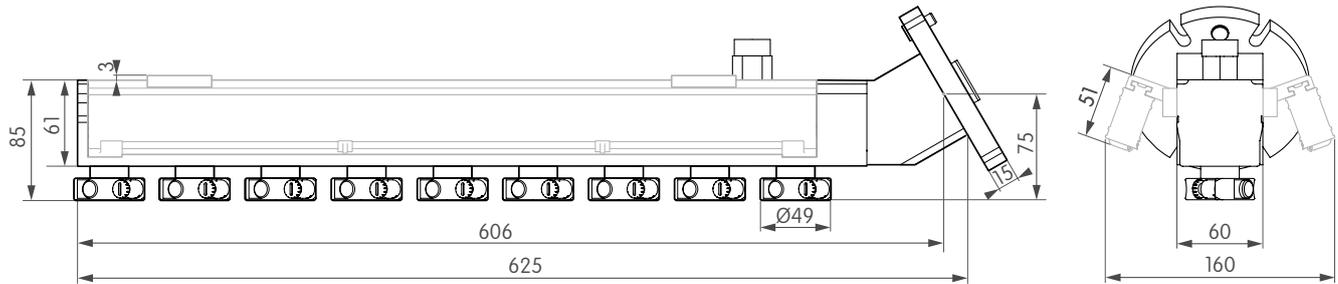
Both **cleaning nozzles** detach particles and fine dusts with a jet of compressed air directed at the surface. At the same time, two speed-controlled **drive nozzles** cause the Tornado nozzles to rotate steadily at high speeds. **Tornado nozzles**, type Janus, excel with high cleaning performances. Especially complex surfaces with recesses may be cleaned effectively with these nozzles.



Technical details and dimensions



Sword Blower® with Robot flange and
Tornado nozzles type Janus 50 D



Technical data

Electrical details

for 2 x ionizing bars

2 x 0.4 A; 24 V DC (option)

Compressed air

Purity class

ISO 8573-1:2010 [6:4:3]

filtered: mass concentration particle $C_p \leq 5 \text{ mg/m}^3$

dry: pressure dew point $\leq 3 \text{ }^\circ\text{C}$

oil free: total oil content $C_o \leq 1 \text{ mg/m}^3$

with reference conditions: 20 °C, 1 bar

Compressed air connection

1 x Ø16 mm, 6 bar

Compressed air consumption

455 l/min – 1950 l/min according to nozzle adjustment: 20 °C, 1 bar

110 l/min in addition for 2 x ionizing bars (option): 20 °C, 1 bar

Acoustic emission

Max. sound pressure level

approx. 90 dB(A) if all Tornado nozzles Janus 50 D are activated,
depending on features and dimensions of the subject surface

Representative values; the exact values can be found in the specifications.



Wandres GmbH · Im Gewerbepark 8 · 79252 Stegen · Germany
www.wandres.com