

5000 & 5100 Ionised Air Knives

Ionised Airknives produce fast-moving ionised air which can neutralise static electricity and remove contaminants.

They are used to clean plastic parts- removing the dust and eliminating the static electricity to prevent re-attraction.



Benefits and Advantages

Performance

- Powerful ionisation kills the static charge holding the dust, allowing the fast beam of laminar air to remove it for a thorough cleaning.
- The non-turbulent laminar airflow limits the recombination of ions in the air and so maximises the static neutralisation performance.
- Compressed air is amplified by a factor of up to 20:1. So a litre of compressed air produces up to 20 litres of fast-moving air.
- Available in a wide range of standard lengths in two body styles - the compact 5000 and the efficient 5100. See page 2 for details.

Reliability

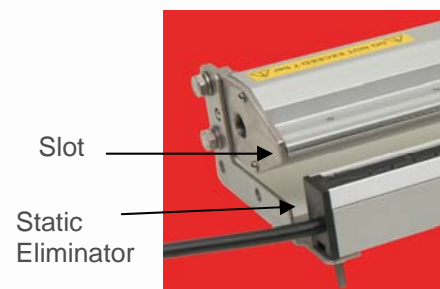
- The 1250 Static Eliminator Bar mounted on the air knife has market-leading reliability - see datasheet on 1250 Static Eliminator for further details.

Ease of Use

- Simple to install and regulate.
- The airspeed can be varied by adjusting the air pressure from 1 Bar up to 7 Bar. For example at 5 Bar pressure the airspeed at a distance of 150mm is 70m/sec. The best cleaning distance is between 100mm and 150mm.
- The compressed air supply should be clean and dry.
- To reduce air consumption we recommend that the airflow is controlled by a sensor so that it only blows when required.

How it works:

Air is forced out of the slot at very high speed. It sacrifices some of this speed to entrain ambient air to produce a large volume of fast-moving air. The air is ionised as it passes over the static eliminator bar and so capable of neutralising static electricity.



Technical specification

Construction:	Aluminium airknife. 1250-S Static Eliminator Bar
Length:	Available in standard sizes of : <u>Model 5000:</u> 150, 300, 450, 600, 750 and 900mm. <u>Model 5100:</u> 80, 100, 150, 200, 250, 300, 400, 450, 500, 600, 750, 800, 900, 1000, 1200 and 1300mm.
Cable:	2m HT cable is standard. Max cable length 10m.
Max. Temperature:	60°C.
Safety:	Meets OSHA and international standards. 5mA maximum current from Power Unit. High voltage resistance inside bars further limits current below 50µA.
Air:	The air should be clean and dry. Air connection (s): 1/4" BSP.
Power Unit:	Use with Fraser 5.5kV 50/60Hz Power Unit.

Air Consumption

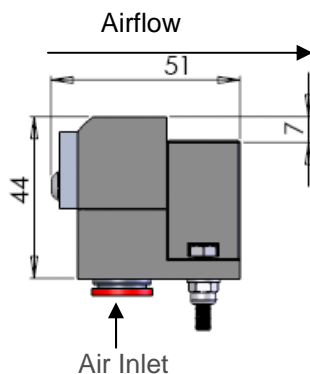
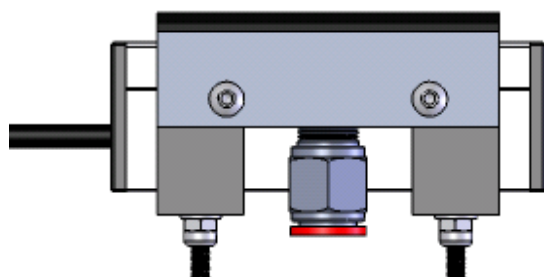
Pressure in Bar:	2	3	4	5	6	7
Air consumption Lit/min per cm of Airknife	19	22	27	33	39	45

The pipework and air supply must be capable of supplying this volume of air.

Maximum pressure 7 Bar. Typical working pressure 5 Bar.

We recommend that a sensor is used to minimise air consumption - blowing only when the product is present.

5000 Compact Ionised Air Knife



5100 Ionised Air Knife

