



# Quick Guide

## Air Knives

### ▶ WHAT ARE THEY?

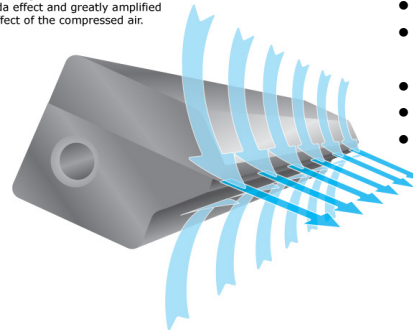
An air knife is a very simple yet very effective device. It is essentially a long chamber with a series of holes along its side (see right). Compressed air is fed into the knife and comes out through the holes to deliver high impact and very focused linear streams of air. Air knives can be used to clean, dry or cool a surface/product and to move or blow off materials/product, all without mechanical contact. They are typically made from either aluminum or stainless steel and are of various lengths or a number can be used end to end cover wider areas.



### ▶ ADVANTAGES

1. Air knives are energy and cost efficient. They have a lower compressed air consumption than drilled pipe or rows of open jets and nozzles. Depending on the set gap used in the air knives, overall air consumption will be anywhere between 10% – 90% less.
2. Air knives are generally quieter than flat jet nozzles. This can be important when considering worker safety on production lines as hearing damage and the legislation surrounding it can be a real health and safety concern.
3. Air knives are maintenance free with easily controlled compressed air output and are safe to use.
4. They have variable force and flow
5. They are compact, rugged, and easily mounted and installed

Surrounding Air entrained via the Coanda effect and greatly amplified the effect of the compressed air.

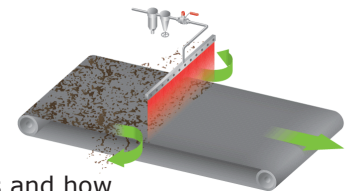


### ▶ KEY INDUSTRIES

- food & beverage
- pharmaceutical
- packaging
- pre-treatment

### ▶ APPLICATIONS

- Blow-off of excess oils, liquids, and dust from flat and curved surfaces
- Drying
- Conveyor cleaning
- Component or Parts Cooling
- Environmental Separation (air barriers)
- Blow-off in pre-paint systems
- Bag opening in filling applications
- Scrap removal in converting operations



To find out more about air knives and how they can help your business, call **The Air Nozzle People** on 01273 400 092.