Drying

and cleaning

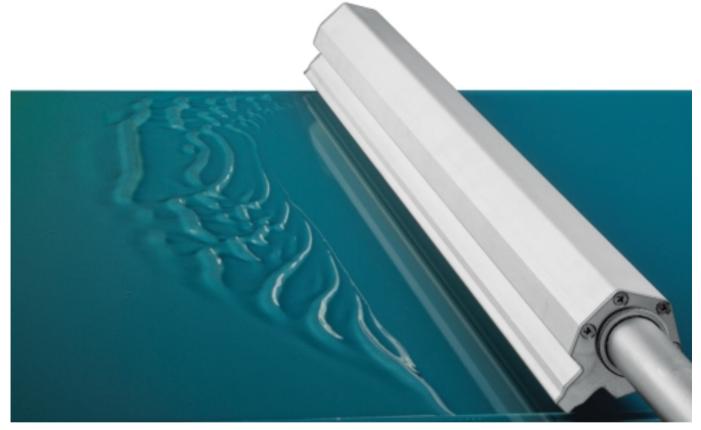
systems

Secomak..... the cutting edge

Secomak

Secomak have been producing solutions for industrial process drying and cleaning for over 80 years.

During this time, we have developed the expertise, technology and products to solve almost any problem in this field.



An air knife in operation

A sheet of moisture laden material passes beneath the outlet of the Air Knife. The curtain of air pushes the approaching liquid back, forming a standing wave. Residual moisture is shattered into tiny droplets which are dispersed by the continuous stream of air.

THE PROBLEM

In many manufacturing processes, moisture or particles can become deposited on plant or product. These need to be continuously removed quickly and cleanly, but with minimal cost and maintenance requirements. A further complication is that debris often becomes lodged within isolated areas of machinery.

THE SOLUTION

Secomak's modular POWERSTRIP system can provide flexible solutions for virtually any application. Its essential components are unique Secomak Air Knives and the High Velocity Blowers developed specifically to power them.

the cutting edge.



WHAT IS AN AIR KNIFE?

Air Knives deliver a continuous sheet of precisely controlled high-velocity air for stripping away moisture and debris. To work successfully, they need a reliable supply of low-pressure air. To meet this need, Secomak has developed a unique range of Centrifugal Blowers with performance curves optimised for Air Knife applications.

THE POWERSTRIP SYSTEM

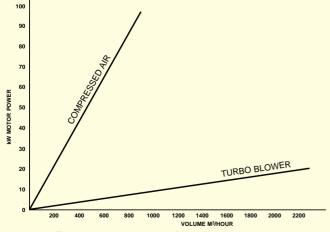
Systems are available in modular packages. These range, in their simplest form, from Air Knife/Blower combinations, through to fully-engineered systems with universally adjustable frames for supporting the Air Knives with drip trays, enclosure panels and acoustic covers.

To determine the most appropriate solution for your particular problem, contact our team of specialist application engineers, who will provide a detailed proposal to suit your individual requirements.









The curve shows the comparison of motor kilowatt requirement between Compressed Air and Turbo Blower generated air for a typical application blowing water from a flat surface passing under the air outlets.

THE BENEFITS

- Increased productivity
- Improved quality
- Improved environment
- Low running costs
- Energy saving
- Eliminates staining

HOW YOU CAN REDUCE COSTS

Secomak drying systems can reduce the cost of drying by up to 90% compared with thermal drying and compressed air systems. There are also the benefits of substantially reduced maintenance costs using low stressed negative displacement Blowers which have no requirement for inline filters or pressure relief valves.

- Low capital outlayFast paybackEasy to install
- Easy to install
 Waste reclamation
- Waste reclamation
 Low maintenance
- Cost

Food Beverages & Fresh Produce

A prerequisite for food and beverage production processes is that both the product and container need to be clean and, in the case of foodstuffs, dry. Hygiene standards also dictate that the product cannot be directly handled.

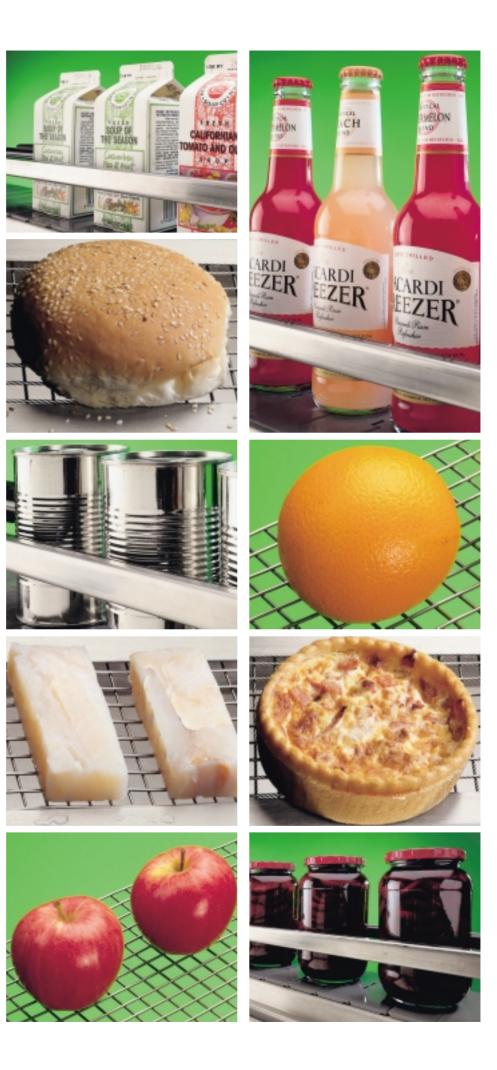
This is where an Air Knife comes into its own: a sheet of dry air is directed at the product, removing all surface debris and moisture, but without compromising product quality or appearance.



Our Air Knives have proved highly effective in the bottling, canning and packaging industries. They are used on many products with a variety of shapes, sizes and textures.

Uses include:

- Removing moisture from soup cartons
- Removing excess sesame seeds from buns
- Stripping moisture from bottles prior to labelling
- Coating egg glaze
 evenly on quiches
- Removing moisture and soil particles from fruit and vegetables
- Removing trapped moisture from inaccessible areas, such as under the lids of jars
- Intricate components such as ring pulls on cans pose no problems for Air Knives, as all surface moisture is dispersed.



Industrial Processing & Manufacturing

In many industrial processes, removing surface debris or liquid can be a major problem.

Our Air Knives have solved a diverse array of industrial problems, such as removing broken glass from conveyor lines or drying and cooling delicate glassine paper. They can be powerful enough to dry vehicles or sensitive enough to dry fine wire.

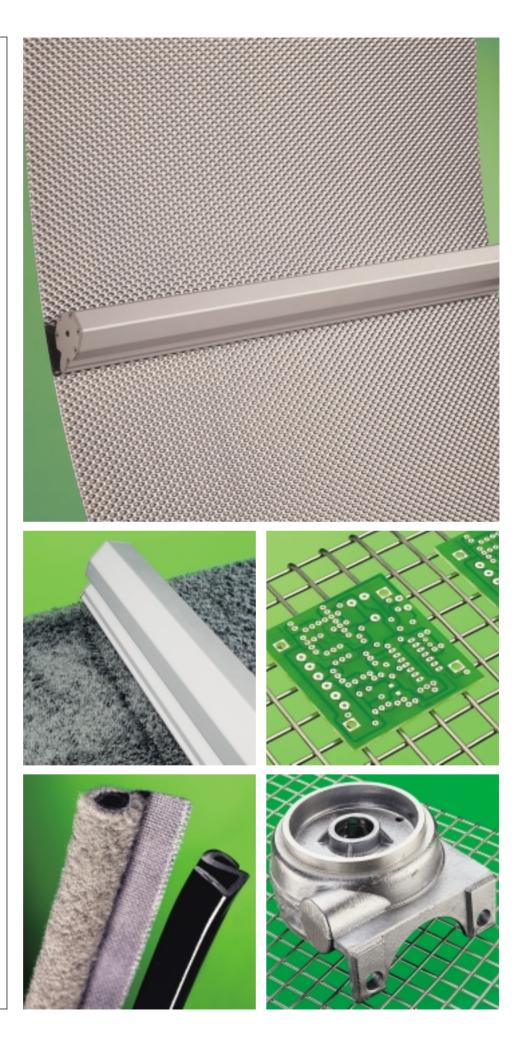
Whatever the application, we have the knowledge and experience to help.

NOUND

Eliminate unwanted surface dust or moisture by adding Secomak Air Knives to your production line.

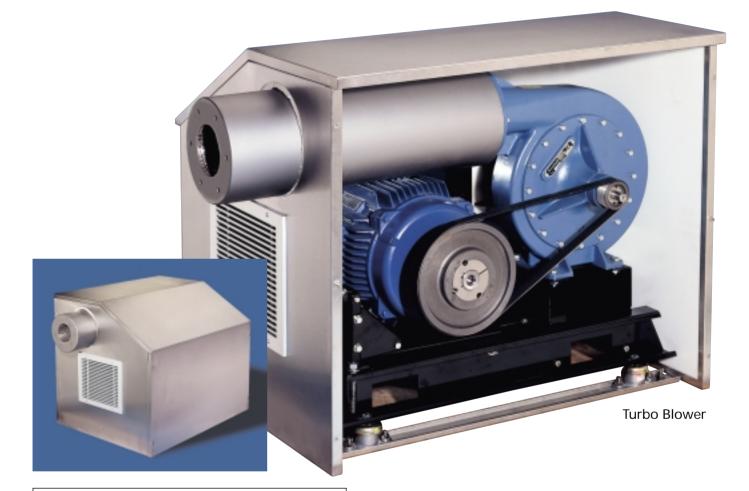
> Some of the many problems we have solved include:

- Drying metal foil and strip quickly without staining
- Removing excess curing solution from rubber extrusions
- Removing excess dust from bricks prior to packaging
- Fluffing up towels
 and flock removal
- Drying printed circuit boards after washing and rinsing in a chemical bath
- Drying castings
 after washing



High Velocity Blowers

Secomak manufacture an extensive range of Turbo Blowers, High Velocity Fans and Accessories which ensure optimum performance for any Air Knife application.





Turbo Blowers and High Velocity Fans provide an instant source of independent air for POWERSTRIP systems, at a cost far below that of compressed air.

The Secomak Turbo Blower has been developed to deliver maximum performance to our Air Knife range. It ensures smooth, pulsation-free air delivery across the whole of the performance curve. Its well-proven drive system ensures virtually maintenance-free operation and, when fitted with a stainless steel enclosure, noise levels are reduced to a minimum.

Air Knives

Secomak POWERSTRIP Air Knives are available in lengths to suit the application and there are two cross sectional sizes each having the facility for either air entry at the end or at the rear in a position to suit customers requirements. We manufacture our Air Knives in either extruded aluminium or stainless steel with an adjustable blade that has been designed and developed to give a controlled air exit velocity. The ability to adjust the slot gives greater precision.

Secomak Circular Air Knives are used when drying rods, cables, tubes and extrusions.

For situations where a localised delivery of high velocity air is necessary, Secomak offer Air Cannons. Air Cannons come in two sizes and are made from aluminium with a specially designed aerofoil at the exit to optimise the power of the blower.

The POWERSTRIP System

Our modular system offers the user the option of the basic Air Knife and Blower with mounting brackets, hose and hose splitter or, by stages, progressing to a full system consisting of support frame, Air Knives, Plenum chamber, side enclosure panels and drip tray. The blower delivers air to the plenum chamber which feeds the universally adjustable air knives.

HOW TO SELECT A SYSTEM

There are many factors that determine the selection of the correct POWERSTRIP system. Consideration must be given to the size and shape of the product and its material and texture, also to be taken into account is the location of moisture or particles and their volume. To make this selection process easier Secomak have a team of Applications Engineers to advise you.



POWERSTRIP Systems

Secomak's POWERSTRIP bottle drying system is complete with air knives, turbo blower, frame, drip tray and enclosure panels. It has all the equipment you need in one complete package.



Ionizing Air Knife

There are many industrial situations where an Air Knife is ideal for removing particles, but this is complicated by the particles being attracted to the surface due to static electricity. This problem can be overcome by the addition of an anti static bar at the air exit point. The bar produces ions, which are captured by the airflow from the knife, which impinges on the target surface. This neutralises the static and leaves a clean dust free surface.

Process Air Heaters

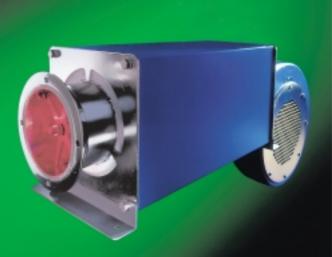
Secomak Hot Air equipment provides a continuous stream of clean, dry hot air at up to 600°C and is suitable for applications such as drying, curing, heating, softening, melting, heat shrinking and high temperature testing.

Designed for use with Secomak fans, the hot air can be distributed exactly where it is required resulting in lower running costs and increased productivity.

Controls are available to provide accurate temperature control and, in many applications, recirculation of the hot air is possible for reduced power consumption.

Mobile units offer greater flexibility of use and deliver the hot air exactly where it is needed.





Secomak.....the cutting edge

Honeypot Lane, Stanmore, Middlesex, HA7 1JR England Tel: 020 8952 5566 Fax: 020 8952 6983 Email: sales@secomak.com Web: www.secomak.com A Division of Klaxon Signals



