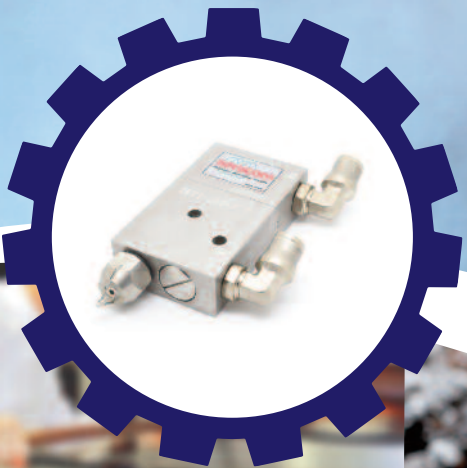


**Sealpump  
Engineering Ltd**

# SPRAY TECHNOLOGY

**FOR THE FOOD & BAKERY INDUSTRIES**



**COMPLETE SPRAY SOLUTIONS FOR:**

COATING | COOLING | CLEANING | LUBRICATION | HUMIDITY CONTROL | & MANY MORE



**From a single nozzle to a complete integrated and controlled spraying system, Sealpump Engineering provides the total solution for all spraying applications**

With over 35 years experience, Sealpump Engineering Limited is one of the UK's major designers and suppliers of industrial spray nozzle systems. Our UK wide team of dedicated designers and sales engineers visit sites to advise on the optimum solution for each application.

We design, manufacture, supply and install spray nozzle systems for a wide variety of applications within the food and baking industries. As these industries strive to meet ever more stringent standards on production efficiency and product quality, Sealpump Engineering has designed unique methods and processes in key areas of humidification & product coating.

Our partnerships with selected engineering service providers allow us to offer total solutions, integrating our spraying products into new and existing processes. Customers derive cost benefits from decreased water and material consumption and energy efficiency through well designed systems.

Sealpump Engineering Limited is a quality assured company in accordance to standard ISO 9001: 2015

**Spray Nozzle Types**

- Flat fan
- Deflected Flat Fan
- Solid jet
- Hollow cone
- Solid cone
- Air atomising
- Ultrasonic fogging
- Tank cleaning
- Air nozzles
- Spraying systems

**Applications**

- Cleaning
- Coating
- Cooling
- Humidification
- Applying viscous liquids
- Applying temperature critical products
- Lubrication and mould release
- Odour control
- Dough splitting
- Automated spraying systems

**Total Solutions  
for all  
Spraying  
Applications**



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In all areas of precision spray nozzles and applications, Sealpump Engineering is a leading and innovative spray technology company. Founded in 1979, we have a wealth of experience in spray technology and have designed and supplied our spraying expertise to virtually every processing and manufacturing industry, none more so than the food and baking industries.

There are many applications within food and bakery processes which can benefit greatly from well designed, innovative and reliable spray technology, such as humidity control in the baking process, applying a wide variety of coatings and flavourings to food products, lubricating, cleaning of vessels and equipment, bread scoring and dough splitting and many more.

Sealpump Engineering Ltd has the correct nozzle for your spray application, with thousands of nozzles readily available in various configurations and materials, a quick, professional service is guaranteed. Optimising spray performance and improving productivity is a key aspect to our automated spraying systems, fully controllable and ensuring the highest level of performance is achieved from every spray system.



# Humidification Systems for the Baking Process



*“Bakers, like humidity?  
Don’t like wetting?  
Then Dry Fog is for you”*

Humidification is the artificial regulation of humidity in the environment. When the atmosphere becomes too dry, moisture is drawn from surrounding materials, which has a detrimental effect on your product. Low relative humidity is not only uncomfortable, it can also be damaging to equipment and materials.

The Sonicom fogging nozzle is ideal for increasing the level of relative humidity within a room or process by introducing moisture back into the atmosphere without causing wet areas or excessive water drop out.

Ultra-fine fogs down to only 1 micron (0.001mm) are possible, therefore ensuring the soft plume of water droplets remain in suspension until evaporation takes place. When complemented with our special water valve assembly, the unit becomes a highly efficient non-drip, self-cleaning atomiser.

The heavy duty stainless steel water valve is controlled by the same compressed air supply used to activate the nozzle. A simple on/off signal is required to activate the system and when the signal is removed, the water valve self-cleans every time by blowing excess water away, significantly reducing any potential particulate build up. This air controlled valve also ensures that every time the nozzle is turned on/off, it does not drip meaning there is no risk of having a blocked nozzle, allowing for use in environments where control is essential and access limited.

Nozzles are controlled by a Sealpump control panel, which switches the system on/off automatically to provide the stable humidification levels required. Sealpump can work with you to design a highly efficient Dry Fog humidity control system with controls that can link into existing processes.

The Dry Fog humidification systems provide an economical, low maintenance and low energy consuming humidity control solution, capable of achieving up to 99% rh.

## Advantages

- Less than 5 micron droplets
- Close humidity control
- Non-drip system
- Self-cleaning nozzles
- Saves up to 90% on steam energy
- Low running costs
- Low maintenance
- Low energy consumption
- No pump required
- Easy mounting & install

## Applications

- Provers
- Conditioning rooms
- Bread coolers
- Retarder provers
- Comfort cooling

# Dry Fog Humidity Control for Proving Rooms and Ovens



*“Improve performance through  
perfect humidity control”*

Creating the perfectly controlled environment is critical in the bakery process in order to help generate repeatable production of a high quality baked product.

Provers allow the product to rise to approximately 90% of its final size. If the humidity and temperature are not controlled accurately enough, the dough will either rise too much or not enough, meaning a poor quality final product and increased waste, therefore reducing the bakeries bottom line.

Typically, the standard method of controlling the relative humidity is by injecting steam. In many provers steam injection can be replaced with our Ultrasonic Dry Fog system.

The Dry Fog nozzle is ideal for increasing the level of relative humidity within a prover by introducing moisture in a Dry Fog spray back into the air without causing any wetting. Ultra-fine droplets down to 1 micron (0.001mm) in size ensure a soft plume of water remains in suspension until evaporation, allowing for rh of up to 99%.

Using our system eliminates the need for creating steam which can save up to 90% on energy costs and greatly reduce down time and the need for regular maintenance, service and inspections.

The Dry Fog system can be easily mounted within any prover using adjustable mounting brackets supplied as part of the assembly and can be integrated into the customers control system or supplied complete with sensors and control package.

All our systems are tailored to the exact requirement of the customer and the prover type and size. This allows each system to provide benefits such as high and easily controlled humidity levels, very low running and energy costs and little or no maintenance.

## Advantages



- Humidity of up to 99% can be achieved
- Saves up to 90% on steam energy
- Low running costs
- Little or no maintenance
- Self-cleaning nozzles
- Non-drip system
- Close humidity control
- Eliminates the need for steam generation
- No expensive service or maintenance
- Reduces down time



# Dry Fog Humidity Control for Retarder Provers



*“Reduce operating costs through Dry Fog technology”*

Retarder provers are a useful addition to the baking process as they can hold a raw product at a stable temperature until the proving process is required to begin. The retarder prover can hold and retard the bread for up to three days allowing for delays in production as well as letting bakers schedule breaks in batch production. They also help produce a better end product, as the dough is allowed longer to rest between mixing and proving.

These provers can be used by both small craft bakeries, family bakers with multiple outlets or larger plants. Whatever the size of prover or site, having control over the humidity level is essential; this can be achieved by using our Ultrasonic Dry Fog nozzle system. Our system can replace the traditional method of injecting steam, therefore greatly reducing operating costs and energy use whilst increasing performance and controllability.

Energy and running costs are a big factor in many manufacturing processes, and the chance to reduce them while also increasing performance can have a positive effect on a bakery's bottom line.

The Dry Fog technology can be used in small or larger retarder provers and systems can be adapted to suit all types. The system can be used alongside existing humidity monitoring equipment or we can supply a fully controlled and self-contained package to suit your needs.

## Advantages



- Up to 99% rh can be achieved
- No need for steam generation
- Virtually no maintenance
- Droplet sizes as small as 1 micron
- Low energy costs
- Easy control and mounting platform
- Up to 90% cost saving on steam
- Non-drip and self-cleaning system

# Dry Fog Humidity Control for Dough Fermentation Rooms

*“Dry Fog creates the perfect conditions for your process”*

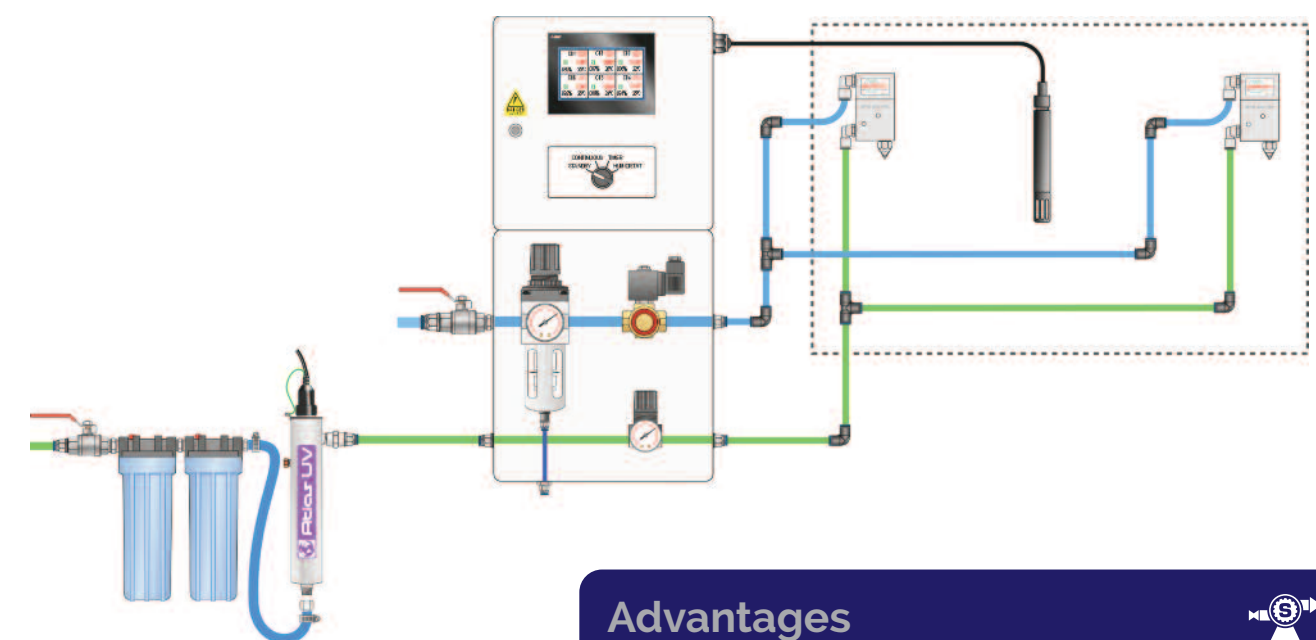
For traditional bread making methods the fermentation or conditioning rooms is where pre-mixed dough is fermented or conditioned for up to three hours. This process changes the dough from a dense mass into an elastic product which is then ready for the cooking and cooling stages.

Fermentation rooms are used mainly when making speciality baked goods rather than bulk products, due to the increased time it takes compared to the more high volume production CBP method favoured by the mass producers.

As with all baking stages, creating a well-controlled environment is essential in helping produce a consistently good end product. By using our Dry Fog technology you can increase the level of relative humidity within a room by introducing moisture back into the air without causing wet areas or excessive water dropout. Most importantly rh can be raised to 99% without the concern of damp equipment or product.

In these rooms, the Dry Fog nozzles are strategically located to give an even humidity level without over fogging. Mains water can be used along with an ultraviolet disinfection unit, and due to the unique self-cleaning nozzle design, there is no risk of blocked nozzles meaning little or no maintenance is required.

Our systems can be supplied with humidity sensors and full control package or we can retrofit into the rooms and link into existing controls the site may have.



## Advantages

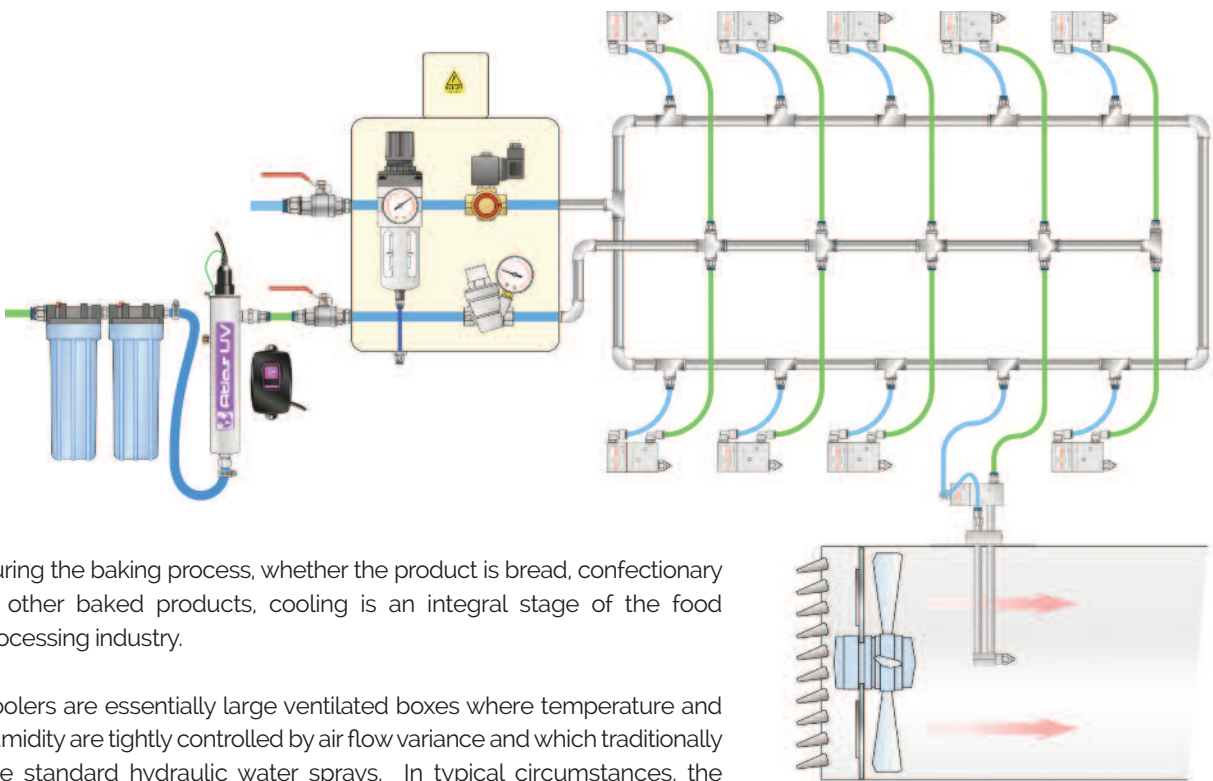


- Humidity of up to 99%
- Low pressure system
- Self-cleaning and non drip system
- No need for high pressure equipment
- Little or no maintenance
- Easily mounted nozzles
- No pump required
- Non-wetting



# Dry Fog Humidity Control for Bread Coolers

*“Use Dry Fog for increased control over humidity”*



During the baking process, whether the product is bread, confectionary or other baked products, cooling is an integral stage of the food processing industry.

Coolers are essentially large ventilated boxes where temperature and humidity are tightly controlled by air flow variance and which traditionally use standard hydraulic water sprays. In typical circumstances, the temperature in the cooler is maintained to approximately 20 degrees C while the humidity is held at around 85-90%. If the bread is not cooled sufficiently it can collapse when slicing and cause condensation on the inside of the packaging.

By replacing the existing traditional water sprays with our Dry Fog system it allows for greater control over the relative humidity within the cooler, increased efficiency and reduced water usage.

The Dry Fog nozzle assembly uses compressed air and water to create an ultra-fine spray consisting of droplets as small as 1 micron, this type of spray increases the rh without wetting and eliminates the need for drip trays, re-circulation systems and maintenance intensive high pressure systems.

As well as the quality of the spray performance, the nozzles come complete with a non-drip and self-cleaning valve, meaning they are virtually maintenance free. The unique valve design means that control is easy and as the valve self cleans the nozzle every time it is switched on/off there is no risk of the nozzle blocking.

Our system can be easily retrofitted into existing coolers replacing poor performing standard nozzle systems and Sealpump engineers are available to visit site to discuss individual requirements as well as give a system demonstration.

## Advantages

- Less than 5 micron droplets
- Close humidity control
- Effective cooling
- Non-drip & self-cleaning design
- Low water usage
- No need for re-circulation or waste water disposal
- Easy operating & simple control
- Can be integrated into existing coolers
- Low energy and low running costs
- Low maintenance
- Low pressure system
- High efficiency

# Dry Fog Humidity Control for Fresh Produce Cold Storage

*“Improve shelf life and product freshness with Fogging technology”*



One of the biggest problems facing fresh produce producers and suppliers is finding ways to increase the shelf life and freshness of their product, whether it is potatoes or broccoli or carrots and fruits, all without compromising product quality and adding excessive costs.

Our Ultrasonic Dry Fog nozzle system can accurately and economically control the relative humidity of a cold store to up to 99% rh, adding moisture into the atmosphere through millions of airborne water particles as small as 1 micron, but without the wetting of any storage equipment or floors.

The moisture created by the fog allows the product to hold its weight for longer, increase its shelf life and helps reduce the risk of disease. In potato storage it can also protect the potatoes from compression damage which reduces scrap and wasted product.

Our Dry Fog nozzles can also be used to dose in chemicals that stop the risk of sprout growth, again helping the products while at the same time controlling the rh. As we design and supply the complete liquid delivery and spray control package, we can offer either the standard humidity control systems, or a system with the added option of a chemical dosing system, meaning a dual purpose spray solution.

## Advantages

- Increases product shelf life
- Maintains product weight
- Less than 5 micron droplets
- Non-drip & self-cleaning design
- Reduces risk of disease
- Protects products from compression damage
- Low running costs & low energy usage

## Applications

- Cold storage
- Potatoes
- Carrots
- Sprouts
- Fruits



# Product and Ingredient Coating



*“Repeatable results through spray control”*

Consistency of the final product is essential in all food and bakery processes, therefore achieving controlled and repeatable product coating through accurate spray system design, improves the efficiency of any production process.

We design, supply and install a comprehensive range of hydraulic and air assisted atomising nozzles and systems to help achieve complete control and even spray coverage, reducing waste and overspray even when applying viscous or heated coatings. Our systems are designed by working alongside our customers to achieve the best results for them as all applications require different set ups and control. Our team of sales engineers can visit site to understand your requirements, and support you from initial site survey through to system install.

## Coating Applications



- Spraying slurries such as starch yeast and sugar
- Applying oil, flavourings and butter onto bakery products before baking to enhance taste & appearance
- Adding water moisture to both help with adhesion of ingredients and maintain moisture loss from freezing
- The application of viscous or heated coatings such as chocolate
- Spraying tiger glaze onto baked goods
- Applying egg glazes & many more

# Spray Technology for Applying Flavourings



*“The correct spray solution controls material usage and improves quality”*

Applying the correct amount and having the optimum distribution of flavourings to a baked or processed product can not only reduce costly waste but can also have a direct effect on product quality and ultimately effect whether consumers will continue to buy the product or not. Therefore ensuring the flavourings are applied properly is very important.

An efficient solution using spray technology can guarantee that high product standards are continually met and also improve a bakery or manufacturers bottom line by eliminating expensive waste of ingredients.

Sealpump can design and supply a spray system which will compliment your existing process line and can incorporate a simple manual control package or a fully integrated solution that includes product delivery and filtration. After an initial site survey by one of our sales engineers, we can also run spray trials in our testing facilities to see how the flavouring performs under different conditions. This also allows for the selection of the correct nozzle type and system.

## Advantages



- Reduce waste of ingredients
- Improved process efficiency
- Ensures even coverage of each product
- Eliminates misting of oil based products
- Reduce down time with low maintenance and in-built cleaning cycles
- A precise coating can ensure a consistent calorie count

## Applications



- Applying chocolate to cakes and baked goods
- Decoration of cakes
- Spraying butter and syrups
- Applying sugars and starch solutions
- Spraying caramel and other flavourings



# Spraying Temperature Controlled and Viscous Coatings



*“Systems and components”*

Applying viscous liquids or coatings that need to be temperature controlled pose challenges for food processes, however, with a well-designed spray solution, these challenges can be overcome and processes improved.

We can provide spray nozzles and systems for applications such as coating confectionary with chocolate, spraying butter and oils onto bread and baked goods and applying glazes such as egg and tiger glaze.

As well as selecting the correct nozzle type, Sealpump can then ensure that the spray controller, delivery lines and associated components complement the existing process line, liquid type and production conditions.

For applications where the liquid requires accurate temperature control in order to apply it evenly, we can design and supply a solution that is fully temperature controlled from process start, through the delivery process and even heated nozzles and spray headers.

## Applications



- Applying chocolate coatings
- Spraying egg glaze
- Spraying tiger glaze
- Applying butter and margarine to bread products
- Cake decoration

## Heated Components and Options

- Spray nozzles
- Spray headers
- Liquid and air delivery lines
- Pressure tanks and mixing vessels

## Advantages

- Increases production speed
- Improved product quality
- Improved consistency of product
- Reduces waste of expensive coatings and ingredients
- Systems can be fully controlled with no 'cold spots'
- Products can be cooled or heated
- Controlled systems are not affected by change in outside temperature
- Accurate control of flow & liquid viscosity

# Spray Solutions for Product Adhesion



*“Improve process efficiency through spray technology”*

Whether a plant is making bread buns or baked products that require seeds and toppings, or a food manufacturer making pizzas, ensuring that the toppings consistently adhere to the product is essential.

This application is an example of how spray technology can improve a food and baked goods production process by automating what can be a maintenance intensive job.

By using a well-designed and reliable spray system, a plant can greatly improve efficiency and control while also reducing waste and increasing production speed. The correct nozzle type and size ensures the exact amount of water is applied to the product every time meaning complete reliability and peace of mind for the operator.

Many sites, whether a small craft bakery or mass food producer still use labour intensive and expensive methods such as dipping bread dough in water before proofing or using valuable operator resources by using manual hand spraying or brushing on.

An example of where spray technology can improve the process is with a large mass producer of frozen pizzas. This company used a steam tunnel to make sure toppings such as pepperoni and chicken adhered to the pizza base before freezing, however, this method was very expensive to run and maintain due to the need to generate steam as well as being difficult to control. Sealpump designed and supplied a cold water and air nozzle system to replace the steam hood while offering much better coverage, control and repeatability has greatly reduced the energy and maintenance costs.

Sealpump can design and supply a system tailored to the exact needs of our customer, with scope of supply ranging from nozzles, filtration and manual controls to a fully automated system which can be linked into the process line and controls. Our systems can include specially designed headers and controls and can be supplied to be mounted on the line, wall or even supplied as a mobile unit.

## Advantages



- Precise control of Liquid volume
- Automates a manual process
- Reduces product waste/rejection
- Provides repeatable results
- Precise coverage

## Applications

- Applying seeds to bread and dough products
- Adhesion of pizza toppings
- Adding garnish to savoury goods



# Tank and Vessel Cleaning Solutions

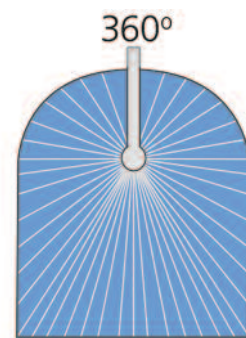


*“Peace of mind cleanliness for the food industry”*

It doesn't matter whether your process requires a light rinse or high impact, fully controllable wash cycle, Sealpump Engineering offer a variety of tank washing and CIP nozzle systems along with technical expertise to assist in selecting the most suitable product for your application.

To complement our larger range of wash heads, Sealpump also offer the design and supply of automated tank washing systems. Such systems are key in achieving cost savings and improving process efficiency. From stainless steel static spray balls to geared rotating nozzles; our range has the product for all projects.

Sealpump has helped improve and solve numerous washing problems in the food and beverage industries from rinsing out small glass jars and bottles to sanitising full scale tanks and mixing vessels by providing the correct solution.



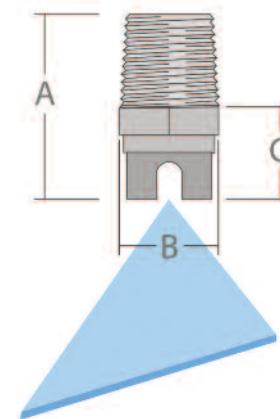
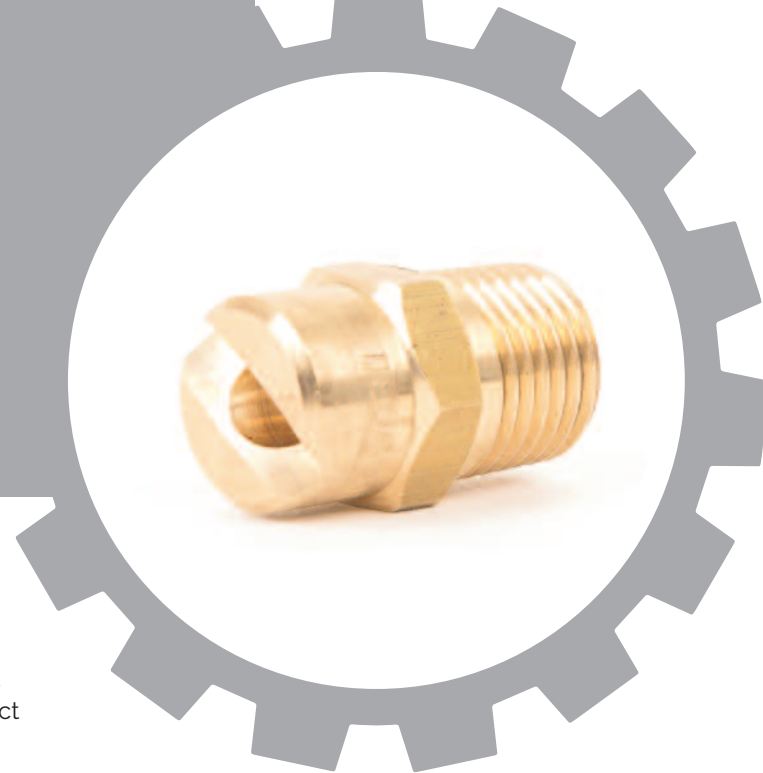
## Applications

- Keg or barrel cleaning
- Cleaning of mixing vessels
- Rinsing, cleaning and sanitising
- Blending and vat cleaning
- 1 Mtr – 20 mtr diameter tanks cleaned

## Features

- Reduced labour costs
- Reduced down time
- Reduced water and chemical costs
- Improved cleanliness
- Quicker cleaning time
- Reduced waste water disposal cost

# Belt Cleaning and Tray Washing



The cleanliness of equipment in the food and bakery industry is of the upmost importance and helps ensure that production and product standards are continuously met.

Sealpump Engineering supply a range of spray nozzles, accessories and systems designed specifically for such applications, including conveyor belt cleaning and tray washing.

Selecting the correct spray solution for your cleaning application can greatly improve cleaning efficiency, reduce costly downtime, reduce labour and chemical costs and more.

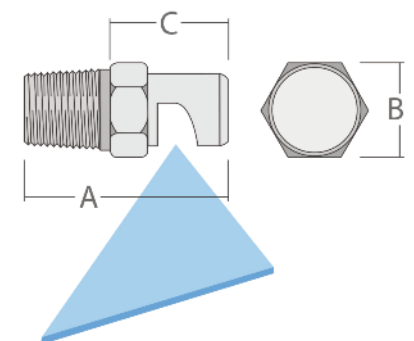
# Conveyor Belt Cleaning



Conveyor belts carrying food products require regular cleaning to ensure that hygiene standards are maintained. Cleaning efficiency can be improved significantly by using fixed spray nozzles in place of manual operator based cleaning.

Depending on the application nozzles can be mounted both above and below the conveyor to allow for a thorough clean. For rinsing, cleaning and sanitising, generally narrow flat fan spray nozzles are used due to their even coverage and uniform spray pattern. These nozzle types are available in many configurations and materials including stainless and plastic and can be supplied in dovetail and quick release version for ease of installation & maintenance.

We also supply control packages as well as the spray nozzles. These controls can be supplied with either manual control or automatically controlled and times systems linked to production sequences.





## Tray Washing



Efficient tray washing can not only help improve cleanliness but also greatly reduce costly down time, reduce waste and cleaning product consumption and reduce wasted labour time.

Tray washing is typically done by using flat fan nozzles designed to ensure a complete and even coverage of the tray. These nozzles are available in a wide range of flow rates, spray angles, materials and type such as dovetail or quick release versions to allow repeatability, no threads, and easy maintenance.

The thorough cleaning given by a well specified and designed tray washing system can also reduce the risk of any cross contamination of food stuffs when different products are made.

Should you require controls for your tray washing applications, Sealpump Engineering can work with you to offer the best solution, from manual controls to integration into your production process line.



## Air Nozzles for Drying and Blowing



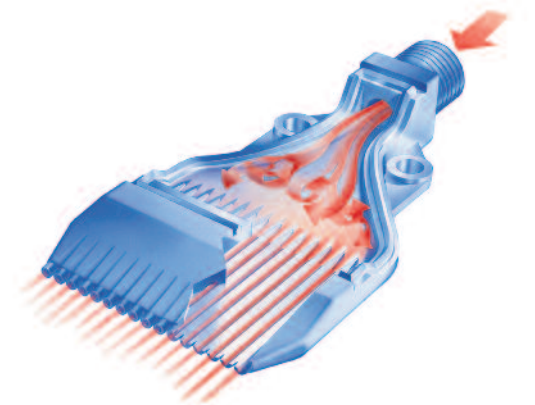
*“Reduce air consumption and noise levels”*

By using a dedicated air nozzle rather than relying on open ended pipe, it means you not only greatly reduce and control the amount of expensive compressed air used, but noise levels are reduced significantly. By channelling air through multi-channel air nozzles you can also increase the blowing power.

The flat fan air nozzles produce a flat fan shaped air pattern, replacing open ended pipe while offering major advantages in efficiency and performance.

This performance is based on partitioning the air inflow into single air jets. These separate orifices are arranged to ensure optimum flow conditions, provide a uniform and powerful overall air jet.

We also provide a range of round and pencil jet air nozzles for many different applications.



### Applications

- Blowing off/out
- Cooling baked goods
- Blowing rejected product
- Drying conveyors
- Cleaning

### Features

- ¼" BSP male connection
- Reduction of noise levels of up to 12db
- Low service air pressure with same blowing power
- Low operating costs
- High blowing power
- Improved worker safety



# Mould Inhibitor Spray System



*“Increase product shelf life through spray control”*

Sealpump Engineering can help a bakery or food processing company extend the shelf life of its product by installing a spray system that evenly and consistently applies mould inhibitors to many types of food products including convenience foods and baked products.

A problem many food producers face have is being able to control the optimum amount of inhibitor being applied every time. When not enough liquid is added, the shelf life of the goods declines, however, if too much is used then returns from quality control & customers increases as the taste suffers.

A well designed mould inhibitor spray solution can accurately control the amount sprayed onto each product, whether it be bread buns or speciality baked goods, therefore helping reduce the amount of costly liquid required, reducing operating costs & improving efficiency of operation.

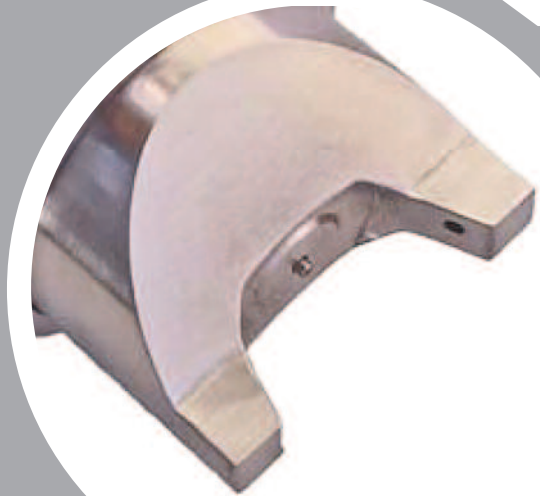
## System Options

- Wall or process mounted controls
- Automatic re-fill system or manual option
- Systems can be manually controlled or fully automated
- Pre-set spray programmes means the system is ready for use
- Trolley mounted systems available

## Advantages

- Increase product shelf life
- Reduces and controls usage of expensive mould inhibitor
- Even coverage of each product
- Operator peace of mind
- Can be linked into existing process line
- Easy to use
- Low maintenance

# Dough Tin and Pan Lubrication



*“Controlling expensive material wastage and increasing process speed”*

The lubrication of dough tins and pans is often a process which is manually carried out, a process which can waste valuable operator time, use excessive amounts of costly oil or release agent and not have consistent results. Even in some applications where nozzle systems are being used, the wrong type, number or settings can cause considerable overspray and misting which can again cause unnecessary mess, wasted time and expensive product waste.

Sealpump can help you ensure that the lubrication system is both efficient, low maintenance and reliable. We can design and install a solution to fit the exact needs of your line and supply a complete system including sensors to detect the tins or pans which can then trigger the sprays to start/stop. This means that each tin is covered evenly and limits overspray and mess by crucially not wasting costly material.

Our nozzle control packages can adjust and control the volume of release agent or oil and also adjust the spray pattern for width to allow for different size tins and pans to be sprayed while ensuring optimum performance. A well designed spray lubrication system can increase production speed by automating and improving existing systems and methods but also offer quick payback on investment through material savings.

## Advantages

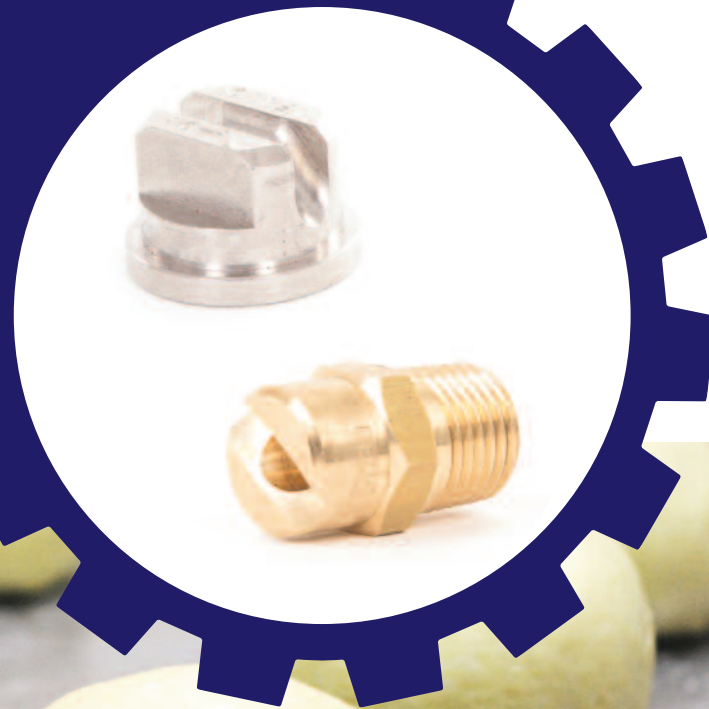
- Reduced operating costs
- Lower usage of lubricant /release agent
- Staff can be moved to more important processes
- Greater control of volume
- Cleaner operation with less mess/overspray
- Systems include tank, delivery line, nozzles, controls, sensors & timers
- Increased production speed and quick payback

## Applications

- Bread tins
- Dough tubs
- Pan lubrication
- Conveyor lubrication



## Dough Splitting and Scoring



## Odour Control Systems



*“Creating a better environment through Spray and AiroPure Odour control technology”*

### *“Reduce waste product and downtime through spray technology”*

In many baked goods processes a reliable dough splitting and scoring system is often required as the traditional method of using a mechanical splitter can cause problems through high maintenance and un-reliability which can lead to increased down time and high rates of waste product.

Sealpump can help overcome these problems by supplying a highly reliable spray solution which can accurately and consistently score and split dough products. For this application a pencil jet type spray pattern is used to give a straight, defined sprayed line. Used in conjunction with one of our specifically designed control packages, the nozzle can be precisely controlled to make sure the exact result is achieved every time.

As environmental standards become ever more stringent, the onus is on companies to stay ahead and look for ways of improving the manufacturing processes and the environments around them.

Sealpump Engineering can provide unique methods of controlling odours that arise through manufacturing and ensure that any waste produced, such as gases, can be cleared of any odours that could cause complaints. Sealpump can work with you to eliminate any odour problems your process may cause, from initial site survey to system design, install and on-going chemical supply and support. Our Dry Fog spray technology can be used in conjunction with the market leading AiroPure odour control agent.

#### **Description:**

Unlike alternative odour control additives, AiroPure's sophisticated science means it combines physically with the odour molecules and destroys them completely. AiroPure is available as an odourless product or now with new 'Fresh or 'Berry' fragrance.

### Advantages



- Replaces high maintenance mechanical systems
- Provides accurate and repeatable results
- Gives defined and straight score marks and cuts
- Decreases scrap product rate
- Reduces down time
- Improves product appearance

### System Options

- Ready to use spray system
- Trolley, line or wall mounted
- Integration into production line
- Automatic re-fill and delivery system
- Components only or full system can be supplied
- Range of nozzle sizes
- On-site commissioning



### Advantages



- 100% biodegradable
- Environmentally friendly
- Non-carcinogenic
- Non-hazardous, non-irritant and safe under CHIP, COSHH, REACH
- Recognised as safe in the food industry
- Non-acidic or caustic
- Low dosage rates
- Ideal for use with dry fog nozzle technology

### Applications



- Systems can be mounted in stacks or chimneys
- Head space spraying at a concentration of 500:1 with water
- Direct spray onto waste material at a concentration of 50:1
- Control of legionella as low as 150:1 with water



# Automated Spraying Systems



*"Total solutions and control through spray technology"*

Sealpump's Automated Variable Spraying Systems offer an advanced and self-contained control package which enables extremely accurate control over the spraying of liquids and more viscous solutions in many spray applications in the food and baking industry.

Each system comes complete with precision spray nozzles selected specifically for each application, fluid delivery system and variable spray controller complete with HMI touch screen panel.

The system is available with pre-set spraying software allowing for easy operator use and complete automation which can be linked to your production/process machinery or software meaning that you'll be up and running quickly and seeing the benefits.

Our tailored systems allow customers to greatly improve their processes in applications such as coating, cooling, cleaning and humidification while gaining quick payback by:

- Minimising Labour Costs
- Controlling waste product & eliminating overspray
- Increasing production speed & product quality

Every enquiry and application is treated on an individual basis and Sealpump's team of sales engineers work closely with each customer to tailor a solution and system to match your needs.

Should you require a more basic control system, we offer a manual control system, while not compromising on spray performance. This system requires the operator to manually input and regulate the spray pressures etc. This does not offer the pre-set spray programs, software and complete automation of other models, but it does reduce cost significantly for applications where a more basic solution can be used.

The overall aim of our systems is to improve product quality and control, reduce costs and control wastage, while increasing profitability, and delivering a complete and integrated spraying solution.

## Advantages

- Improve product quality and control
- Controlled costs
- Less wasted product
- Increase profitability
- Easy operation and maintenance
- Automation of production Line
- Complete integration into each production line/process
- Cost effective solutions
- Each system tailored to the customer's requirements

## Features

- Unique pre-set spray program
- Integrated software program
- HMI touch screen controls
- Mounting and trolley options
- Food grade material component option
- Spray control cabinet IP65 rated
- System status shown on touch screen panel
- Easy to use, step by step controls
- Automatically adjusting flow and spray coverage to suit individual products.
- Heated nozzles, headers, pressure vessels and delivery line options with controllable heating panel
- Different mounting and cabinet options available

# Configure your Spray System - Components and Options



To allow for ease of integration and installation in your process we offer different mounting options on our systems.

The Automated Variable Spray system is available either in two separate panels mounted on a trolley meaning the system can be moved around easily, or in a one panel version which can be machine or wall mounted.

There are also a number of mobile spray trolley designs available to cater for the different requirements of various applications.

However, should you require a bespoke design, please let us know and we will work with you to create the best possible solution.

Customers own logo can be included on the door label and screen – ideal for OEM clients who prefer systems to look consistent with their own equipment.

The mobility of the Mobile System means that the system is very versatile and is suited to applications where a panel cannot be mounted on a production line or conveyor.

The Panel/Wall Mounted System offers an all in one control system, which can be mounted in a fixed position in a process, with only the fluid delivery system mounted on a stand or trolley.

Our systems can feature a manual filling option or have our automatic delivery and filling system which uses an air driven diaphragm pump and pressure vessel. The automatic filling system will fill a pressure vessel to a pre-determined level which is controlled by a float switch. This then allows the system to take the fluid from a constant and steady level.

We also offer the option of a temperature controlled system where all components can be heated in order to spray materials like chocolate, fats or butter.





## Spray Nozzle Types

- Flat fan
- Deflected Flat Fan
- Solid jet
- Hollow cone
- Solid cone
- Air atomising
- Ultrasonic fogging
- Tank cleaning
- Air nozzles
- Spraying systems

## Applications

- Cleaning
- Coating
- Cooling
- Humidification
- Applying viscous liquids
- Applying temperature critical products
- Lubrication and mould release
- Odour control
- Dough splitting
- Automated spraying systems

## CONTACT:

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