Number 91

NEWS YOU CAN USE FROM EXAIR CORPORATION

Spring 2012

New Equipment Digest King Awards Winner!

EXAIR is the leader in compressed air nozzle technology and we now offer you award winning liquid atomizing nozzles! Our Internal Mix Atomizing Nozzles were just named winners in the



New Equipment Digest's King Awards. This newly expanded line includes internal mix, external mix and siphon fed nozzles. All are available with round or flat fan patterns.

- Internal mix nozzles For pressure fed applications not requiring independent air and liquid control. These nozzles mix the liquid and water inside the air cap and produce the finest atomization. Both air and liquid sides are pressure fed. Internal mix nozzles can be used on liquids with a viscosity up to 300 cp.
- **Siphon fed nozzles** For non-pressurized applications. These nozzles require no liquid pressure and can be used with gravity fed liquids or lift liquids from a siphon height as much as 36 inches (91cm). Siphon fed nozzles can be used on liquids with a viscosity up to 200 cp.
- External mix nozzles For pressure fed applications with independent air and liquid control. These nozzles have the highest flow rates and allow the air and liquid flows to be adjusted independently and precisely. External mix nozzles are also the best choice for liquids with a viscosity over 200 cp.

EXAIR's liquid spray nozzles atomize fluids (most commonly water) in a range of spray patterns for a variety of uses. They combine liquid and compressed air to create a mist of atomized liquid that can be easily adjusted to meet the needs of your application. All models use stainless steel construction for durability and corrosion resistance. For more information check our web site at www.exair.com/05/5180.htm.

Flat Fan Spray Pattern



Narrow Angle Round Spray Pattern



Wide Angle Round Spray Pattern







EXAIR Does It Again! Another Product of the Year Winner!

EXAIR's Atto Super Air Nozzle[™] has received the Gold Award in *Plant Engineering's* Product of the Year Awards in the Compressed Air category! This

new award was presented at the 2012 Engineering Awards in Manufacturing dinner hosted by both *Plant Engineering* and *Control Engineering* in Chicago in late March.

The Atto Super Air Nozzle is the smallest of our Super Air Nozzle family. All Super Air Nozzles have been engineered to reduce noise levels and air costs. The Atto Super Air Nozzle delivers the smallest, most precise blowoff. The air pattern for this tiny nozzle is forceful, measuring 1.0" in diameter when positioned 6" away from the surface. The 58 dBA noise level is a fraction of ordinary air nozzles.

EXAIR is no stranger to receiving awards. We have received awards for our Atomizing Nozzles, PEEK Nozzles, Chip Trapper, Large Super Air Nozzle, High Power Cold Gun, EFC™ Electronic Flow Control, ½ NPT Super Air Nozzle, 2" Super Air Nozzle, Super Air Wipe, Super Air Amplifier, Super Ion Air Knife and Line Vac. EXAIR constantly strives to produce the best tools to help you improve the overall efficiency of your operation... And the results show!

Premium Chip Vac Systems Now Available!

EXAIR's new Premium Chip Vac[™] System comes complete with a 30, 55 or 110 gallon drum, ready to use for your specific application. The Chip Vac is used to clean chips or other dry materials from fixtures, floors and work surfaces of machining centers, lathes, saws, mills and other industrial equipment. It can easily be moved from drum to drum to keep different materials separate for recycling.

The Premium Chip Vac is compressed air powered and attaches to the included drum. It is extremely quiet at 77 dBA, making it suitable for a wide variety of applications. There are no motors or impellers to clog or wear out. It is covered by a five year warranty.







Application Spotlight:

Super Air Knife Increases Production by Decreasing Cooling Time

The Problem:

The customer wanted to decrease the cooling time of heat-treated tooling after it was removed from the furnace.

Customer was using (3) 24" industrial



shop fans to cool the tooling piece from 1,725°F to less than 600°F. The engineer's intent was to provide a turntable system to rotate the part, while blowing it with a greater volume of air, to effect faster cooling. Their goal was to reach 600°F in 15 minutes.

The Solution:

The turntable system was designed and fabricated, using three Model 110012 12" (305mm) Aluminum Super Air Knives, equipped with Model 9060 Universal



Air Knife Mounting Systems, and Model 9076 Air Knife Plumbing Kits.

The resultant total air flow of 4,176 SCFM from the 104.4 SCFM consumed by the 3-unit system provided better-thananticipated results, by cooling the tool to less than 200°F in less than 20 minutes.

Editor's Comment:

The Super Air Knife was the logical choice since it provides a hard-hitting sheet of laminar airflow across the entire 12" (305mm) length. To simplify their installation, they also installed EXAIR's Model 9060 Universal Air Knife Mounting System, making it fast and easy to change the position of the Super Air Knives.



FREE Vac-u-Gun with Purchase!

Here's your chance to try one of our vacuum products. Receive a free Vac-u-Gun with your purchase of an EXAIR compressed air powered Reversible Drum Vac, Chip Trapper, Chip Vac or Heavy Duty Dry Vac. These vacuums are specially designed to suit your industrial vacuum needs.

If you purchase one of these industrial vacuums by May 31, 2012, you will receive a free Model 6492 Vac-u-Gun.

See more at www.exair.com/05/vacpromo.htm. +





New Application Checklist

For decades, EXAIR's products have solved many common industrial problems. Please call our Application Engineering Department at (800) 903-9247 for help with yours.

- Machine shop operator uses a **Model 110012 12**" (305mm) Super Air Knife to prevent chips on a CNC machining center chip conveyor from falling into the cooling sump. This keeps the coolant sump cleaner for a longer period of time.
- An entertainment business simulated a high wind condition in an exhibit by using a Model 120022 2" **Super Air Amplifier**. The Super Air Amplifier's 22:1 entrainment ratio allowed them to do this efficiently and affordably. (For every SCFM of compressed air consumed, it entrains 22 SCFM of surrounding "free" air.)
- A precision machine shop is using the **Model 6193 Chip Vac System** to clean chips from a multi spindle drilling machine. This has decreased cleanup time and freed up the operator to perform additional tasks.

Liquid Atomizing Nozzles



- » Fully adjustable
- » Maximizes liquid dispersion
- Minimizes liquid consumption
- » Compact
- » Versatile
- » Interchangeable liquid and air caps
- » Minimizes air consumption
- » Fine atomization

EXAIR's atomizing spray nozzles atomize fluids (most commonly water) in a range of spray patterns for a variety of uses. They combine liquid and compressed air to create a mist of atomized liquid that can be easily adjusted to meet the needs of your application. All models use stainless steel construction for durability and corrosion resistance.

Call now (800) 903-9247

