Low Cost Vacuum Generators

Mechanical vacuum pumps have been around for a long time. They take up a lot of space, frequently experience fluctuations in vacuum, and have moving parts that wear out. They're expensive, which makes them impractical for companies who need to incorporate it in the machines they

sell. Now, there's a better way to do it using compressed air.

EXAIR's new E-Vac vacuum generators are the low cost way to create a vacuum for:



- Pick and place
- Clamping
- Lifting
- Chucking
- Alignment
- Surface mounting



The E-Vac connected to four vacuum cups lifts a crate lid.

The E-Vac in-line vacuums have been engineered for high efficiency to minimize air consumption while providing instantaneous response. These single stage vacuum pumps are a low cost venturi available in a variety of sizes and flows, along with a selection of suction cups suitable for a wide range of applications. They are compact, so it's easy to mount the E-Vac right where the vacuum is needed. And, they are maintenance free with no moving parts to wear out.



E-Vac is available in two different styles. The low vacuum units have high flows to overcome porosity on materials such as cardboard. The high vacuum units are used for non-porous materials such as glass, steel, etc. We've put a video demonstration on our web site to show the two styles in action that you can view at www.exair.com/evacvideo.htm.

Not sure which E-Vac model is the right choice for your application? Contact an Application Engineer at (800) 903-9247 or techelp@exair.com. They'll be glad to help.

Super Air Knife Is The Low Cost Solution

When it comes to drying, cooling or cleaning parts, there are some bad choices out there. Drilled pipe is extremely loud, uses way too much compressed air, and doesn't provide good surface coverage (wet parts might remain wet). Blowers are expensive, loud, and require a lot of space for mounting. And, a blower can become a maintenance nightmare. In just 12 months after the purchase, you'll likely have to shut down the production line to ship the blower head back to the manufacturer for bearing replacement.



The Model 110054 54" (1372mm) Super Air Knife provides wide surface coverage that is ideal for drying parts on a conveyor.

EXAIR's compact Super Air Knife is the logical choice for these applications. It drastically improves compressed air efficiency by pulling in 40 parts surrounding room air to the one part of compressed air. The uniform, laminar airflow gives full surface coverage without dead spots. The noise level is surprisingly quiet at 69 dBA at 80 PSIG. Many lengths up to 54" (1372mm) are available from stock in aluminum, Type 303 stainless steel and Type 316 stainless steel. New Plumbing Kits for supplying the compressed air and the Universal Air Knife Mounting System are available.





Application Spotlight Large Engine Block Blowoff

The Problem: A tanker ship uses two 16 cylinder diesel engines to act as a starter for the main engine. The engine manufacturer recently installed a new machine to automate the machining process. To machine the large starter engine casting, it is loaded onto a large fixture (shown above) that lifts the block as it is machined. Once the machining cycle is complete, it is important to blowoff any remaining coolant and chips. Using the machine operator to blow it off with an ordinary air gun didn't always get the surfaces clean, was time consuming, and wasn't automated like the rest of the process.

The Solution:

The company installed (16) Model 6042 2" (51mm) Adjustable Air Amplifiers (please see inset above) that were strategically placed above the moving fixture. The conical stream of air was aimed at the 16 bored holes and engine block surface. The chips and coolant were completely removed.

Editor's Comment:

The EXAIR products helped them create an efficient blowoff system. They installed Model 9068 Swivel Fittings on the inlets of each Adjustable Air Amplifier, making it easy to aim the airflow exactly where it was needed. They minimized compressed air usage by adjusting the air gap of each Adjustable Air Amplifier, making sure it delivered the precise amount of air required for the blowoff operation. Low cost Adjustable Air Amplifiers are compact, portable, have no moving parts to wear out, and assure the highest output airflows while using the least amount of compressed air.



Energy Company Offers A \$20 Rebate Per Air Nozzle

Some energy providers want to help you lower your company's utility bill by offering incentives to upgrade to engineered air nozzles. In our area, Duke Energy of Ohio is offering its commercial electric



customers a \$20 rebate per Super Air Nozzle purchased from EXAIR. The low air nozzle price combined with the energy savings could amount to a huge savings! Check with your local energy company to see if they are offering a similar incentive.

New Application Checklist

Since 1983, EXAIR products have solved many common industrial problems. Please call 1-800-903-9247 for help with yours.



To increase production speeds, an automotive bumper manufacturer uses (8) Model 120022 2" (51mm) Super Air Amplifiers to speed the drying time of primed fascia.



A brewery dries the filled beer bottles with a Model 1122SS 2" Stainless Steel Super Air **Nozzle** prior to applying the label.



A plastic components manufacturer eliminated shutting down a machine for cleaning, by using a Model 6081 1" (25mm) Line Vac to vacuum the shavings away as the parts are drilled.



To eliminate warpage of their gaskets and seals, the manufacturer installed a Model 2401SS 1" (25mm) and 2402SS 2" (51mm) Stainless Steel Super Air Wipe on their extruders to cool the rubber.

Static Control Products

Prevent jamming, tearing and static electricity shocks!



Super Ion Air Knife™ delivers a uniform sheet of static eliminating ions!



Ion Air Cannon™ provides a concentrated flow for static removal.



Super Ion Air Wipe" Ring of ionized airflow clamps around the part!



Ion Air Gun™ is a rugged, ergonomic, effective spot



Ion Air Jet™ is a compact static eliminator that delivers a blast of air!



lonizing Bars compact, rugged bars eliminate static cling.