

Can Manufacturer Saves More Than \$500,000 Annually By Reducing Compressed Air Usage



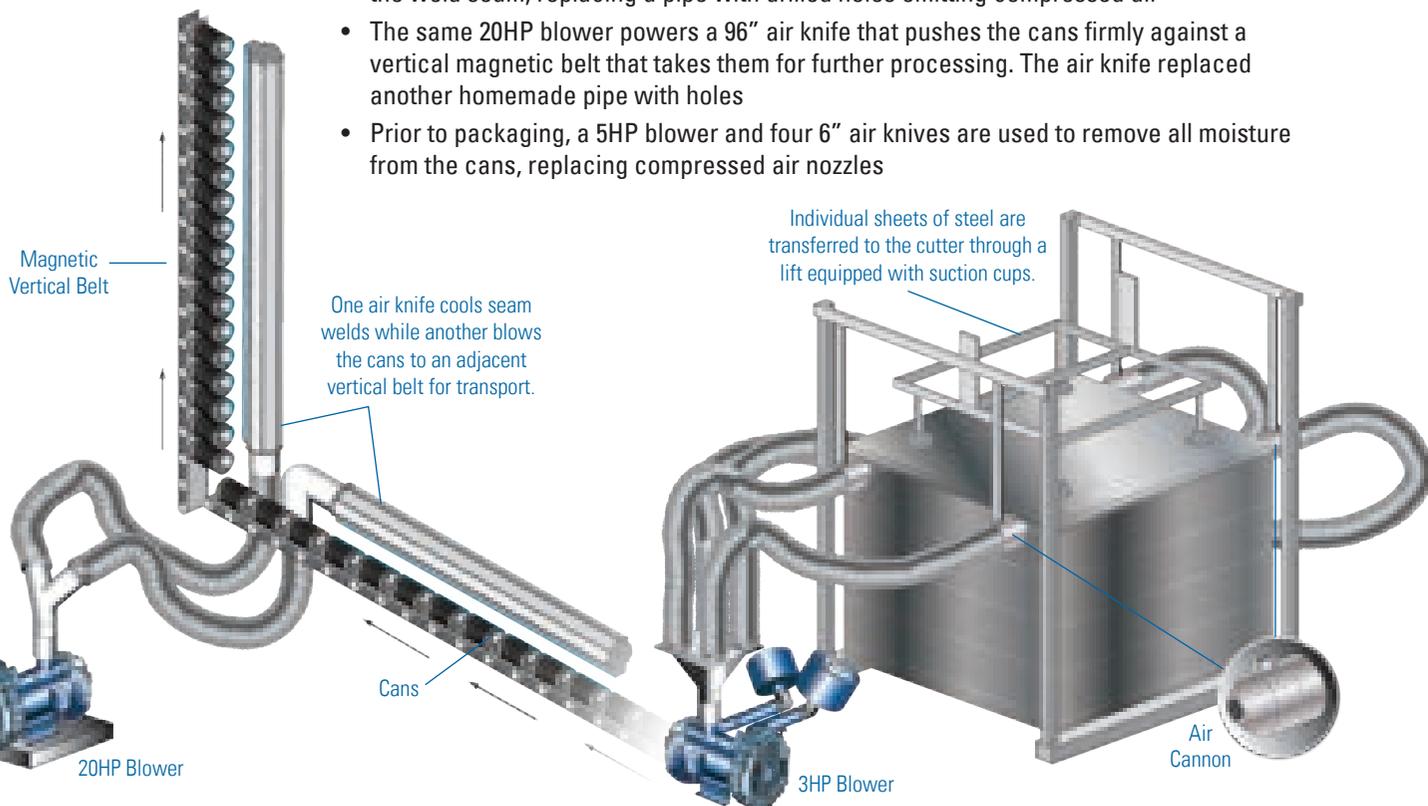
Problem:

A manufacturer of three-piece cans wanted to reduce its compressed air usage to save money and qualify for a government grant awarded for energy savings. Like most can manufacturers, they were faced with multiple cooling and drying applications and had historically used a variety of compressed air nozzles and open pipes to accomplish these operations.

Solution:

After a plant audit evaluating air use in all processing operations, WindJet® Air Knife packages were installed in four applications that were using large volumes of compressed air.

- At the sheet separator, a 3HP blower with four air cannons now prevents steel sheets from sticking together when lifted into place on the conveyor belt. This system replaced six compressed air nozzles
- After the cans are formed and welded, a 20HP blower with a 48" air knife is used to cool the weld seam, replacing a pipe with drilled holes emitting compressed air
- The same 20HP blower powers a 96" air knife that pushes the cans firmly against a vertical magnetic belt that takes them for further processing. The air knife replaced another homemade pipe with holes
- Prior to packaging, a 5HP blower and four 6" air knives are used to remove all moisture from the cans, replacing compressed air nozzles





Can Manufacturer Saves More Than \$500,000 Annually By Reducing Compressed Air Usage – Continued

Results:

The WindJet® Air Knife packages, powered by powerful, low maintenance regenerative blowers, produce high-velocity streams of clean, heated air and have eliminated the need for compressed air in these four operations. The systems operate 24/7 and have decreased plant compressed air use by nearly 3,800 scfm, generating electricity savings of more than \$500,000 each year – including the cost of operating the new blowers. The payback for these systems was less than one month and the can manufacturer has qualified for a government energy grant.

A CLOSER LOOK AT THE SYSTEM

WindJet Air Knife Packages are customized to each application and use unique, high-performance WindJet Air Knives and low-maintenance, direct-drive blowers to provide thorough drying and blow-off without compressed air.



Air cannons provide a high velocity air stream into holes and indentations in irregularly-shaped parts.

WindJet Air Knives feature a unique leading edge design to deliver a controlled, uniform, high velocity air stream across the entire edge of the knife.



Blowers included in the air knife packages are durable and energy-efficient and produce clean, heated air.



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