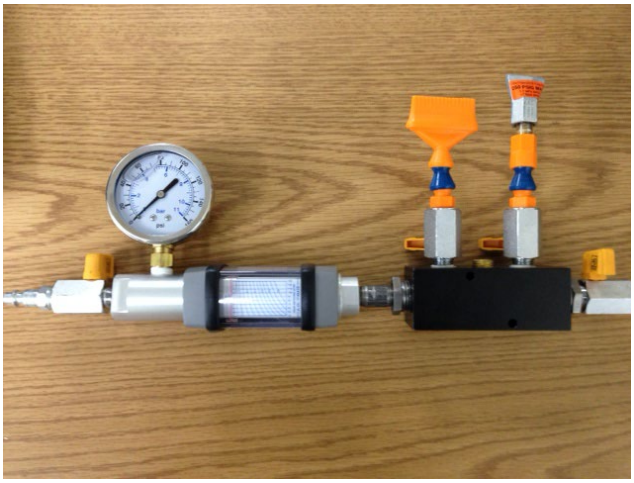
CASE STUDY

1563

APPLICATION GOAL

To lower compressed air consumption and noise levels in a greeting card manufacturing process.



BEFORE EXAIR

A greeting card manufacturer used 40 liquid coolant plastic tips with compressed air to assist in diverting greeting cards to an auxiliary straight conveyor. Without an air assist the greeting cards would bounce and move outside their intended path. The customer first installed a coolant tip, which is not designed for compressed air to flow air across the cards. The coolant tip used 7.1 SCFM at 10 PSIG inlet pressure and produced a noise level of 65 dBA from 3 feet away.

AFTER EXAIR

The manufacturer installed a **Model 1126 1" Flat Super Air Nozzle** with a 0.005" thick shim. This nozzle reduced the air consumption to 0.9 SCFM at 10 PSIG of inlet pressure. The noise level decreased to 42 dBA from 3 feet away. The customer replaced 40 coolant tips for a total compressed air savings of 248 SCFM.

SUMMARY:

The manufacturer saved 6.2 SCFM for every coolant tip they replaced. The customer replaced 40 coolant tips with engineered nozzles in their facility. In total, the engineered nozzles saved 248 SCFM of compressed air, and lowered the noise level of each nozzle by 23 dBA. **Installing 40 EXAIR Model 1126 1" Flat Super Air Nozzles eliminated the need for the generation of this compressed air; saving the company $22,320 Per Year. (Savings based on 250 days per year, 24 hours per day.)**

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