CASE STUDY

1546

APPLICATION GOAL

The main goal is to reduce the consumption of compressed air. Added benefits would be to lower the noise level along with reducing the number of nozzles needed.

BEFORE EXAIR

This customer was using a REX USA, 70873 brass nozzle to blow excess oil off a continuous sheet of metal before it is processed further. The existing nozzles are all drilled and tapped into a 2" (51mm) header pipe and there are a total of 36 nozzles to blow the excess coating off. There are multiple blowoff points in the process. The existing nozzles perform the job well but the customer would like to minimize the amount of compressed air that is being consumed by the operation. The current nozzles consumption is 58.65 SCFM while generating 103.8 dBA.

AFTER EXAIR

The EXAIR **2" (51mm) High Power Flat Super Air Nozzle** is a direct replacement for the existing REX USA nozzle. The EXAIR **Model HP1125** is able to produce the same results as the existing blowoff but at a lower pressure. The consumption of the HP1125 is 37 SCFM and it produces a noise level of 83 dBA. This makes for a compressed air savings of 21.65 SCFM per nozzle replaced for a total of 779.4 SCFM. That equates to being able to shut off 194.85 HP of compressor. On top of the compressed air savings the noise level was reduced by 20.8 dBA.

SUMMARY:

By installing the HP1125 2" High Power Flat Super Air Nozzle, we were able to save 779.4 SCFM or a little more than 190 HP of air compressor. The total amount of compressed air saved equates to $93.03 per 8 hour shift, for a total of $23,257.44 per year. (8 hr./ day, 250 days)

EXAIR LLC • 11510 GOLDCOAST DR • CINCINNATI, OH 45249

(513) 671-3322 • (800) 903-9247 • TECHELP@EXAIR.COM • EXAIR.COM