CASE STUDY

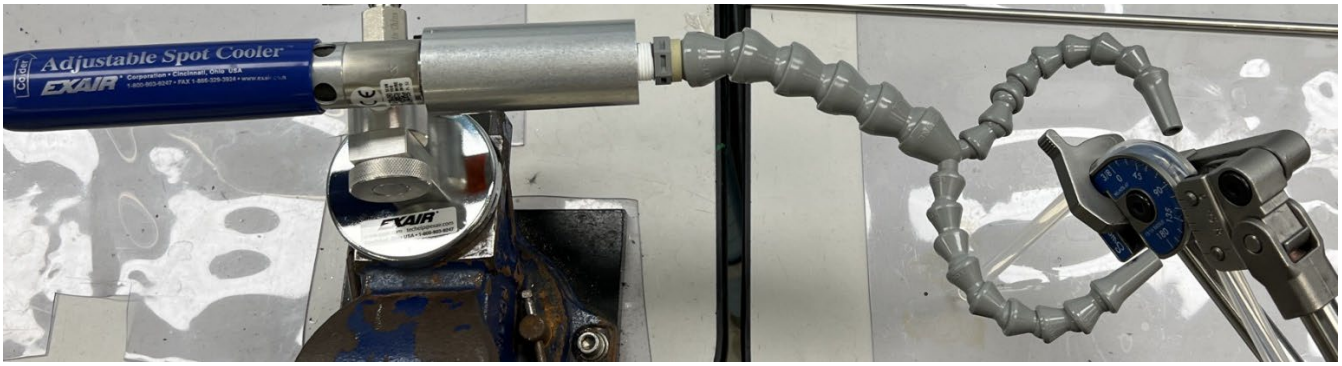
1601

APPLICATION GOAL

Customer is an OEM who builds 20 automated systems every year. One of the most time-consuming applications is heating and bending Teflon tubes that route fluids around the system. So, they wanted to speed up the time it took to do this, and increase the accuracy of the bends.

BEFORE EXAIR

When forming Teflon tubing for plumbing runs inside these large processing machines, the tubing needs to be heated with a heat gun to soften the tube to allow for forming. After forming, the tube must cool down to hold its shape. Cooling time can take approximately 6 minutes per bend. Alternatively, ice water-soaked rags can be used which may decrease the time down to 2-3 minutes. However, there is no guarantee that the form will hold at the precise angle and may need to be reformed which starts the process over again. Also, ice water and rags create a mess and can cause a slipping hazard if dripped on the floor.



AFTER EXAIR

Using the EXAIR **Model 3925 Adjustable Dual Spot Cooler System**, they were able to decrease the cooling time to under one minute. And due to the dual hose option, it gave them the ability to spread the cold air around the tubes so they did not have to remove them from the fixture while cooling, meaning the tube holds its shape to a greater accuracy.

SUMMARY:

By reducing the cooling time from 6 minutes per bend to approx. 1 minute per, with at least 300 bends per part, we can reduce the production time for each piece of equipment by 25 hours. Producing 20 pieces of equipment per year frees up the equivalent of 20.83 working days. With an hourly rate average of $26.40, the EXAIR Model 3925 Adjustable Dual Spot Cooler System is **saving them $660.00 USD per machine** in man hours alone! **Over the course of one year, that's a savings of $13,200.00 USD for just man hours.** Meaning the ROI is right around the use of the Adjustable Spot Cooler to build one machine.

EXAIR LLC • 11510 GOLDCOAST DR • CINCINNATI, OH 45249

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