



Protecting the Core of the HVAC Industry

In order to eliminate some of the waste involved in production, Goettl Air Conditioning, Inc. enlisted the help of supply firm Pacific Parts Sales Company, Inc. when it came time to implement an improved condenser coil guard for its HVAC products.

When an innovative concept comes to an OEM, finding an economical and efficient supply company is often an integral step in getting a jump on the competition. For Goettl Air Conditioning, that supplier was found in Pacific Parts Sales.

Pacific Parts Sales (Santa Ana, CA, U.S.) was contacted 3 years ago after Goettl had settled on an innovative solution. "At that time, we were using louvered metal to protect our condenser coils," says John Ryan, vice president of Marketing and Distribution for Goettl Air Conditioning (Phoenix, AZ, U.S.). The metal guards were too heavy and too costly, however. "The idea for the new guard came to me when I saw some packaging material made of plastic netting," Mr. Ryan explains. He thought the material might protect his coils if it were heavier.

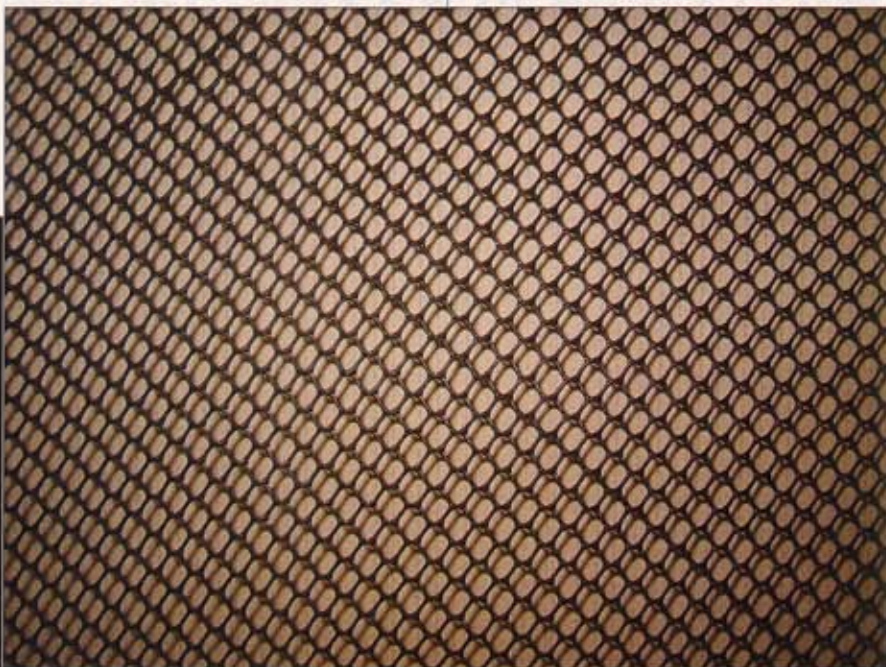
Unfortunately, most suppliers deliver the plastic mesh in a large roll, which is then cut into the proper size pieces by workers on

the production line. This results in a waste of labor, time, and also material; excess plastic on the end of a roll is unavoidable, according to Mr. Ryan. While searching for a solution, Goettl called on Pacific Parts Sales.

Del Roghair, president of Pacific Parts Sales, was more than willing to assist Goettl Air Conditioning in its undertaking. "They called us and asked if we could produce the plastic mesh in a larger size," says Mr. Roghair. "I asked them what size they wanted it. We build to the manufacturer's specs, so all they have to do is take it out of a box and install it."

While Pacific Parts Sales is considered a procurement company, Mr. Roghair likes to think of its mission as cost and time engineering. "We do not engineer our clients' products, but in many cases we can cut cost as far as the end product is concerned," he says. "We save our clients a tremendous amount of time and labor in the installation of our products."

Manufactured to the dimensions 72-80 in x 36-48 in x 1/8 in for Goettl Air Conditioning, the plastic mesh condenser coil guard is made of UL-approved high-density polyethylene. The polyethylene material contains a fire retardant man-



The new polyethylene mesh condenser coil guard comes manufactured to size for Goettl's air-conditioners. All that remains of a once difficult process is bolting the coil guard to a bracket on an air-conditioner's modified coil endplate.

dated by UL and a UV protectant. The UV protectant is added at the behest of Goettl Air Conditioning. Goettl, whose client base is rooted largely in the southwestern U.S., thinks the UV protection just makes sense. "People expect their air-conditioners to last at least 15 years," says Mr. Ryan. "But untreated plastic barely lasts 90 days in the Arizona sun. That's why we use UV protection."

Before Goettl Air could begin implementing the new coil guard as a feature on its heating and air-conditioning units, tests

needed to be conducted to ensure that the plastic mesh was mechanically feasible. "A coil guard cannot interfere with the operation of the unit," says Mr. Ryan. "It cannot block the airflow to the coil." Goettl tested the plastic mesh on running air-conditioners in order to guarantee they wouldn't short out or overheat. They also froze up a heating unit with the coil guard installed in order to determine its effects on the unit. Once those tests had been successfully completed, Goettl began installing the new plastic coil guard on its small household units.

Since the use of a coil guard was not a completely new application, only minor modifications to Goettl's products were necessary. The only change was to the endplate of the condenser coil used in the air-conditioning units. A bracket was integrated into the coil endplate in order to attach the new guard to the coil.


While the plastic mesh used in the new coil guard was less expensive and lighter than the louvered metal used previously, it exhibited comparable protection for the condenser coil. In addition, the new material did not show the evidence of impacts as obviously as the older metal guards did.

Mr. Ryan describes a condenser coil as a very fragile component, even more so than a car's radiator with its hundreds of delicate fins. He compares the mesh coil guard to a bulletproof vest: "It absorbs and disperses the forces of an impact. It will bruise, but you won't die," he says. The old metal guards could protect against an impact, but they showed the evidence of the impact more than the plastic mesh.

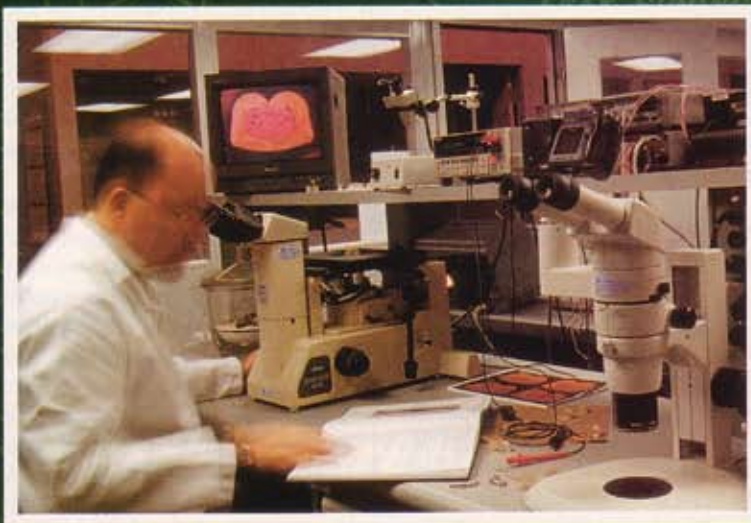
Mr. Ryan appreciated the advantages of the new coil so much that he began placing it on all of his units with an exposed coil. While this may no longer seem cost-effective, he believes that the money is well spent. The lighter weight of the plastic mesh coil guard makes air-conditioning units easier to handle, and the better protection offered by the material makes end users happier. The final implementation of the new coil guard was completed in 2002.

Mr. Ryan believes that he has an advantage on the rest of the HVAC industry by being among the first, if not the first, OEM to use a plastic mesh coil guard. He has now noticed several other manufacturers starting to use similar products. Having a time advantage can be crucial for a smaller manufacturer. "I may not be able to compete with Goodman," Mr. Ryan says. "But this gets me a step closer."

Aside from the new plastic mesh coil guard, Pacific Parts Sales furnishes Goettl Air Conditioning with several other components, including transformers, brass valves, wiring harnesses, and fan guards. Pacific Parts explains that it is able to deliver superior service while providing quality, low-cost goods because of its relationships with more than 100 factories throughout Asia.

Based on its previous experiences with Pacific Parts Sales, Goettl Air Conditioning plans to continue their beneficial business relationship into the future. "I'll go back to Pacific Parts," says Mr. Ryan. "They're very accommodating; they're cost effective; and they can handle my supply requirements." 

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