## One touch

777 warehouse team works to reduce parts packing materials, increase recycling and improve productivity

By Dawsalee Griffin Photos by Gail Hanusa

hat if you could make your work processes easier to follow, cost less, save time and help the environment? Employees from the 777 124W Interiors warehouse team in Everett, Wash., used teamwork and Lean+ tools to do just that with parts packaging.

The team members began with a clear idea of what they wanted: to simplify their processes and reduce the amount of packaging materials on 777 parts. "'One part, one touch' is our goal," said Cindy Steele, team lead. "We wanted to cut down the number of times that parts are handled from the time they are packed by the supplier to when they're installed on our planes." The team reasoned that if parts were handled less they would require less packaging, thereby saving time and reducing waste.

The team turned to Lean+ tools to help identify areas for improvement and create a path to the one-touch goal. They held an Accelerated Improvement Workshop, a type of Lean+ event that examines a process to reduce cost and flow time.

It became clear during the workshop that parts were being partially unpacked three times: The outside packaging was removed at receiving, more packaging was removed in the warehouse area, and the final protective packaging was discarded by mechanics before installing the part on the airplane.

As a result of the workshop, the team streamlined the process by stationing a warehouse employee in the receiving area, consolidating most of the packaging removal to one area. Now, parts are unpacked down to the inner protective packaging before they are sent to the warehouse. That change not only saves a process step, it has increased cardboard recycling. The 777 124W warehouse team already recycled cardboard, but now the team fills three 5-foot-by-5-foot recycling bins a day. The team also found a way to begin recycling plastic and now fills two recycling bins a day. Increasing recycling and reducing the amount of material sent to landfills is a priority for Boeing, which committed in 2008 to improve recycling rates by 25 percent over five years.

The team then looked for more ways to reduce parts packaging. One idea was to stage the parts on reusable carts, which would both reduce the need for

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PHOTOS: (LEFT) 777 124W Interiors facilitators
Nancy Coghe (left) and Kayla Thorson inspect grilles
stored in a reusable shipping case. (TOP) Kelly Hinsey
(left) and Calvin Kennebrew, 777 124W Interiors
facilitators, examine parts stored in a reusable cart.
(MIDDLE) 777 124W Interiors facilitators Terry Schmidt
(left) and Michelle Oliveira place parts in a "blue bag" to
reduce packaging. (ABOVE) 777 124W Interiors facilitators Cindy Steele (left), Nancy Coghe and Kayla Thorson
(kneeling) inspect parts stored on a reusable cart.

handling and packaging as well as protect the parts. The warehouse team brought the concept to the Commercial Airplanes 777 Moonshine Shop, where Jeff Thiessen, tool engineer, created the carts. "I had developed similar carts for another group," Thiessen said, "so when Cindy approached us, I was able to quickly draft a cart and pallet design I thought would work for her group." Now, parts are loaded into the carts at the receiving area, stored at the warehouse and issued to the mechanics.

"Our first step, consolidating unpacking and recycling into one main area, was important," said Roberta "Robin" Layton, a material processor requirements facilitator on the 777 124W Interiors warehouse team. "That freed up floor space, which made it easier to reorganize the warehouse and accommodate the new carts."

The warehouse team didn't stop its improvement efforts with that success. The next step was to work with suppliers to further reduce packaging. The team developed reusable packaging for some parts. The new packaging saves time and money for both Boeing and the suppliers and reduces the team's environmental footprint. Parts require less handling because the reusable carts, cases, totes and bags are not unpacked until they reach the assembly area.

"The reusable packaging makes it easier to inspect and store the parts, and it simplifies our processes," said Nancy Coghe, material processor requirements facilitator in the 777 124W Interiors warehouse.

Grilles, which are small panels, are a good example. "Grilles used to come in a huge box," Steele said. "Now they come packed in reusable suitcase-sized cases."

The cases are packed by the supplier, shipped to Boeing and unpacked by the mechanic who installs the grilles on the 777. With no packaging to discard, the empty cases are returned to the supplier to be refilled and shipped again.

According to Steele, the team continues to look for ways to improve its processes. Meanwhile, word about the improvements already in place is spreading. The team is excited to work with representatives from other organizations who are coming to learn "how we did it," Steele said.

Coghe and Steele have some advice for teams that might hesitate to propose changes. "No one knows your process better than you do," Coghe said. "You are the ones who can see whether there's a better way to do what you do."

"Empower yourself," Steele added. "You can make a difference to your area and to Boeing." ■

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