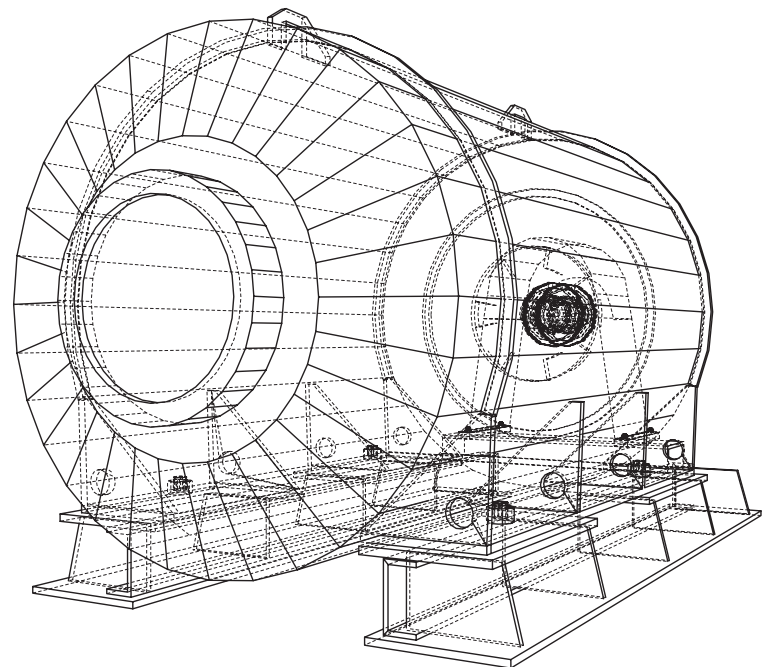


A large, solid red L-shaped graphic that frames the top-left corner of the page.

# Tough Packs Solved:

How Deufol Packaged a  
350-Ton Generator





## Overview

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Here at Deufol, we live by our motto - "Tough Packs Solved." Simply put, our motto means that we've made the commitment to solve our customers' toughest packaging needs, no matter how complex those needs may be.

Our customers often come to us with their toughest packaging challenges. That was recently the case with one of our longtime customers, a leading global power company. They have a plant in North Carolina that builds turbines, generators and other large-scale products for the power industry. They needed a preservation cover for shipping a power generator, and they asked us if we could do the job.

The biggest challenge was the size and scope of the project. The generator weighed 350 tons. Also, the generator was going to be stored outdoors, so the company needed a steel cover that would protect the generator from the elements for up to four years.

While we had faced similar challenges in Europe, this one had very special needs and was a first in the US. This job had never been done in the United States, so we were very much starting from scratch. The cover had to be built and installed in the customer's facility and we would only have four days to do it.

Fortunately, we had one incredible asset that gave us the confidence to move forward with the project. That asset was our people. We have a fantastic team of project managers, engineers, material sourcing experts, implementation specialists, and more. All of them have made the commitment to the "[Tough Packs Solved](#)" mindset, so they were more than eager to take on this challenge.

# Engineering and Design

Our process started with our engineering team. It was their job to design a cover that not only met the customer's very specific specifications, but that could also be delivered and installed in four days or less.

Our parent company in Germany had completed a job that was similar, but also very different in some ways. However, our North American engineering team was able to work with the German team to obtain designs, budgets, lists of materials, and more. That international teamwork helped us accelerate the project timeline.

In all, [our engineering and project management team](#) included 18 team members overseeing 13 different milestones. Their hard work resulted in the following outputs:

- 13 milestones and 85 tasks completed 100% on-time.
- 47 design steps to build and install a 4-year weatherproof barrier.
- Control specifications for all potential material suppliers.
- Impact testing for the container's metal roof.
- 107 quality control inspection points.



13

milestones



85

tasks completed



107

inspection points



100%

on-time

Our engineers ultimately delivered a design process that met our customer's requirements and specifications. That design helped our installation team implement that solution on a tight timeline.

# Sourcing, Training, and Project Planning

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With the design in place, it was up to our project management team to source all the materials, labor, and other resources to make the vision a reality. There was an extensive need for materials. Our sourcing team procured and coordinated the following to make sure we could meet the customer's tight deadline:

- Materials from 16 different vendors.
- Purchase orders for 794 unique parts.
- Housing and transportation for 7 Deufol team members who worked onsite in the customer's Charlotte facility.

Quality control was also an important element in the planning phase. It wasn't enough to simply design and install the packaging. The container also had to protect product quality in an outdoor environment for up 4 years. The product itself had hundreds of electrical components and parts, so there was no margin for error. Our project management developed a quality control plan that featured:

- 107 quality inspection points.
- 88 checkpoints that were marked as "critical-to-quality."
- Inspection process design to fit the customer's resources and needs.

The cover would be installed in our customer's facility. That meant that not only did our team members have to meet our safety regulations, but they also needed to be in compliance with the standard. Our installation team of seven employees went through extensive safety training, which included modules on things like scissor lifts, fall protection, and ladder safety.

# Onsite Installation

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With the design complete, the materials ordered and tested, and the team trained, there was only one thing left to do: install the crate on the generator. At that point, the job shifted from Deufol's facilities to our customer's building in Charlotte.

As mentioned, our customer had a tight window for the installation of the cover. We had to have the job complete in four days or less. There was no option for extending the installation time or rescheduling at another date. If it wasn't done in four days, the customer could miss the vessel shipping deadline, potentially throwing the project off-track.

Our main installation team consisted of seven employees from our Charlotte facility. They put in a total of 158 hours over three days to complete the job. That's right — the install was completed a day early. Our customer was happy with the final product and with our timeline.

We like to tell this story because it conveys the very essence of our Tough Packs Solved philosophy. Our customer had a complex industrial packaging challenge that didn't have a ready-made solution. We leveraged our people, knowledge, and experience to develop a strategy.

At Deufol, our entire team is committed to tough packs solved. From business development to engineering to project management, sourcing, and implementation, our business is built on our commitment to tackle the most difficult packaging issues. We do it as a team because teamwork is the only way the toughest packs get solved.

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