



HOW SAVAGE INCREASED SAVINGS AND OPERABILITY FOR A WORLD-CLASS PETROCHEMICAL FACILITY

Overview

Savage works with many Partners operating in the refinery, energy, petrochemical, and agricultural spaces. One of these partnerships in the plastics industry developed prior to building one of the largest processing and distribution plants in the world.

Prior to partnering with Savage, our Customer, known as an industry-leader in the petrochemical market, had relied on internal teams to design and build their facilities. This sometimes resulted in difficulties in the design and build stages that could otherwise be avoided when partnering with a more experienced construction company. Realizing this, the Customer chose to team with Savage to build their new rail operation.

The Customer’s goal was to build a polyethylene facility that could capitalize on the abundant, inexpensive natural gas feedstock in North America. This resource is used to produce plastics that are found in numerous everyday products.

The resulting facility helped the Customer achieve a greater level of operability and see certain long-standing sustainability goals realized.

Challenges

The Customer wanted to build a polyethylene cracker big enough to accommodate the scope of their worldwide business. At that time, the proposed design would make it the largest of its kind. The Customer was aware of the challenges a project of this size could bring to cost, operability, and their supply chain processes. They needed a partner with answers.



CATEGORY	CHALLENGE
Cost	Troubled project management, or the wrong partner, can sink a budget with compounding costs. A more experienced company with expertise in these areas would need to help them design at a discount.
Operability	A facility of this caliber requires deep supply chain understanding from those who have operated facilities throughout the world. Designing this facility from an operator’s perspective was critical for efficient intermodal transportation and product handling.
Sustainability	A plastics facility is prone to numerous sustainability issues, including properly handling nurdles and cleaning spills. To avoid this, better processes must stay top-of-mind from the earliest design phase to daily operation.

“... this has been the most enjoyable contractor relationship I’ve ever dealt with, and the most impressive in my 15-plus years overseeing projects across the world”

– PROJECT MANAGER WITH THE CUSTOMER



Solutions

Savage worked alongside five respected construction companies to design, build, and finance the facility. Later, Savage expanded its role to handle operations at the facility. Special attention was given to helping the Customer achieve a fully integrated design plan, one that kept efficiency and operability top of mind—in short, to design like an operator.

CATEGORY	SOLUTION
Cost	With Savage overseeing engineering and construction, the rail facilities were delivered on time and on budget in the face of the COVID-19 pandemic.
Operability	Savage's input led the Customer and the partnering Class 1 railway to make needed changes to the infrastructure that enhanced the project's operability. This included iterating on the Customer's railcar loading system to improve its efficiency.
Sustainability	By designing like an operator and iterating on the best practices from groups like The Nurdle Patrol, the facility runs smoothly, safely, and cleanly, setting a new standard in plastics sustainability.

Results

Thanks to compounding successes in both sustainability and supply chain operation, the Customer has become a gold standard in how to design, build, finance, and operate new infrastructure, especially in the plastics industry. By leveraging their own experience – and the experience of partners like Savage—they recognized processes that could be improved and developed a long-standing partnership to correct them. Savage is proud to have assisted in a project that was delivered on time and under budget.

Savage's Environmental Responsibility

Despite their universal utility, plastic pellets pose a threat to wildlife and their habitats if spilt. Savage takes this problem very seriously and leads the way in promoting sustainability at this facility.

Innovation

Working with the Plastics Industry Association, Savage raised industry standards to enhance the impact of Operation Clean Sweep.

Education

Savage's sustainability experts have championed best practices with the Customer and their partners, maintaining a level of cleanliness and safety at this facility that far exceeds other plants in this industry.

Recycling

By partnering with Cyclyx, Savage is helping to shape the supply chain to dispose of plastics responsibly. Together, new and innovative ideas are being developed to turn the dream of a sustainable plastics recycling supply chain into a reality.