

# A Non-Metallic Solution Enabled a Faster, Easier Installation.

## PROJECT WINS

Kinder Morgan's Bostco storage facility project was in a time crunch, with two months on the clock and 65 million barrels of distillate fuel in need of a home. They needed a replacement for the metallic shoe solution they were employing (and the corrosion it invited), and APP was able to deliver 2,000 corrosion-resistant composite pipe shoes and faster installation times (while knocking six weeks off the project timeline). Kinder Morgan weighed their options and ended up with a lighter pipe shoe—and some heavy, long-lasting benefits.

## THE BIG PICTURE

CLIENT	Kinder Morgan
INDUSTRY	Midstream
PRODUCT	APP ProTek Wear Pads and ProTek Pipe Shoes

- » Kinder Morgan Bostco is a storage facility on the Houston Ship Channel designed to support the storage and transport of black oil.
- » The facility provides high-speed loading and improved barge and ship access to the Texas Gulf Coast for the export and import of various refined products.
- » APP was selected to supply all composite wear pads and pipe shoes for uninsulated lines on this \$500 million project.

## KINDER MORGAN'S STORAGE FACILITY NEEDED A FAST, COST-EFFICIENT INSTALLATION.

Kinder Morgan's Bostco storage facility was slated to hold 51 tanks of residual fuel, feedstocks, distillates, and other black oils, plus six tanks of other distillate products. The 57 tanks were to house a total of 6.5 million barrels of fuel. The problem? Sea air and salt

water—that adds up to corrosion. The original engineering company's approach to avoiding corrosion involved a metallic pipe shoe and a round bar welded to the beam, which was creating unnecessary expense during installation—and inviting future worries around the possibility of the shoe impinging necessary system movement, creating unsafe conditions for personnel and lasting piping system damage. The timeline for new pipe shoe delivery and installation? Two months.

## THE APP ANSWER

APP delivered 2,000 ProTek Pipe Shoes and 2,000 ProTek Wear Pads to be installed on-site, requiring zero welding (and zero round bars). The composite APP pipe shoes helped Kinder Morgan avoid the corrosion and binding issues around metallic pipe shoes and offered a quicker, easier installation. They were also delivered within a two week timeframe—six weeks shorter than the project's estimated two-month window for pipe shoe installation. APP:

- » Performed all installation training with Kinder Morgan employees and contractors.
- » Executed testing to demonstrate compatibility of APP ProTek Pipe Shoe with current solution.
- » Significantly shortened timeline on pipe shoe and wear pad delivery and installation.



**2,000  
OF EACH**  
APP PROTEK PIPE  
SHOES AND PROTEK  
WEAR PADS DELIVERED

**SIX  
WEEKS**  
ELIMINATED FROM  
ORIGINAL TWO-MONTH  
INSTALLATION TIMELINE

**ZERO  
WELDING**  
REQUIRED—AND  
SIGNIFICANT INSTAL-  
LATION COSTS SAVED