



CASE STUDY FOCUS

# Online Cleaning and Port Cutting

TESTIMONIAL

*“Groome took the time to work with our team and understand both our facility’s goals as well as our parameters for completing this work. The team was safe and delivered great value. They just got what needed to be done, done.”*



CLIENT

## Southwest Petrochem Plant



BACKGROUND

This southwest plant had a vertical flow gas path, and was experiencing minor fouling. The concern was that this fouling could put the unit out of compliance due to strict permits. The facility had existing 3” view ports, but no vacuum door or ability to clean the catalyst. As well, the reactor wall was at a 45-degree angle upstream of the SCR catalyst, adding additional challenges.

The unit was built with no online aftermarket in mind, so a custom design was required to conduct an online cleaning of the unit.



OBJECTIVE

The petrochem facility was looking to clean the unit and restore it back to near 100% capacity. Management’s goal was to accomplish this with minimal interruption to production and as little downtime as possible



SOLUTION

The Groome team reviewed the unit data to understand the situation and the trends. Drawings were used to determine and develop the vacuum door size. The crew visited the site prior to work and immediately started taking high temperature images of the unit utilizing the existing 3” ports; this work was important as it helped the team to understand both where the debris was located on the catalyst as well as the nature of the debris. The team identified online cleaning, with a safety plan, as the ideal solution.

Four vacuum ports were installed which provided optimal access based on the size and shape of the bed.



RESULTS

The total project lasted five days, with Groome utilizing day-night shifts to minimize the interruption to plan operations with the result of zero downtime. Upon completion of the work, the plant immediately experienced a 3” improvement in back pressure. And soon after, the unit was near 100% of its target capacity level.