

The Industrial Pipeline

Space-Saving Endura® XL 150 Grease Interceptor gets the Green Light for Denver, CO, Building Restoration

Size and weight constraints made this compact platform the go-to solution for the job

“With Endura, excavation was simpler. Getting them in place was simpler. Lead times were faster, and the cost was better. Across the board, it was just a no-brainer that Endura was by far the best application for this project”

Ross Rosenow,
General Contractor



THE CHALLENGE

In a burgeoning area of south Denver, an old retail facility was being transformed into a modern entertainment complex to serve the growing local community. BurnDown would be South Broadway's premiere destination for group dining, live music, and mountain views.

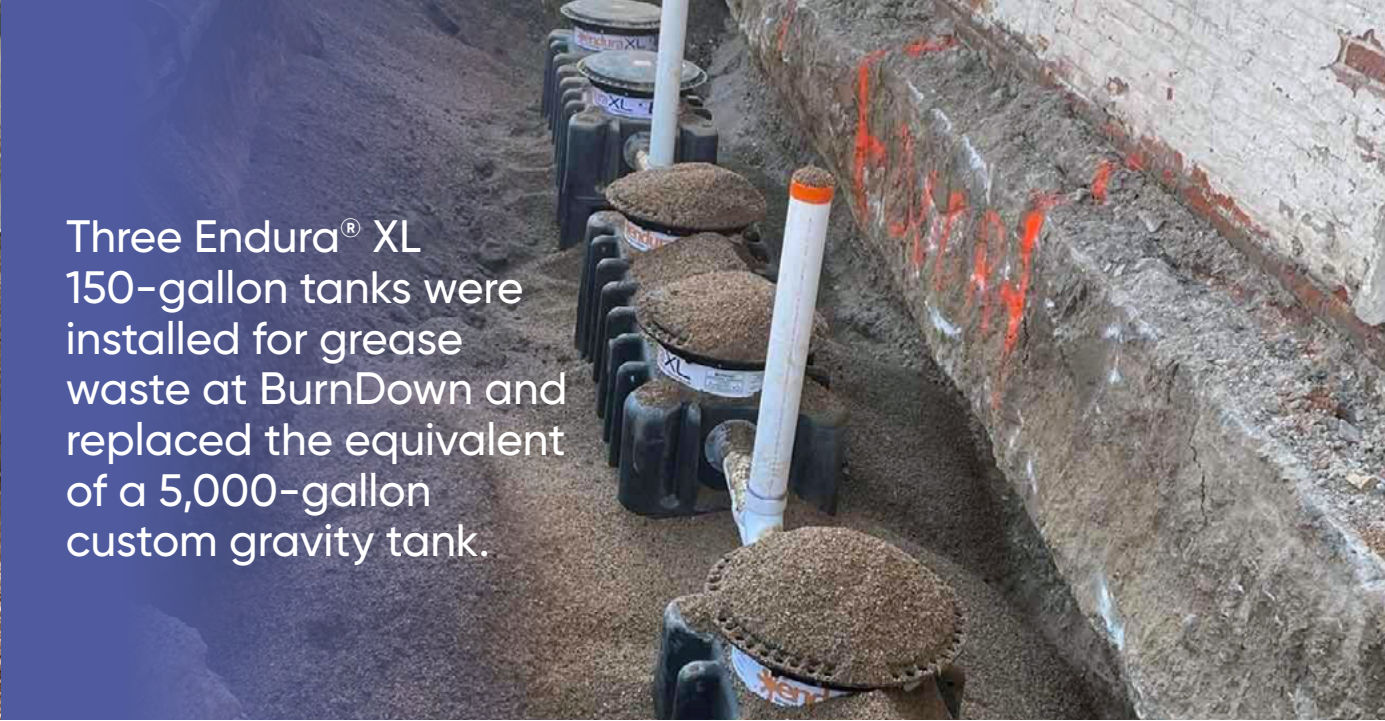
The three-story brick building would boast 24,000 square feet of space with a kitchen on the first floor, bar, dining, and entertainment on each floor, a rooftop deck, and an open courtyard on the third level. The restaurant, bar and common areas total 18,600 square feet and the office spaces on the second and third level make up the remaining 5,400 square feet.

It would be a one-of-a-kind venue in Denver based on its size, scale, and offering as an entertainment hub in the city.

But while the inside space was ample, BurnDown's exterior footprint was tight. This meant installing critical external plumbing units, like a grease interceptor, would be especially challenging.

This type of large-scale venue would produce considerable grease from its kitchen that services the dining and bar spaces on each floor as well as the rooftop deck. Traditionally, this type of application would use a gravity grease interceptor: large, central units used by commercial food service establishments that use the force of gravity to separate fats, oils, and grease (FOG) from wastewater.

These substantial units measure, on average, around 1,300 cubic feet and weigh close to 60,000 pounds. During an exploratory demolition of the BurnDown site, it was



Three Endura® XL 150-gallon tanks were installed for grease waste at BurnDown and replaced the equivalent of a 5,000-gallon custom gravity tank.

discovered that the foundation extended 13 inches into the nearby alley. The city had also increased its easements into the right-of-way, which encroached on the property by two feet. While the contractor had started with an area of six feet from the building wall to the edge of right away during the initial design submittal, they were now down to just four feet to squeeze in all the necessary plumbing equipment.

Fitting a traditional gravity grease interceptor into this tight space would require digging over the top of city waste lines and maneuvering around overhead power lines. It would also mean excavating 12 feet into the ground, about eight feet below the existing foundation. The building would need to be shored up to ensure it was secure during the dig. On top of that, the contractors would need to get a truck into this tiny space to lift up this massive gravity grease interceptor unit and place it into the ground.

A gravity interceptor simply would not work given all the restrictions of the space.

Another solution was clearly needed.

THE SOLUTION

BurnDown needed a compact, high-performance grease interceptor that was cost-effective and easy to install.

The clear choice was IPEX's Endura® XL 150 Hydromechanical Grease Interceptor (HGI).

These flexible, convenient, and durable thermoplastic HGIs treat and process kitchen wastewater from food service establishments using gravity separation.

IPEX's line of Endura products is designed to improve grease separation efficiency while offering a significantly longer service life and lower maintenance requirements than traditional gravity interceptors. Hydromechanical units are over 90% more efficient and can hold substantially more grease than a gravity unit before needing to be emptied. This means they have a considerably smaller footprint allowing for installation in tight spaces.

An Endura® XL 150 unit is lightweight, measuring roughly 237 cubic feet and weighing roughly 200 lbs., making it exponentially smaller than a gravity grease interceptor. Given its size, it requires less excavation, resulting in an easier, faster installation and significant cost savings.



PROJECT:

Burndown, modern entertainment complex, in South Denver

CONTRACTOR:

Jordy Construction

PRODUCTS:

3 Endura XL 150 gallon tanks

- Compact size, lightweight and easy to install
- Hold more grease than a gravity unit
- No excavation results cost saving and faster lead time
- Available off the shelf



Despite its many benefits, the City of Denver was known for being reluctant to approve the use of hydromechanical grease interceptors for these applications.

Jordy Construction had prior experience working with IPEX and Endura products and knew it was the right solution for the job. Working closely with IPEX application engineers and sales reps, they helped make a case for using an HGI for this application.

An IPEX rep familiar with the demanding requirements of the City helped draft a letter of hardship to explain the specific complexities and size constraints of this project. The rep also understood how to perform complex calculations and conversions that the City required as part of the application process, which was critical in ensuring it got approved on the first pass.

A formal change order with modified drawings and a variance request was submitted to the City. Luckily, because the team had kept the City's building department in the loop about the challenges with the project, they were prepared for the change request. After reviewing the new documents, the use of Endura® XL 150 for this project was approved.

In March 2022, three Endura® XL 150-gallon tanks were installed for grease waste at BurnDown

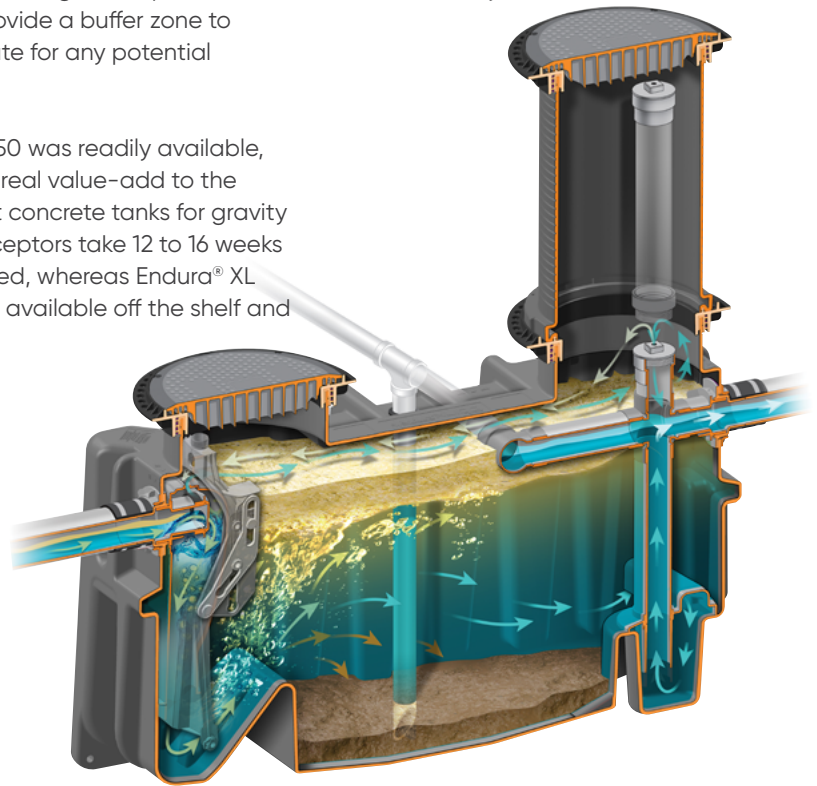
and replaced the equivalent of a 5,000-gallon custom gravity tank. Using Endura® XL also resulted in a cost savings of \$10,000 and decreased the lead time of the project as well.

IPEX wanted to ensure the sizing of the HGI was optimal to reduce the frequency of grease pump-outs. Ideally, the unit should be pumped out every one to three months, so the size needs to reflect that level of demand on the system. Application engineers helped calculate the optimal size, including oversizing the requirements slightly to provide a buffer zone to accommodate for any potential overuse.

Endura® XL 150 was readily available, which was a real value-add to the project. Most concrete tanks for gravity grease interceptors take 12 to 16 weeks to be delivered, whereas Endura® XL products are available off the shelf and

can be onsite within five business days. This resulted in fewer delays and helped keep the project on time and on budget.

IPEX sales reps and application engineers were available at all times before, during, and after the installation. The client was able to pick up the phone and have a direct line to an IPEX team member whenever they needed them. IPEX was onsite during the installation to ensure everything went smoothly.



THE RESULTS



FAST INSTALLATION

From start to finish, the installation of the three Endura® XL units took around two weeks to complete and went seamlessly to plan. The plumbing connections were also completed without any issues.



LESS INTERRUPTION

The speed of installing Endura XL 150 units also helped reduce the impact on residential parking spaces and garages located across the alley. This downtime would have been considerably longer had traditional concrete gravity grease interceptor been used instead.



LOWER INSTALLATION COSTS

The client is thrilled that the installation was fast, saved them money and solved a critical challenge around space constraints with their plumbing units.

BurnDown is planning to officially launch in spring 2023.