



CASE STUDY

DoubleTrac® Stainless Steel Piping for Brownsburg Community School Corp.

- Saves Time
- Saves Money
- Increases Installation Options

Product:

DoubleTrac® Recirculating DEF (Diesel Exhaust Fluid)

Location: Brownsburg Community School Corporation, Brownsburg, IN



Brownsburg Community School Corporation

The original Brownsburg Transportation and Maintenance Facility was built in 1984 when Brownsburg Community School Corporation (BCSC) had just over 3,600 students and less than 40 buses. In the winter of 2019, work began on a new Transportation and Maintenance facility at the site of the original location at 570 E. Airport Road Brownsburg, IN. With a current bus fleet of 110 and enrollment over 9,200 students, significant renovations were long overdue.

Robert Hughes from Allied-Ott Petroleum located at 517 Herman Ct. Noblesville, IN 46060 was awarded the job of installing the new fueling system, which included a 10,000-gallon Unleaded, 12,000-gallon Diesel, and a 1,000-gallon Diesel Exhaust Fluid (DEF) underground storage tanks. Allied-Ott Petroleum used a total of 250 ft of DoubleTrac® piping to supply (2) unleaded, (2) diesel, and (2) DEF dispensers.

DEF freezes at 12°F (-11°C). Unlike high temperatures, low temperatures will not cause DEF solution to degrade. However, it is recommended that DEF be stored at temperatures above the freezing point so it's always ready for use.

Maintaining the temperature of DEF is typically achieved by using a heater cable. Another option to maintain temperature is to direct bury piping and allow DEF to continuously recirculate throughout the piping system.

Allied-Ott Petroleum decided to design a DEF recirculating system using the DoubleTrac® piping system based on the chemical compatibility of DoubleTrac® 316 stainless-steel primary piping and 316 stainless-steel field attachable fittings with DEF. DoubleTrac® 316 stainless steel construction meets the approved material per the **ISO 22241-3 standard**.

The job consisted of running DoubleTrac® as a DEF supply line out to two dispensers and a return line back to a 1,000-gallon DEF underground storage tank. The recirculating equipment used was a DEF submersible turbine pump (STP) and a petroleum turbine pump controller capable of recirculating DEF using temperature probes. Recirculating DEF using the DoubleTrac® piping system reduces installation time.

If you are weighing your options on using DEF supply piping with a heater cable system vs the DoubleTrac recirculation system for DEF then call Allied-Ott Petroleum and ask for Robert Hughes.



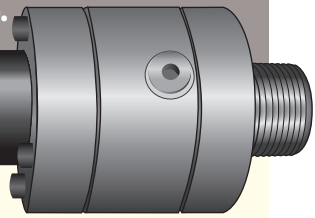
1-1/2" DoubleTrac® entering and exiting the UDC (Under Dispenser Containment Sump).

(continued on back)



CASE STUDY

DoubleTrac® Stainless Steel Piping for Brownsburg Community School Corp.



(continued from front)

Features and Benefits of DoubleTrac®

The DoubleTrac® double containment fuel piping system is optimized for installations in existing building structures. The outer shell is a smooth Nylon 12 which allows DoubleTrac® to slide easily over and around structures during installation. The outside diameter of the DoubleTrac® piping is equivalent to steel piping (NPS) so off-the-shelf pipe hangers and mounts can be used. DoubleTrac® piping is available in 1", 1 1/2" and 2" sizes to accommodate most fuel system requirements. It is sold in off-the-shelf reel quantities for quick delivery and can be ordered in custom lengths to accommodate long continuous runs.

Type 316 stainless steel Tee and 90-degree fittings are available for multi branch systems or installations requiring bending below DoubleTrac® minimum bend radius. All DoubleTrac® fittings carry interstitial communication internally and are not required to be installed within containment sumps on above ground applications.

DoubleTrac® innovative doublewall design includes a primary interior layer of zero permeation, highly corrosion resistant corrugated 316 stainless steel with an outer EFEP barrier layer bonded to a Nylon 12 protective layer. DoubleTrac® can be considered a "green product" because the stainless-steel piping has zero permeation and EFEP/Nylon 12 outer jacket has nearly zero permeation (.000001%). DoubleTrac® is a true future fuel piping system and is the best choice for fuel oil, low Sulphur diesel blends, biodiesel, gasoline, and aviation and jet fuels.

DoubleTrac® Piping and Fittings are UL 971A (for below ground flammable fuels) and UL 1369 listed (for above ground flammable fuels).

DoubleTrac® passed a 2-hour Fire Per UL 1369 listing.

DoubleTrac passed General-use Fuels, B100, DEF and Ammonia Hydroxide per UL 1369 listing.

DoubleTrac® has a patented mechanically field attachable fitting that creates a metal-to-metal seal that requires NO O-Rings which have finite lifespan and can degrade over time.

DoubleTrac® has a 15 Year Aboveground Warranty and a 30 Year Belowground Warranty.

OmegaFlex® offers a team of in-house engineers dedicated to assist with piping layouts and answering technical questions about DoubleTrac® piping system. OmegaFlex® offers no cost training and certification of new installers.



*1-1/2" DoubleTrac® exiting and returning
to Underground Storage Tank.*

