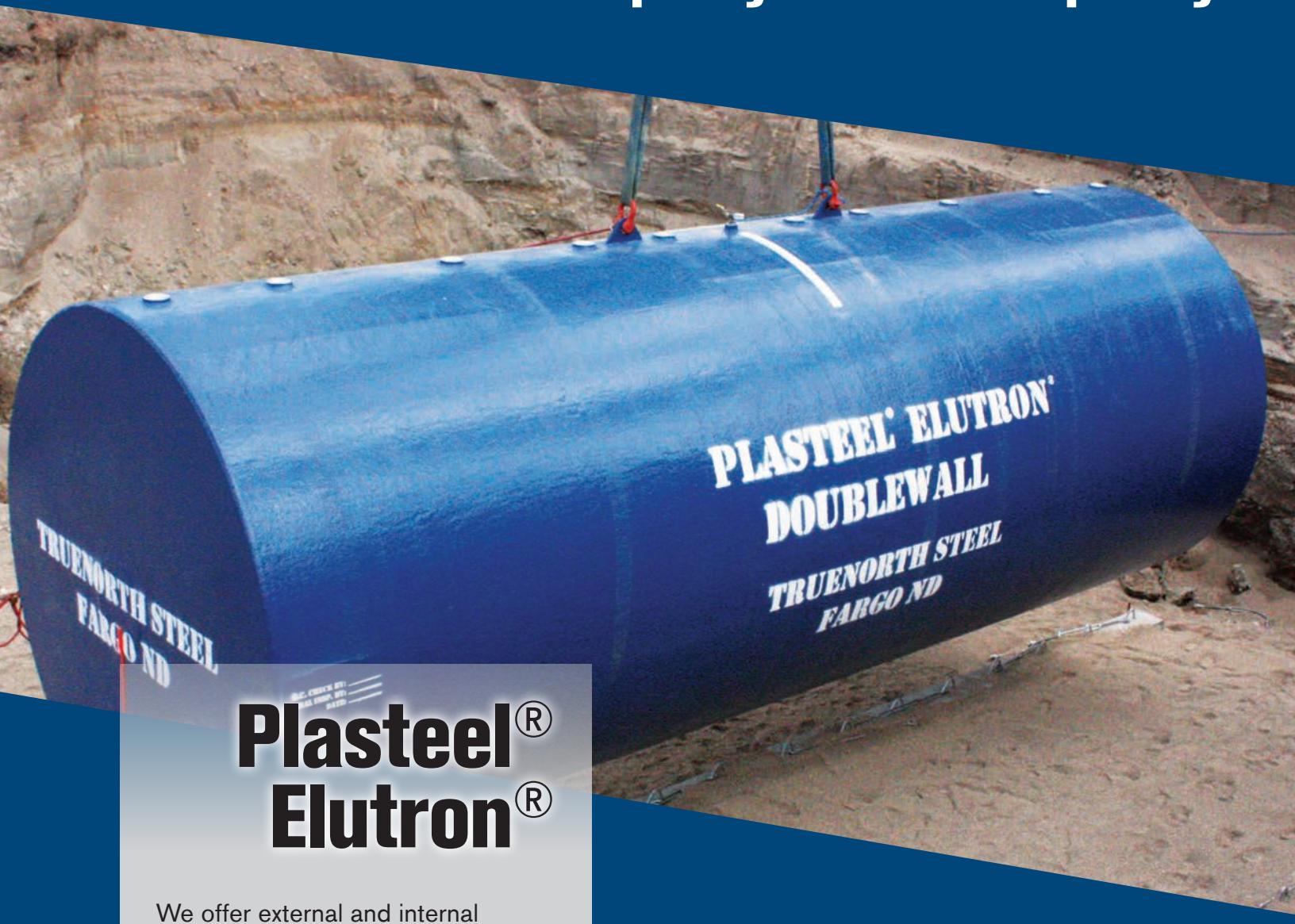
Tank Installation Comparison

Plasteel Elutron Simplicity vs. FRP Complexity



Plasteel® Elutron®

We offer external and internal protection from the elements that can cause tank failure including Plasteel® Elutron® Double Wall technology. The Elutron® jacket combines an interstitial stand-off material and outer layer of fiberglass, preventing external damage from corrosive soil. Using the same technologies and knowledge gained from the oil field, we offer internal corrosion prevention options unlike any other tank manufacturer in the industry. This includes options in ultra-low sulfur diesel tanks to minimize the impact of microbial growth.

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Procedure	Plasteel® Elutron® Tank	FRP Double-Wall Tank	Cost Effectiveness
Pre-Installation Testing	Not required if delivered with factory established interstitial vacuum.	Inner tank Pressure Test. Interstice Pressure Test. External Soap Suds Test. Monitor Fluid Leak Inspection.	FRP Tank - Additional labor and equipment required.
Backfill Material	Choice of sand, pea gravel, or crushed stone.	Pea gravel per ASTM C-33 for most FRP tanks.	FRP Tank - No potential savings. Elutron® Tank - Potential savings with choice of materials.
Excavation	Smaller Excavation.	Larger Excavation.	FRP Tank - Most require 30-50% more soil removal and 30-50% more backfill material than Elutron® Tank.
Backfill Procedure	Less time ensuring compaction.	More time ensuring compaction.	FRP Tank - Most FRP tanks rely on backfill for structural support, no voids. Elutron® Tank - Steel resistant to small backfill voids.
Ballasting	Quick and simple, backfill to the top not required before ballasting.	Slow and tedious.	FRP Tank - More labor hours for wet hole since most FRP tanks cannot be ballasted until backfilled to top of tank.
Defelection Measurement	Not required.	Most FRP Tanks require two measurements - one before backfill and the other after backfill.	FRP Tank - Additional labor and possible tank removal and replacement of backfill.
Warranty	Deflection measurement compliance is not a term in the warranty.	Most warranty validations are based on compliance to a specified maximum Deflection measurement.	FRP Tank - Possible future, in-service costs in Deflection exceeds a specified maximum limit.

SUMMARY:

1. All the above FRP Tank procedures are an effore to maintain the structural integrity and minimize the Deflection of the FRP (non-metallic) structure during the service life of the FRP Tank. When the FRP Tank laminate exceeds it's yield point, failure can be catastrophic.
2. Because of the ductility of steel, the Elutron® steel primary tank will perform well beyond its yield point.
3. All Elutron® Plasteel Tanks use a steel tank for structural performance. The steel tank provides the structural performance for the Plasteel FRP Imaninate.
4. Over 33,000 Plasteel® Tanks (22,000 Elutron® Tanks) have been placed in service since 1971. There has never been a Plasteel® Tank failure due to external or internal corrosion when storing motor vehicle fuels.
5. Simplicity = Elutron® Tank installation instructions are 3 pages. Complexity = Most FRP Tank installation instructions exceed 20 pages.
6. The Elutron® Tank was UL performance tested and Listed per the External Pressure Tes in UL Standard 58. The test tank was successfully submerged in 5 feet of water with no backfill. The test tank did not deflect or deform.

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