LAB NOTES

STX is Changing the Way Labs Do Business

The laboratory industry has traditionally relied on fragmented processes in which architects, general contractors, equipment vendors, and specialty suppliers operate independently with limited coordination and little understanding of how laboratories truly function. STX has changed that model by integrating scientific expertise, engineering, construction, equipment acquisition, and operational workflow into a unified approach designed specifically for modern laboratories. Through its six core business divisions, STX is redefining how laboratories are planned, designed, constructed, equipped, and deployed.

STX Business Divisions

Envision™ An STX Brand

STX believes laboratories should be designed by scientists for scientists. Traditional laboratory layouts are often based on boilerplate architectural concepts or casework templates developed by organizations with limited understanding of laboratory operations, workflow, safety, or scientific efficiency. STX's Envision business unit replaces this outdated approach with scientist-led design focused on functionality, workflow optimization, operational efficiency, and real-world laboratory performance. By understanding how laboratories actually operate, STX creates facilities that improve productivity, collaboration, sustainability, safety, and long-term usability.

Design+Build

The conventional low-bid construction process frequently creates an adversarial environment where contractors compete primarily on price rather than performance, communication, or long-term project success. In many cases, the lowest bid does not ultimately produce the lowest overall project cost. STX replaces this outdated model with a collaborative Design/Build approach centered on communication, transparency, and shared goals. By establishing relationships and aligning expectations before construction begins, STX improves project efficiency, reduces costly misunderstandings, accelerates timelines, and delivers superior outcomes for laboratory clients.

STXanalytical™ An STX Brand

Laboratory equipment is often treated as a separate procurement process disconnected from facility planning and construction. STX Analytical changes this by integrating analytical instrumentation, related infrastructure, and data handling directly into the laboratory development process. This approach allows facilities to be built specifically around the types of equipment they will house while also, in many cases, helping organizations conserve valuable capital budget resources. STX is uniquely positioned as the only company in the United States with the relationships necessary to provide an industry wide range of analytical instruments through long-term partnerships with industry-leading manufacturers as part of a fully integrated laboratory delivery solution.

The demand for modular laboratories continues to grow as organizations seek faster deployment, lower costs, and greater flexibility. STX's ModuLab division delivers purpose-built modular laboratory solutions specifically engineered for laboratory operations rather than retrofitting separately purchased modular buildings. This integrated approach improves functionality, operational efficiency, and lifecycle cost performance while significantly reducing deployment timelines. Purpose-built modular laboratories provide both immediate and long-term advantages compared to adapting structures never originally intended for scientific applications. Ask for our tech paper "Scientist-led Modular Laboratory Design vs. Retrofitted Modular Buildings" to learn more.

Cleanrooms require far more than simply controlling airflow and filtration. STX's CleanLab division designs and builds cleanroom environments specifically tailored to the operational requirements of each client's application. Purpose-designed cleanrooms improve workflow efficiency, operational consistency, and long-term performance while creating more sustainable operating conditions than retrofitted spaces designed independently from the scientific processes they support. The result is a more reliable, efficient, and application-focused controlled environment.

Modern laboratory needs increasingly require mobility, rapid deployment, and onsite response capabilities. STX's TechVan division transforms vehicles ranging from small vans to large diesel-powered trucks into fully functional mobile laboratories capable of supporting field analysis, emergency response, remote operations, and specialized onsite testing. These mobile laboratories bring scientific capability directly to the point of need, allowing organizations to perform critical analysis in locations where traditional laboratory infrastructure may not exist or where immediate results are essential.

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STX Business Divisions at a Glance

The following overview summarizes how each STX division replaces a fragmented, traditional model with an integrated, laboratory-specific approach:

Division	Traditional Industry Approach	STX Division Approach
Envision™ An STX Brand	Boilerplate architectural concepts or casework templates from organizations with limited understanding of laboratory operations	Scientist-led design focused on functionality, workflow optimization, operational efficiency, and real-world performance
Design+Build	Low-bid construction where contractors compete on price; the lowest bid does not always produce the lowest overall cost	Collaborative Design/Build centered on communication, transparency, and shared goals, with expectations aligned before construction
STX analytical™ An STX Brand	Equipment procured separately, disconnected from facility planning and construction	Analytical instrumentation, infrastructure, and data handling integrated into development, with facilities built around the equipment
MODULAB™	Retrofitting separately purchased modular buildings never intended for scientific use	Purpose-built modular laboratories engineered for lab operations, improving lifecycle cost and reducing deployment timelines
CLEANLAB™	Cleanrooms designed independently from the scientific processes they support	Cleanroom environments tailored to each application for better workflow, consistency, and sustainability
TECHVAN	Fixed infrastructure that may not exist where analysis is needed	Vans to diesel trucks converted into fully functional mobile laboratories for field analysis, emergency response, and onsite testing

Summary

By integrating scientific understanding with innovative delivery models, STX is fundamentally changing the way laboratories are designed, built, equipped, and operated. Rather than relying on disconnected vendors and outdated industry practices, STX provides comprehensive laboratory solutions focused on efficiency, performance, sustainability, and long-term client success.

Frequently Asked Questions

What are STX's six business divisions?

STX operates through six integrated divisions — Envision (scientist-led laboratory design), Design/Build (collaborative construction), STX Analytical (integrated analytical instrumentation), ModuLab (purpose-built modular laboratories), CleanLab (custom cleanroom environments), and TechVan (mobile laboratories) — that together cover how laboratories are planned, designed, constructed, equipped, and deployed.

What is Envision?

Envision is STX's scientist-led laboratory design unit. Instead of boilerplate architectural concepts or casework templates, it designs facilities around how laboratories actually operate, focusing on functionality, workflow optimization, operational efficiency, safety, and real-world performance.

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How does STX's Design/Build approach differ from bid construction?

Low-bid construction has contractors compete primarily on price, and the lowest bid does not always produce the lowest overall project cost. STX's collaborative negotiated Design/Build approach aligns relationships and expectations before construction begins, improving efficiency, reducing costly misunderstandings, and accelerating timelines.

What makes STX Analytical unique?

STX Analytical integrates analytical instrumentation, related infrastructure, and data handling directly into the laboratory development process, so facilities are built around the equipment they will house. STX states it is the only company in the United States with the manufacturer relationships to provide an industry-wide range of analytical instruments as part of a fully integrated laboratory delivery solution.

How do purpose-built modular laboratories (ModuLab) compare to retrofitted modular buildings?

ModuLab delivers modular laboratories engineered specifically for laboratory operations rather than retrofitting separately purchased modular buildings, which improves functionality, operational efficiency, and lifecycle cost performance while significantly reducing deployment timelines.

What is TechVan?

TechVan converts vehicles ranging from small vans to large diesel-powered trucks into fully functional mobile laboratories that support field analysis, emergency response, remote operations, and specialized onsite testing, bringing scientific capability directly to the point of need.