



CASE STUDY: COR-TUF

**Army license leads
to market expansion
and accelerated growth**



Companies that work with TechLink to license technology developed by the U.S. Department of Defense (DOD) or the Department of Veteran's Affairs (VA) can expedite research and development to maximize return on investment.

From reaching new customers to expediting time-to-market, collaborating with government labs is a competitive advantage for U.S. companies. And federally developed technology is accessible to businesses through technology transfer. See how Cor-Tuf, a manufacturer of Ultra High Performance Concrete (UHPC), used technology transfer to accelerate company growth and market expansion in the construction industry.

A Concrete Idea

“Concrete is second only to water as the most ubiquitous material in the world,” explains Rich Burgess, President at **Cor-Tuf**. Concrete is the literal foundation of society. It must offer strong, durable support to countless pieces of infrastructure, including but not limited to buildings, roads, and bridges. Without reliable concrete, these structures crumble along with our ability to live, work, and travel.

The United States Army Corps of Engineers originally developed Cor-Tuf UHPC in its **Geotechnical Structures Lab** to make blast barriers at nuclear facilities and foreign embassies. When Cor-Tuf, the company,

learned about the UHPC, it set out to commercialize the invention for the private sector and approached TechLink to facilitate the technology transfer.

Goal: Initiate Infrastructure Improvements

Cor-Tuf recognized an opportunity to use UHPC to improve the construction and durability of critical infrastructure like roads and bridges. After expressing interest in the technology, TechLink — the licensing partnership intermediary for the DOD — helped Cor-Tuf create a commercialization plan and application that would grant the company access rights to commercialize the Army technology.

In 2017, Cor-Tuf's parent company, Integrated Composite Construction Systems (ICCS), signed a non-exclusive agreement to license the Cor-Tuf UHPC technology. The company used this license to build the Cor-Tuf startup, assemble a team, and attract investors before it began pursuing an exclusive agreement later the same year.

TechLink helped ICCS navigate and finalize the exclusive patent license. “The strength of the Army Corps’ technology gave us a significant jumpstart toward recruiting staff and investors. In the end, they trusted our team to bring this incredible material to market,” Burgess said.

“Without [Techlink], I don’t think we would have known how to earn that trust or navigate the licensing process.”

With license in hand, Burgess set out to make the commercialization plan a reality.

Cor-Tuf is the only UHPC that can be produced on-site using large-scale, familiar construction methods for mixing, transporting, pouring, and leveling concrete. And because it can be mixed with locally available sand and cement, Cor-Tuf requires drastically less material than the next most popular UHPC product, reducing shipping weight by 25%. These differentiators made it possible for Cor-Tuf to expand its market share quickly.

In the six years since the technology was licensed, Cor-Tuf has helped customers around the world secure aging infrastructure.

“There was a huge industrial boom in this country in the 1950s, 1960s, and first part of the 70s when a lot of bridges, structures, and roads were built,” Burgess recalls. “Now the number of structures that are deteriorating, deficient, or even potentially dangerous have well exceeded the number of dollars that

Departments of Transportation (DOTs) have to maintain them. Our product is a great way to breathe new life into an existing structure.”

Gaining Influence and Expertise

Today, Cor-Tuf is selling its namesake UHPC product at competitive prices to state and local level DOTs, who recognize the material as a solid investment for increasing the lifespan of critical infrastructure.

“There is an ever-escalating cost to resurface a bridge,” Burgess says. “DOTs know they can spend their dollars now to resurface something they will have to do again in 10 years or so at a much higher cost, or they can use Cor-Tuf and secure that bridge for 25 or 30 years instead.” And local municipalities are taking notice. Cor-Tuf has been used to repair bridges in Arizona, Arkansas, Florida, Missouri, New York, Oklahoma, and Washington.

As it continues to grow its influence, Cor-Tuf is focused on finding new ways to improve infrastructure. “The possibilities are endless,” Burgess says.

“Consider the potential uses for resilient, impermeable concrete in underwater or underground applications. Seawalls, dams, railroads — all these applications and more could benefit. We just need to find out.”

And buyers are trusting Cor-Tuf to do just that.

In less than six years since licensing Cor-Tuf UHPC from the Army Corps, the company has gone from struggling to finance the construction of a single concrete piling to being contracted for global, exploratory projects. Burgess points to Cor-Tuf's exclusive technology license as the driving force of the company's success.

"Our small business is competing at a global level with a technology that has immense needs, not only for our infrastructure but globally and for the military. The license gave us the potential to be something really big." He continues,

"Our business has been able to grow and flourish in a way that we couldn't have imagined."

Technology transfer gives businesses like Cor-Tuf the opportunity to release new products quickly and efficiently. By licensing federally developed technology, Cor-Tuf launched its business to the acclaim of the construction industry and cemented its reputation as an expert in infrastructure repair solutions.

ABOUT TECHLINK

TechLink is the authorized national technology transfer partnership intermediary for the U.S. Department of Defense (DOD) and U.S. Department of Veterans Affairs (VA); we are federally funded to work with companies of all sizes to find commercial potential in technologies developed in DOD and VA labs. Our team facilitates tech transfer partnerships — linking labs with private industry for technology licensing, transfer, and joint R&D across virtually all technology fields — and, in doing so, improves speed and outcomes for companies navigating DOD and VA technology transfer opportunities. Visit [TechLink's technology marketplace](#) to explore commercialization opportunities in almost every technology category.



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