



INTELLIGENT

Wire Harness Tool

ORIGIN STORY

Automating processes and impacting the bottom lines of wire harness manufacturers worldwide.



Creating A New Tool

How one client's pain became the inspiration for an intelligent wire-harness tool.

WHY UPGRADE THE WIRE HARNESS DESIGN PROCESS?

About a year ago, Guild was brought in to assist a drafting team. The problem? Converting customer engineering drawings into production-ready wire-harness designs fast enough to keep up with demand. On paper, the process was straightforward: take what the customer designed and recreate it in an internal system so it could be manufactured.

In reality, it was anything but.

A single harness can contain hundreds of wires—sometimes over 600—spread across dozens of connectors. For every wire, we had to click, assign one end to a connector pin, then manually route the other end to another connector or splice.

Then do it again.

And again.

And again—sometimes hundreds of times per harness.

It wasn't just tedious. It was redundant. All of that information already existed in the customer's original design, but there was no way to extract and reuse that data. Instead, we were rebuilding the design from scratch so it was usable in the manufacturer's systems.

It was a massive, expensive bottleneck.

So we decided to do something about it.

We wrote scripts to extract important data directly from customer drawings—identifying wires, connectors, and

Key Issues:

Repetitive

With hundreds of connections to assign, manually routing is both tedious and time-consuming. Especially when the information already exists in customer drawings.

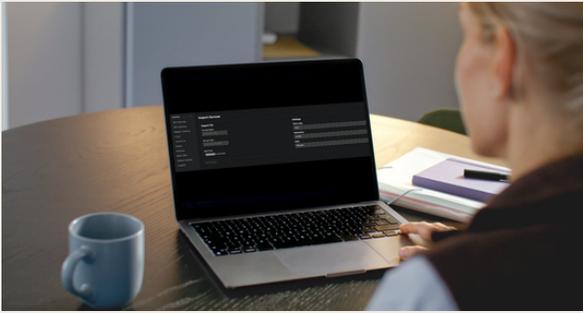
Duplicated Effort

Information is received in a PDF that describes the final product, not the steps to manufacture it. All of the information is there, but has to be re-interpreted in terms that make sense for the facility that will be manufacturing the product.

Lost Hours

Manually estimating wire lengths, identifying connectors and determining relationships in order to quote a specific job results in a huge number of man hours, with no guarantee of a sale.





relationships—and convert that into a format the drafting software could understand. Our goal was to automate the hours of repetitive clicking wherever possible. Which, it turns out, was in a LOT of places. Our earliest versions **cut 16 hours of work** from the process almost immediately.

At first, the tool was purely internal; a way to make consulting work more efficient. But as we went deeper, something else became obvious: drafting wasn't the only bottleneck these companies needed to solve.

Before a manufacturer did the final drafting, they had to first quote and win the job. Which meant analyzing drawings, identifying components, estimating wire lengths and building a bill of materials...all manually. That process could take 40 to 60 hours. If they didn't win the job, all of that time was lost.

That's when we realized our tool wasn't just about making OUR lives easier, it could play a pivotal role in the business of wire harness manufacturers. Automating the building of a complete harness data model from an original customer drawing could cut 40-60 hours of time down to 3 or 4.

That impact would compound quickly:

- Massive reductions in manual labor
- More quotes could be sent (and more opportunities won)
- Faster turnaround times across the board
- Reduced reliance on expensive third-party drafting tools

Fast forward to today: we plan to bring the 1st commercial version of our tool to market in 2027.

Our Beta program is already full (thank you early partners). However, we are opening a highly limited Pilot Program in Nov/Dec 2026 for manufacturers who want to get the tool sooner. Participants will receive early access and exclusive pricing in exchange for feedback and testimonials.



"We built this because we saw a team buried under an **exhausting, manual bottleneck**. Our goal isn't just to automate a process—it's to **give manufacturers their time back** so they can focus on growing their business."

