

The Harness Data Model

Moving beyond a 'parts list' to get you production-ready FAST.



Wires, Splices & Connectors Mapped Out

Most quoting tools just scrape text to give you a parts list. Our tool maps the physical reality of the harness directly from the customer's initial design. It builds a complete data model that understands how components physically fit together in the real world.



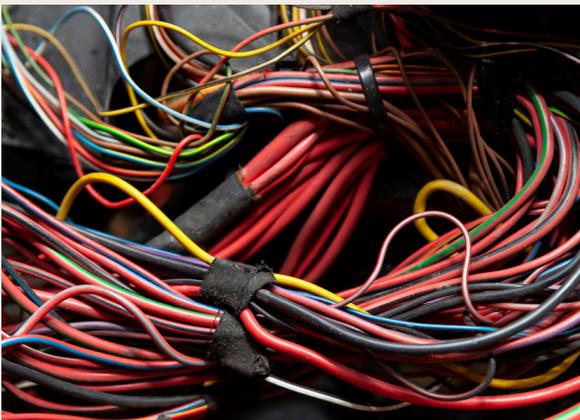
Smart Splice Calculations

- **The Problem:** When wires meet at a splice, they are stripped and overlapped. This physical overlap eats up wire length.
- **The Automation:** The tool automatically applies customizable design rules. For example, it will automatically add exactly 6 millimeters of length to every wire entering a specific splice.
- **The Result:** Prevents short wires, eliminates material waste, and stops the factory floor from having to rebuild faulty harnesses.



Active Connector Geometry

- **The Problem:** Connectors have physical depth. If an 80-pin connector is a 3x5 inch block, and a drawing only measures the wire run to the edge of that block, the wires routing to the far pins simply won't reach.
- **The Automation:** The tool recognizes the physical dimensions of the connector. It calculates and adds the precise extra length required for each individual pin based on its distance from the edge.
- **The Result:** A perfect-fitting harness that plugs in cleanly without tension or stretching.



The Bottom Line

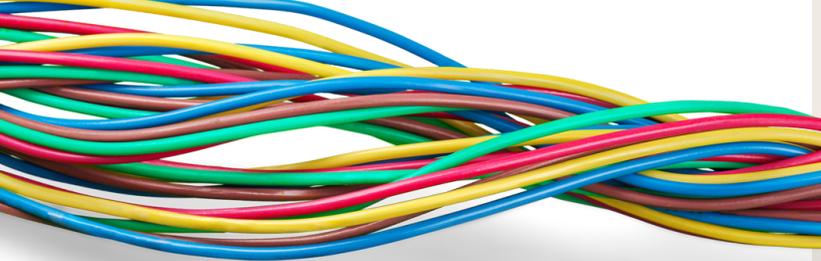
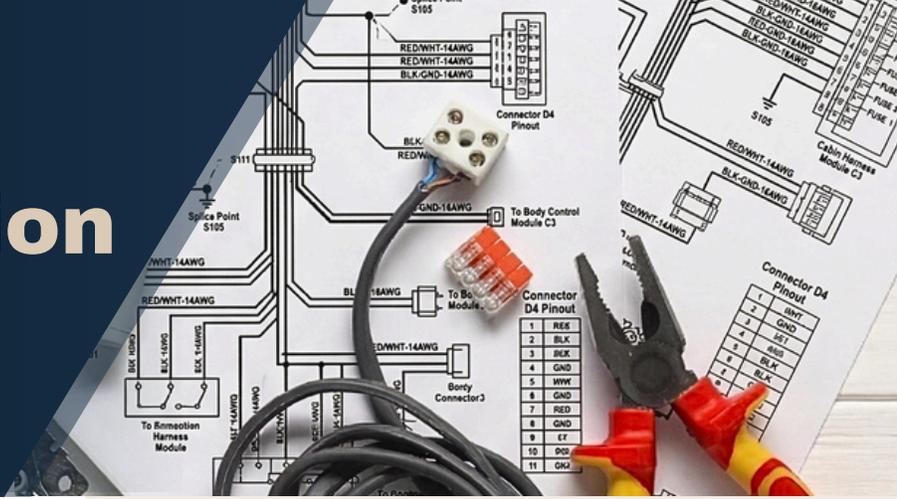
Because it calculates the physical shape of the harness, the tool:

- Automates complex geometric calculations.
- Ensures highly accurate wire lengths.
- Eliminates unnecessary material waste.
- Removes the need to manually figure out lengths in expensive CAD software later.



The Quotation Bottleneck

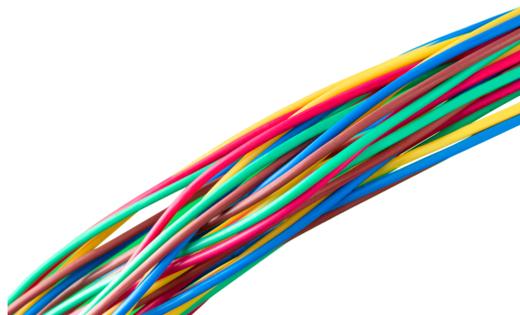
Getting the data you need to quickly get quotations out the door.



Resolving the need to manually create a BOM

Generating a quote requires knowing exactly what goes into the build. Right now, your team has to manually pick those parts out of a drawing one by one.

The Guild Automated Wire Harness tool was designed to automate this process. It does this by reading the drawings supplied by the customer and generating a complete, formatted Spreadsheet/CSV Bill of Materials.



Why This Tool Is Different

When we looked at the existing software landscape, we found that current wire-harness automation tools only solve half the problem.

Quotation-Only Tools

Some tools on the market use AI to extract a basic Bill of Materials for quoting. However, they stop there. They don't capture the spatial data or relationships between the parts, meaning your drafting team still has to estimate wire lengths manually, and they start from scratch if/when it's time to build the production drawing.

Traditional CAD Systems

Heavyweight CAD systems provide digital layouts that you can project directly onto a form board. The problem? They don't generate those layouts automatically from a customer's PDF. Your drafters still have to manually input the redesign effort into the CAD system to get that output.

Our Approach

We extract the data AND build the harness model automatically. Right out of the box, our data can be exported and imported into existing cloud-based CAD tools (like VeSys), meaning you don't have to overhaul your entire workflow to get the job done.



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Roadmap

We are currently covering about 90% of standard harness use cases. We are actively building out solutions for the remaining edge cases—such as loose shield wires that don't terminate at a connector.

Here is exactly where the product is heading:

Current Capabilities (Pilot Phase)

- **Automated data extraction:** Using customer PDF files and drawings.
- **Complete BOM/CSV generation** for ERP quoting.
- **Export capabilities** for existing CAD systems.

Next Phase

- **Automated Layouts:** The system will automatically generate the 2D layout for the drafting process based on the extracted data model.
- **Automated Testing:** The tool will automatically generate the test scripts required for the final harness based on the original customer design.

Long-Term

- **Replacing Dependent CAD:** By handling the automated layout internally, the goal is to completely replace the need for third-party drafting software, saving manufacturers thousands of dollars in time and subscription fees.

EARLY ADOPTOR PROGRAMS

The pricing for our early adopter programs will be shared with participants on a first-come, first-served basis.

Beta Testers

FULL - We are no longer accepting participants for the Beta program.

Pilot Program

OPEN: ETA - November/December 2026

If you are interested in being part of the pilot program waitlist, please fill out the form at:

<https://g-a.tech/wireHarnessPilotProgram>.

