

WIRING HARNESS MODULAR FORM BOARD

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PROJECT OBJECTIVE

To design a form board used in an assembly line to form & build different styles of wiring harnesses that is both modular & ergonomic.

BACKGROUND

SEL produces metering systems 734B & 734W



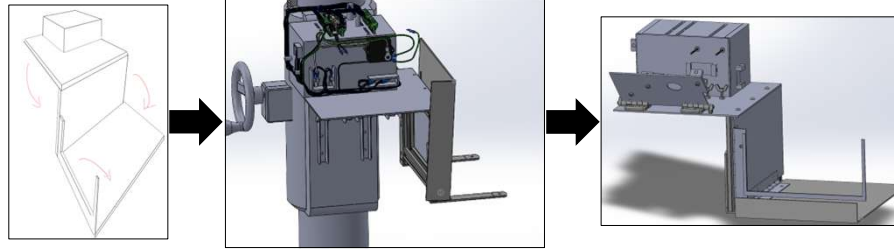
VALUE PROPOSITION

SEL's assembly line for these products are using outdated & nonergonomic form boards. This results in slower production & uncomfortable workspace. Our task is to design a formboard that accurately fits all 12 current harness designs that also has ergonomic design considerations to improve assembler experience.

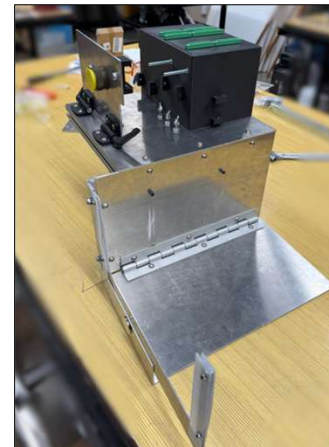
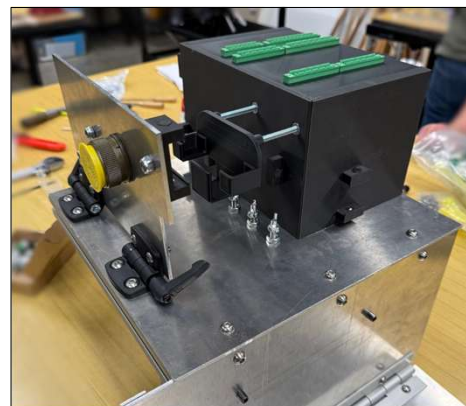
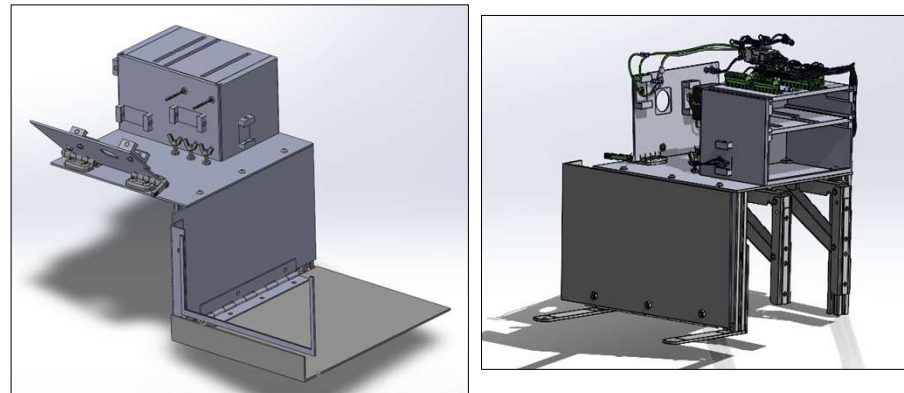
REQUIREMENTS

-  Modular
-  Universal for all 12 harnesses
-  Ergonomic
-  Help reduce zip ties used

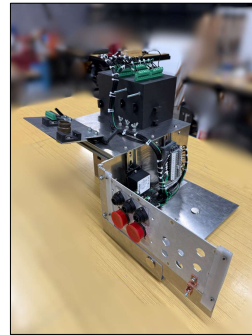
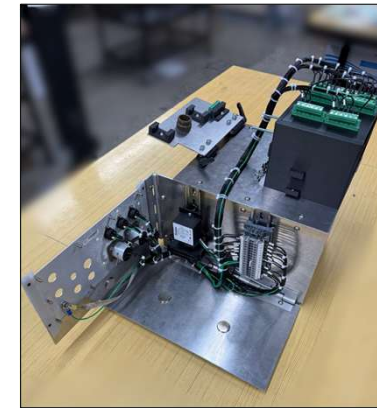
CONCEPT DEVELOPMENT



FINAL DESIGN



VALIDATION



RECOMMENDATIONS

REDESIGN MODULAR COMPONENTS TO BE PRINTED WITH PLA (COST EFFECTIVE)

DESIGN AND BUILD STAND FOR MODULAR FORM BOARD

REDESIGN WIRE HOLDERS TO BETTER FIT A RANGE WIRE HARNESS THICKNESSES

ACKNOWLEDGEMENTS

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