

# Alternate In-Process Packaging Tray

## T - Dex

PLASTIC INGENUITY

**Dexcom**  
CONTINUOUS GLUCOSE MONITORING

Sponsor: Mr. Kenneth Savage, Dexcom

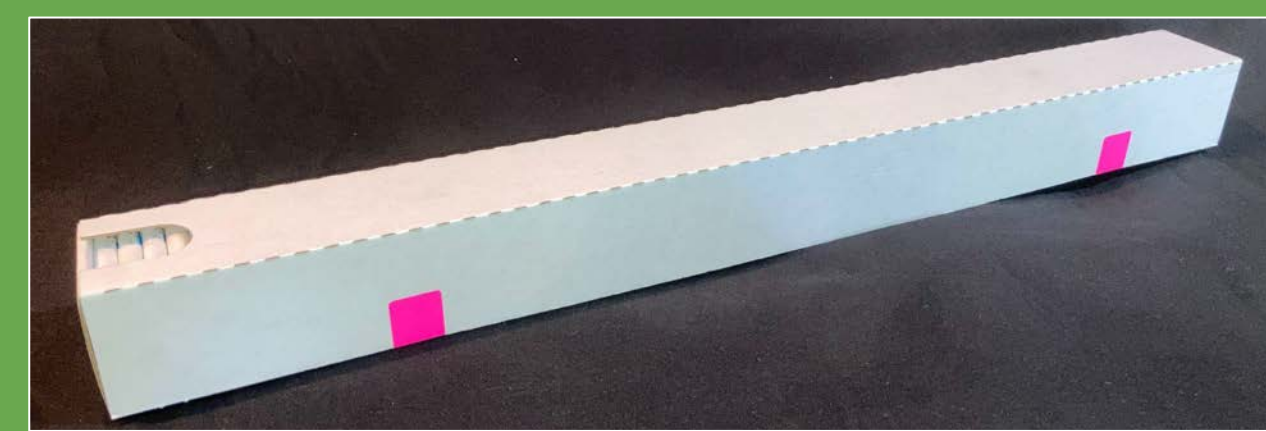
Advisors: Dr. Scott Shaffar, SDSU and Mr. Lenny Barbod, Dexcom



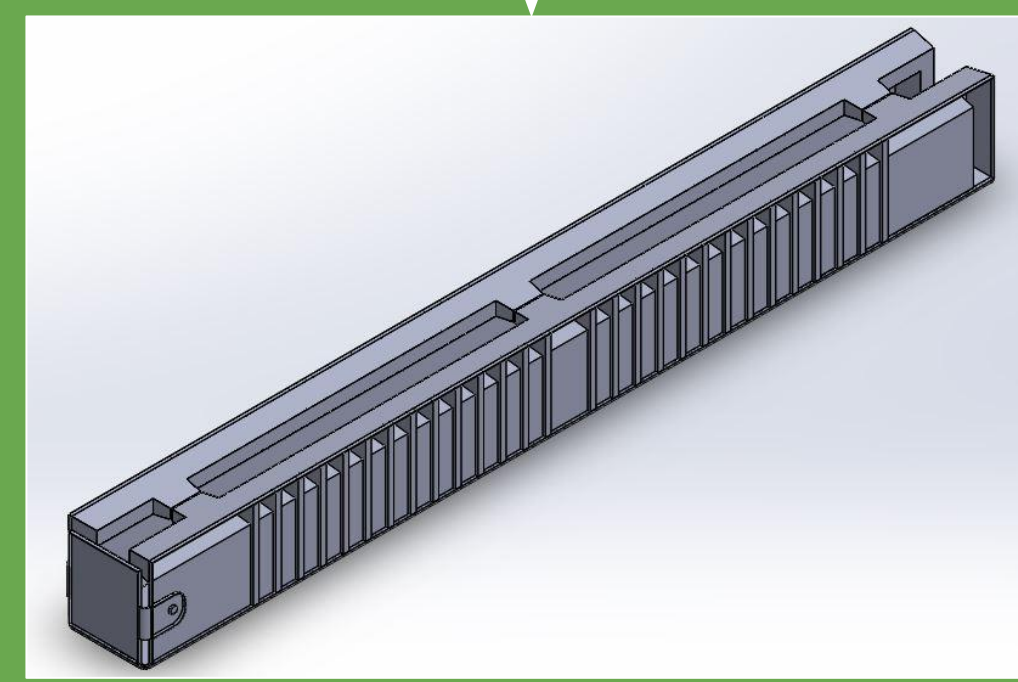
### Project Overview

Our goal is to develop a reusable tray to hold Instructions For Use (IFUs) to be used in automated dispensing equipment. The tray will be integrated into Dexcom's fully automated, replacing an existing single use corrugated carton. The tray will be constructed from a PET thermoplastic and allow for seamless flow of IFUs through its opening. Through research, system design, prototyping, and analysis, the team will develop and manufacture a tray that meets all requirements and passes modified package performance testing.

### Design



Current Corrugated Tray Design



Proposed Thermoformed Design



Square Tray



Triangle Tray



Square Tray Iteration



Triangle Tray Iteration



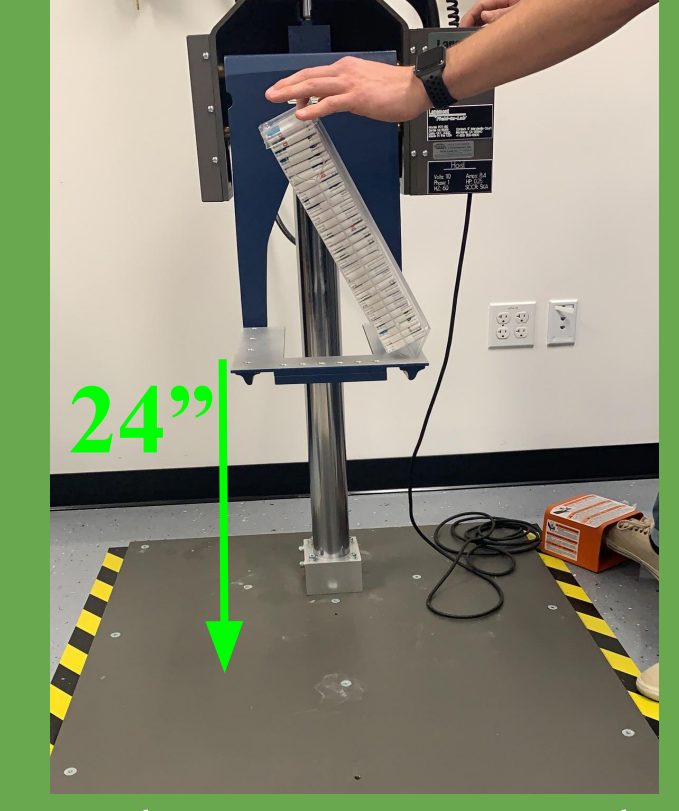
Final Design

Proceeded with the Square Tray, shown here in the Turret

### Testing



Square tray tested on the Drop Tester



Triangle tray tested on the Lansmont Drop Tester

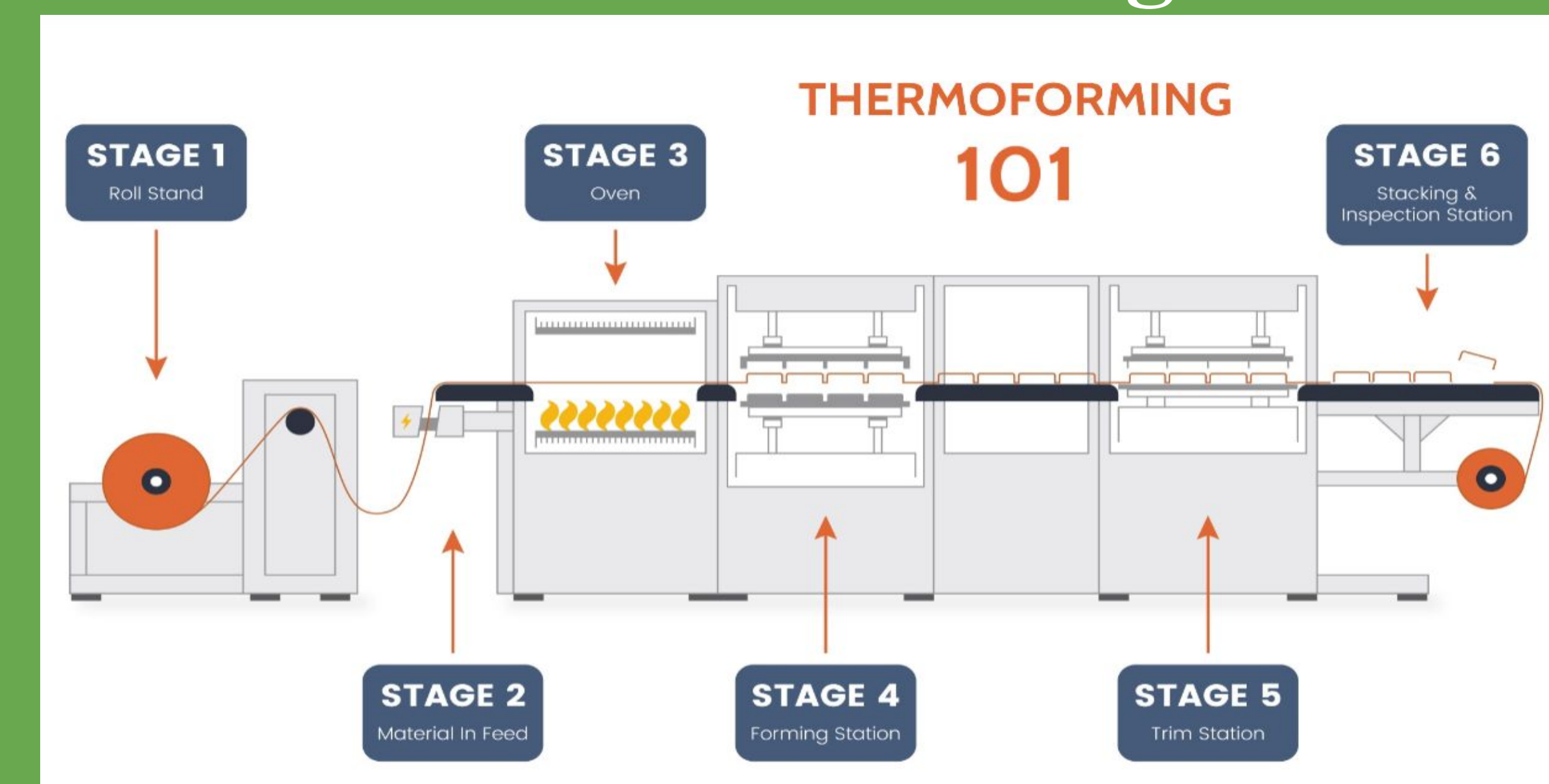


Square tray tested on the Compressor



Triangle tray tested on the Lansmont Compressor

### Manufacturing



Courtesy of Plastic Ingenuity

### Team T - Dex



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Design Co-Lead



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### Acknowledgements

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