INNOVATIVE APPLICATION TECHNOLOGIES FOR COATING FIBER PRODUCTS WITH 2D AND 3D SURFACES

FEBRUARY-MARCH 2024

PROBLEM STATEMENT

Dart Container produces a variety of containers in different sizes, shapes and functionality: some possess corners, curves, and hinges while the depth can range from under three inches to almost seven inches. Consequently, it can be difficult to rapidly apply barrier coatings to all surfaces with minimal reset time from one shape to another. Through this project, Dart hired TechConnect to uncover technologies that would enable them to achieve a coating speed of 2-5 seconds per square foot of substrate, regardless of geometric complexities.

Uncovering an approach that allows Dart to achieve their target coverage speed without damage to the thin substrate could mean higher production throughput. Additionally, next-generation coating systems able to handle the complex geometries could also potentially deliver higher quality products through more uniform coating application.

OUTCOME & RESULTS

This project generated a total of 12 responses from the global community: eight (8) from the United States and one each from Canada, Colombia, Germany, and Sweden.

From the submissions, Dart identified two (2) respondents for direct engagement: one a known spraying equipment provider and another offering a specialized application technology.

12 ENTRIES

50% STARTUPS

33% TRL 4

5 COUNTRIES

67% PROTOTYPE STATUS

2 DIRECT ENGAGEMENTS

TechConnect a division of ATI

DART