



MP21058-L

## Hands on training: composite-Manufacturing “Hand Layup” Nesting + Laser projection

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### Learning Objectives

- Learn how to use TruNest Composites to nest 2D ply shapes
- Learn how to use TruLaser to simulate laser projection
- Learn how to use TruNest Composites to track material roll
- Learn how to use TruPlan to determine manufacturing strategy

### Description

This class is a follow up to “Intro to Composite Manufacturing Platform.” This hands-on course will follow the entire manufacturing process for composites, carbon fiber, and parts. It will begin with determining manufacturing strategies with the help of TruPlan software. Then we will use TruNest Composites software to nest the 2D carbon fiber plies for material efficiency. Since the carbon fiber fabric is time-sensitive, temperature-controlled material, it must be followed through the manufacturing process with high precision. The complete lifecycle of each roll of material and each carbon fiber part will be tracked accurately using TruNest Composites software. Finally, when the 2D shapes are cut using part programs generated by TruNest software, they will be laid up on the 3D part mold by hand, using laser projectors to assist with layup. The laser projectors that assist with ply layup will be programmed using TruLaser software. This session features TruNest Composites, TruLaser, and TruPlan.



## Topics

- About Composite materials
- Setup composite design in TruPlan
- Nest 2D shapes in TruNest
- Simulate laser projection
- Material tracking example

