Lund SLALOM
Multi-Lane Tape Layer System

The Lund SLALOM 1.5” Multi-Lane Tape Layer – Proven productivity with well over 900 of the 787 wing skins produced at triple the rate of traditional CTLMs

Lund Unique Design-to-Build Solutions offers the Lund SLALOM 1.5” Multi-Lane Tape Layer designed with 1 to 27 lanes depending on part configuration and contour. Each lane achieves up to 3 degrees of off axis tape lamination allowing wide lamination swaths for high contoured parts. Highly repeatable on the fly individual lane add speeds up to 5905 ipm (2.5 m/s) Cut and lay speeds up to 11,811 ipm (5.0 m/s).

- Automated in-process lap/gap inspection included with Overhead Laser Template (OLT) defect projection
- Configurable with end placement and edge-of-ply automated overhead inspection.
- Configurable to vertical or horizontal applications from robot to large gantry applications.
- High-speed stiffness optimized head manipulators for every type of part configuration
- No heat required

“From Freezer to Flight, Lund products provide a complete line of composite aerospace solutions.”

The Lund SLALOM specialized features include:

- Adjustable lane spread for custom and optimized lane lap/gap configuration for individual courses, true dial-a-gap for every gap.
- Lane swappable supply and compaction/cutter model for 100% offline material reload and tape path maintenance (5 second exchange per lane).
- Head swappable for applications that require multiple end effector (fiber, wide tape, milling, ultrasonic cutting).
- Proven productivity with well over 787 wing skins produced at triple the production rate of traditional CTLMs.

Design/Build Facility

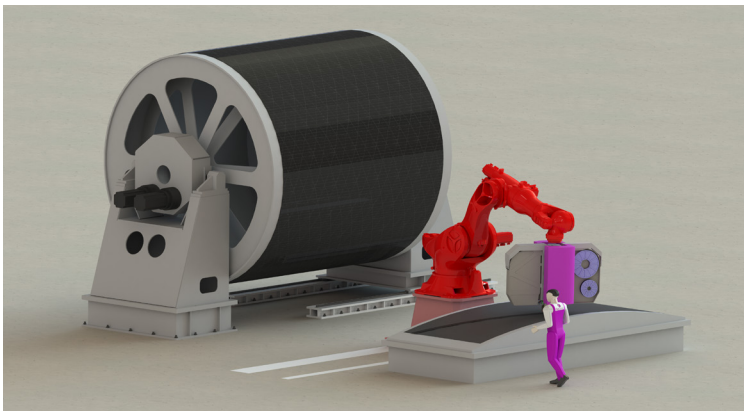
Lund headquartered in Seattle, Washington specializes in advanced technologies and innovative solutions for a wide range of manufacturing processes. Founded in 1995 as an engineering firm Fives Lund transitioned to design-build in the early 2000’s and joined the Metal Cutting | Composites business line of the Fives Group in August of 2015.

MACHINE CONFIGURATIONS:	
Gantry - Low Rail	Lower Cost
Gantry - High Rail	Higher Acceleration
Post Mill Style + Headstock/Tailstock	Barrel Manufacturing
Pivoting Cantilever Beam + X-Axis	Long Narrow Parts
1 to 5-Lane Head on Robot	Small Parts

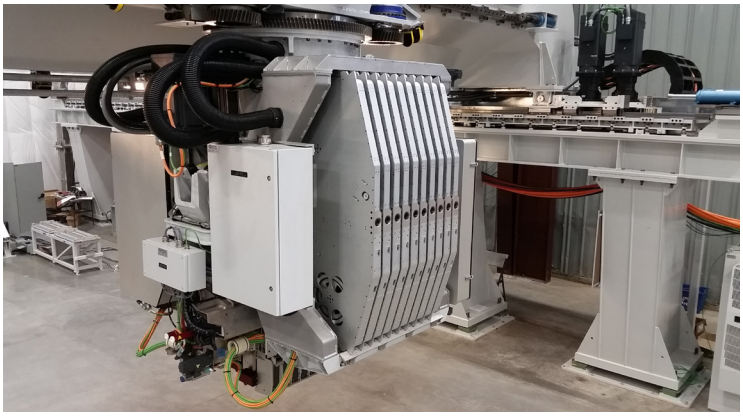
LINEAR AXIS PERFORMANCE VALUES TO:	
Speed	11,800 in/min [5 m/sec]
Acceleration	80 in/sec^2 [2 m/sec^2]
Repeatability	0.002 in [0.05 mm]
Accuracy (Compensated)	0.005 in [0.12 mm]
X-Axis Travel	Configurable
Y-Axis Travel	Configurable
Z-Axis Travel	Configurable

ROTARY AXIS PERFORMANCE VALUES:	
Tape Head Turnaround	≥ 2 sec
All other parameters	Configurable

TAPE HEAD PERFORMANCE VALUES UP TO:	
Add Speed	5900 in/min [2.5 m/sec]
Lay Speed	11800 in/min [5 m/sec]
Cut Speed	11800 in/min [5 m/sec]
Tape Width	1.5 to 3 in [38.1 to 76.2 mm]
Number of Lanes	1 to 21
Course Width	1.5 to 31.5 in [38.1 to 800 mm]
Carbon Payload	370 lb [165 kg]



3-Lane Lund SLALOM Configuration on Fives-Lund Accurate Robot



19-Lane Lund SLALOM Configuration in Production

fives ultimate machines ultimate factory

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