

# Tape Processing Machines with In-Situ Consolidation

» 2D Tailored Blank Production Machines and Laminate Job-Shopping

## Automated 2D tape placement with in-situ consolidation

- **Plug&Produce Production Machine**, heated table diameter: 1,5 m - 2,0 m
- **Small footprint** of 5 x 2.5 x 2.5 m<sup>3</sup>
- **Flexible arrange- and reconfigurable on the shop-floor**, moveable by forklift
- **Integrable into fully automated production lines** by automated unloading mechanism
- **Direct further processing of laminates in thermoforming** by using in-situ consolidation (no additional costly, energy-consuming and space-demanding consolidation step needed)
- **High cost- and material efficiency** by independent cut and add on-the-fly for each tape
- **High productivity** by consolidation of tapes with up to 1 m/s and simultaneous placement of three tapes in parallel
- **Highest standard for the laminate quality** by using aerospace proven laser heating
- **Prevention of over-heating** by temperature-control in the process zone
- **Flexible adaptable of tape material** by exchangeable modules to cover tape widths from 6 to 25 mm, thickness up to 0.3 mm
- **Full control and documentation** of all relevant process parameters by user-friendly HMI

**Please contact us for more information**

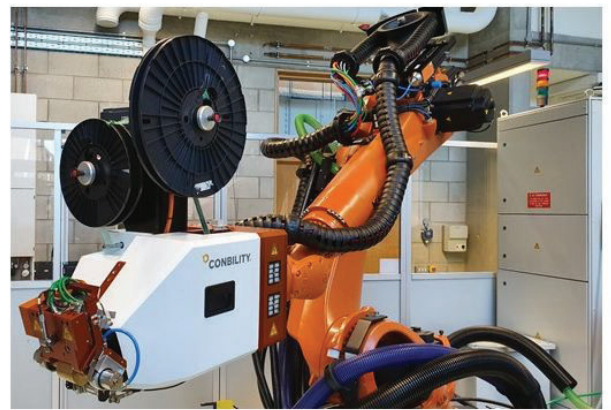
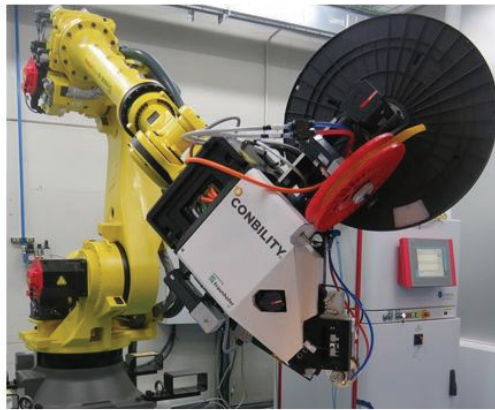
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# Tape Processing Machines with In-Situ Consolidation

» 3D Multi-Material-Applicator - Stand Alone and Turn-Key Production Cells

Conbility's configurable 3D-placement system for automated 3D layout of thermoplastic tapes, dry-fiber, prepregs and towpregs



## Automated 3D tape placement and winding machines

- One investment for the **processing of 3 different materials**
  - **Thermoplastic** CFRP and GFRP tapes
  - **Thermoset** CFRP and GFRP prepregs
  - **Dry Fiber** Rovings
- Suitable for **placement and winding** operations
- Single tows/ tapes with **width up to 50 mm**
- **Tape tension control**
- Heating by **high-power diode laser or infrared heater**
- BECKHOFF-based decentral control system communicating with robot control system, including **process parameter close-loop-control** and HMI
- Provision of **single applicator** or **turn-key production cells** (incl. robot system, winding axis, placement table, Laser-safe cabinet, certification)
- **Training** and **technology know-how** transfer

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