

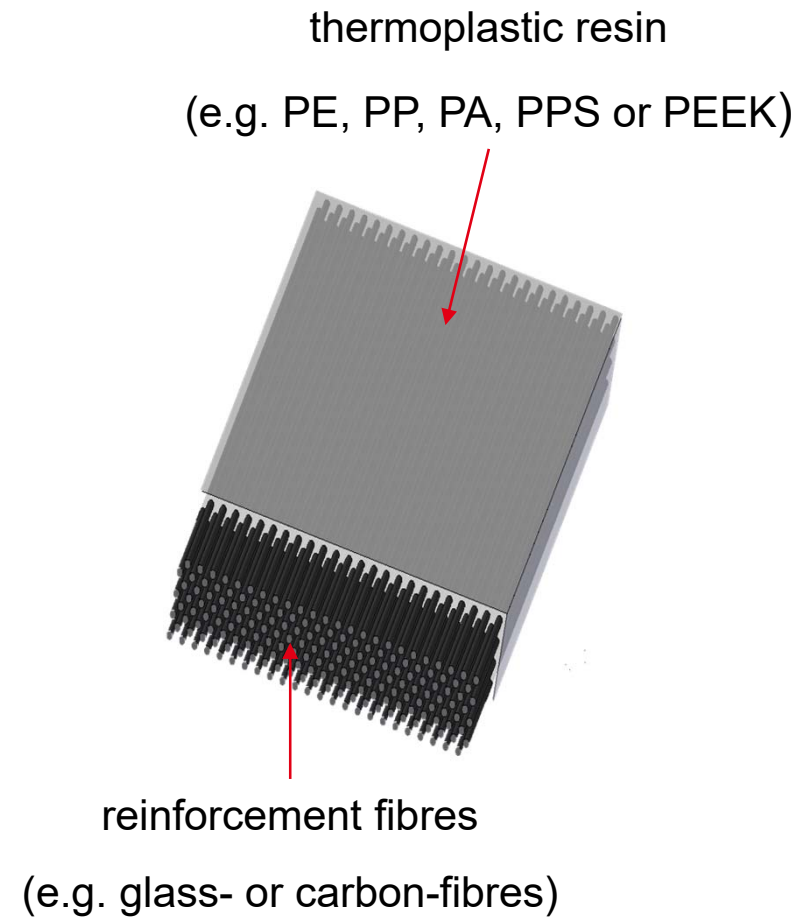
Automated production of thermoplastic composite parts using AFPT's laser-assisted placement technology

AFPT GmbH

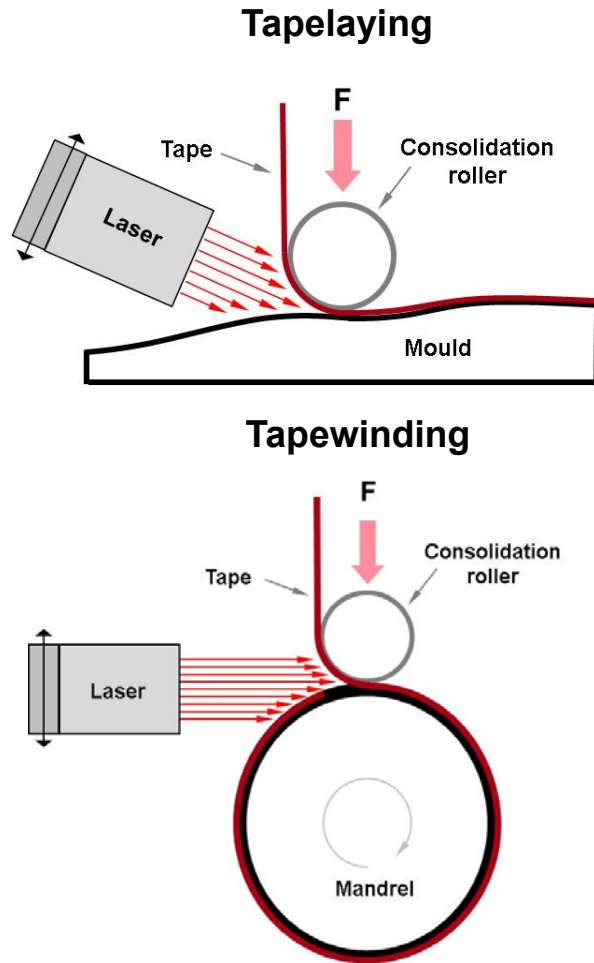
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## Thermoplastic composites

- AFPT is using pre-impregnated tapes, consisting of unidirectional fibres and a thermoplastic resin
- The fibres are responsible for high strength and stiffness of the composite material
- The thermoplastic resin protects the fibres from environmental influences.



## Laser-assisted tape placement technology

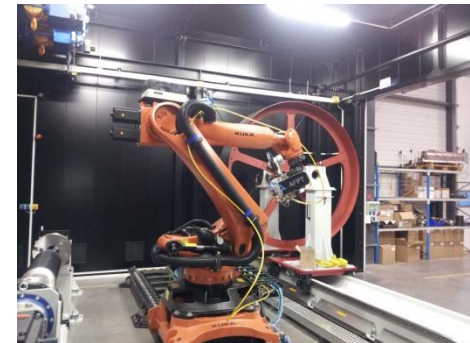
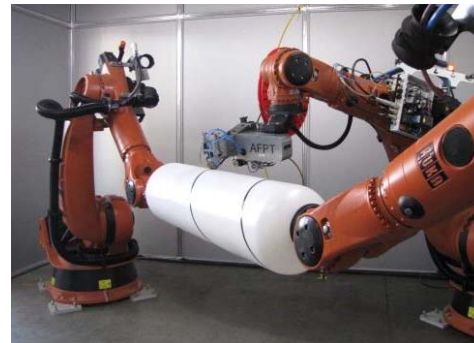


- The thermoplastic prepreg material is laser heated to the processing temperature
- A placement head positions the prepreg tapes, on the required mould or mandrel
- A fast control system maintains the desired parameters like process temperature, consolidation pressure and tape tension.
- The AFPT process results in a composite component which is ready to use (**in-situ consolidation**)
- All process parameters get logged and can be used for all kind of quality assurance reasons.

## AFPT's production systems

AFPT provides

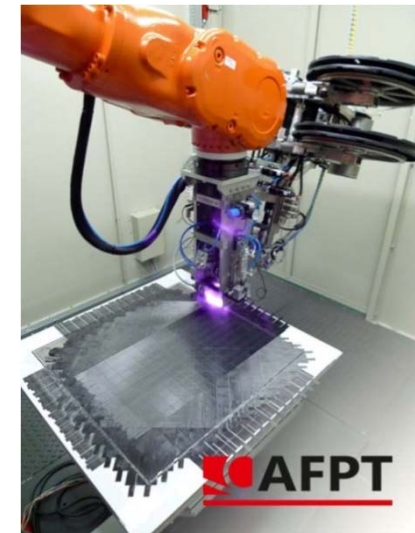
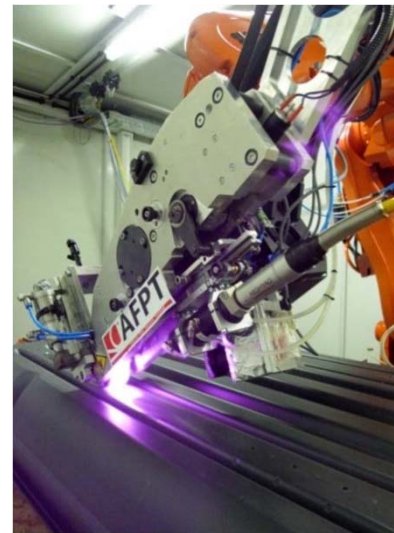
- Complete production systems for industrial composite manufacturing
- R&D cells
- Single- & multi tape placement systems
- Customized AFP solutions



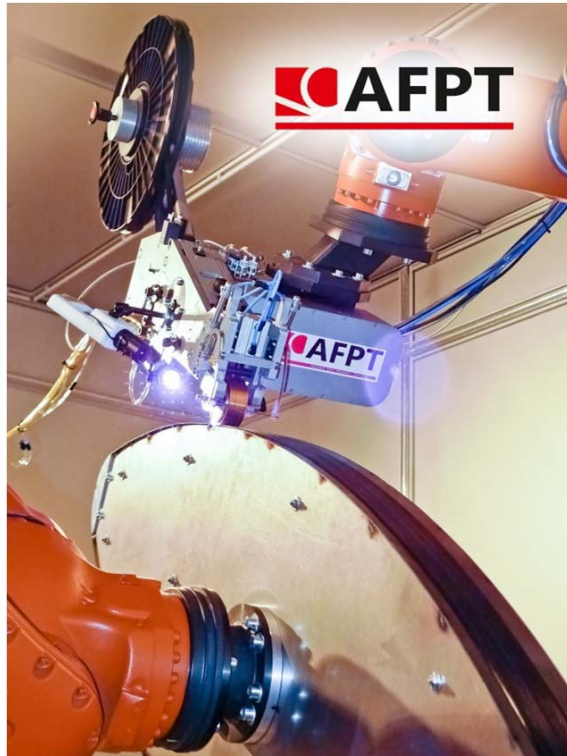
## Technical center for the production of components

In our technical department we can support you with

- Product development
- Small scale production
- Process development
- Training & commissioning of machines



## Contact us



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