



RECO EP

Possible applications



Aerospace



Automotive



Structural components



Wind turbines



Ship building



Aircraft interior

Lines for **PRODUCTION OF PREPREGS**

RECO EP

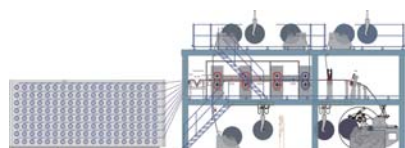
Since more than 30 years we work for the Composites industry. In addition to machines for resin film coating (PAK 400 EP), also lines for the production of Prepregs (RECO EP) for the horizontal or vertical process are designed and manufactured. Prepregs, produced on our lines, are used in the aviation and space industry, for wind energy plants, medical technology and as light weight components in the automotive-, ship building- and sports equipment industry.

The modular design of the RECO EP allows individual line concepts for meeting successfully the most stringent requirements. All materials, e.g. carbon-, glass- or aramid fibers as tapes/rovings, but also mono-, bi- or multiaxial fabrics, can be processed in working widths from 500 to 1.800 mm at speeds of up to 50 m/min on our lines.



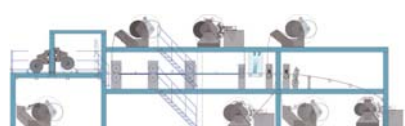
Horizontal Process

Impregnating Line for UD tapes (unidirectional arrangement of fibres)



RECO EP UD tape

Impregnating line for fabric



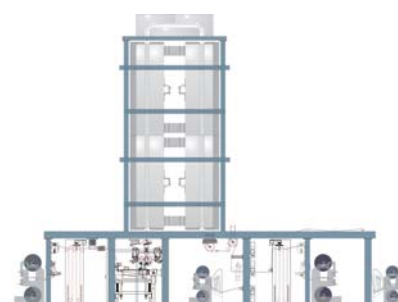
RECO EP fabric

Main features of the RECO EP for the production of Prepregs

- Processing of all types of fabrics, tapes/rovings in varying quality and with different resin contents
- Controlled unwinding tension of spools or reels
- Optimized feeding of tapes/rovings and materials
- High precision rollers with minimal tolerances of $< 2 \mu\text{m}$ T.I.R.
- Bending compensation of rollers
- Coating weight tolerances of max. $\pm 1\%$ (depending on material)
- Consistent and reproducible nip settings
- Accuracy of roller adjustment $\pm 1,5 \mu\text{m}$ (hydraulic)
- Precise temperature control of rollers, dryers, heating and cooling plates of $\pm 1^\circ\text{C}$
- Precise capture and control of web tension
- Various designs for single and turret winders with turret winder good splice rate of 99,5 % or better

Vertical Process

Lines for direct impregnation with vertical drying



RECO EP vertical

Additional features for vertical lines

- Convective and plate dryers for evaporation of the solvents
- Individual profiles for air circulation and temperature control in the dryers for the prevention of skin formation
- IR heated dryers
- Systems for heat recovery and exhaust air treatment

Options (examples for horizontal – resp. vertical lines)

- Motorized setting of rollers
- Nip pressure and contactless gap measurement
- Edge and centre cut
- Closed-loop-control of coating weight combined with coating weight measurement
- Lifting tables and cranes for reel loading and unloading
- Master or Turnkey Installation

Technical data

Working width	500 - 1.800 mm
Working speed	up to 50 m/min
Temperature	up to 180°C
Reel diameter	500 - 1.500 mm