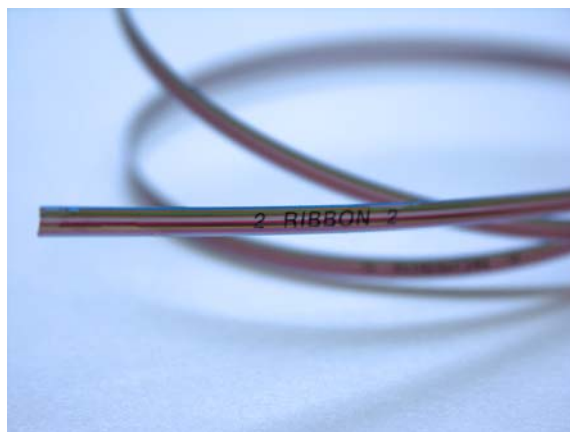


## FIBRE RIBBON PRODUCTION SYSTEM

- High speed ribbon processing
- Production of multi-fibre elements (CFU)
- Operational speeds up to 1000 m/min
- Processing of up to 12 (max.24) fibres
- Modular design

## FRP 05



### APPLICATIONS

Fiber ribbon processing of up to twelve (max. 24) primary coated and colored optical fibers.

### MODULAR DESIGN

The system basically comprises the following components:

- Pay-off unit TPO with the specified number of fiber payoff stations
- Ribbon processing unit including, on a common rack,
- Resin supply VCE
- Ribbon processing head RD (configured for the specified number of fibers required for ribbon production)
- UV curing unit CCD1-FRP
- Capstan and
- Take-up unit RCT
- Control cabinet PCI

### AUTO-TRAVERSING PAY-OFF UNITS

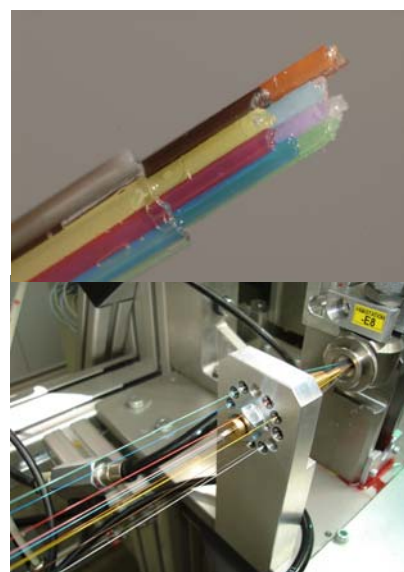
Design speed 2100 m/min  
Pay-off with advanced servo drive and microcontroller supervision  
Only two contact points (guide rollers) in front of ribbon head

### RESIN SUPPLY AND RIBBON HEAD:

Quick fiber feed (all fibers simultaneously)  
High life time  
Accurate pressure control for resin supply  
Bubble free high volume resin supply  
Outstanding planarity results

### UV CURING UNIT

High performance curing with process adapted irradiators.  
UV-output supervision and automated process speed adaptation



## CAPSTAN AND TAKE-UP UNIT

Perfect traversing at speeds up to 1000 m/min.  
 Flange to flange or trapezoid traversing with auto flange detection.  
 Automated servo drives with micro controller supervision for Take-up and Capstan.



## CONTROL AND VISUALIZATION UNIT

- CAN Network OLE-Server
- Easy adjustment of all production parameters
- Production protocol (ISO 9000)
- Network connection (modem/Ethernet)
- Real-time visualizing of all process data (Tension, UV-intensity, etc ...)

## EQUIPMENT DATA

Fiber spools – pay-off	Maximum flange diam. 405 mm Standard max. traverse width 220 mm Optional maximum traverse width 300 mm
Fiber pay-off tension range	30 to 100 grams
Fiber pay-off process tension range	45 to 65 grams
Take-up ribbon tension range	20 to 300 grams
Take-up ribbon process tension range	100 to 140 grams
Ribbon bobbins – take-up	Maximum flange diam. 600 mm Maximum traverse width 470 mm
Design speed	2100 m/min
Production speeds (exemplary data for planarity $\leq 50\mu$ ):	
for 4 fiber ribbon	1000 m/min
for 6 fiber ribbon	850 m/min
for 8 fiber ribbon	750 m/min
for 12 fiber ribbon	650 m/min
Planarity for up to 12 fibers	better than $25\mu$
Attenuation increase at 1310 and 1550 nm	Max. $<0.02$ dB/km – average $<0.01$ dB/km
Noise level for ribbon proc. at 800 m/min	$< 82$ dBA
Air supply	Dry air input – min. 4 bar, max. 6 bar
Nitrogen supply	Purity 99.95% – min. 4 bar, max. 6 bar
Process controls	M&S process adapted micro PLCs
Maximum power consumption	27 kW

