



Measurement	
Control	

Automation

Fully automated detection, realignment and pick count of the most diverse textile structures.



Basic features

The new, innovative Hybrid Scanning[®] with revolutionary double-sided scanners is a detection system with the widest dynamic range on the market.

Mahlo's TK 12 scanner, with its oscillating lens, embodies at present the leading technology for detecting distortions.

With the **Pattern Control System PCS-12**, which has successfully established itself on the market, we have over 10 years of experience in the realms of image processing.

By combining the two systems, and exploiting available synergy and potential, Mahlo's scanning technology has taken a further step towards perfection.

Highlight of the hybrid scanning system is fully automatic fabric recognition along with recipe change by **SOS-technology** (**S**elf **O**ptimizing **S**ystem)

Features at a glance

- Senses automatically a change of fabric
- Selects recipes automatically
- Scans face and back
- Detects patterns
- Built-in pick counter
- Widest scanning spectrum on the market at present
- No need to make fabric-related adjustments
- A hybrid system can be retrofitted without difficulty to all generation-12 Orthomats
- High-speed scanning with up to 80 computations per second from selvedge to selvedge
- Maximal functionality, minimal physical dimensions
- Insensitive to any change in the lie of the fabric
- Unaffected by secondary light
- Dispenses with traversing scanners, and thus detects more accurately and





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HYBRID SCANNING[®]

Technical Data

Back-lighting source for oscillating scanner (upper) and optronic image scanner (lower)

Technical Data



Automatic detection of change of fabric by Hybrid scanning $^{\ensuremath{\mathbb{R}}}$

Signal output	Photoelectrical measurement by oscillating lens (2 – 16 scanners) and image
	processors (2-8 scanners)
	Face and back detection, angular resolution: 0,1 degree
	Detection of weft threads and patterns up to 180 picks/cm
Signal analysis	Evaluation by DSP, microcontroller and IPC in real time
	Visualization via IPC and touch-screen with audio response
Lighting	Infrared LED lighting: back, reflex and flash light with automatic adjustment of
Lighting	luminous intensity
Lana	
Lens	Fixed focus (no adjustment required)
Line-speeds	0 – 250 m/min
Construction	Enclosure and plug connector: to IP64 standards (dust and splash-proof)
Options	Corrosion-proofed and cooled
Dimensions (b x h x d)	13 cm x 15,5 cm x 13 cm per scanner