TECHKON

Perfect Color Made Easy

TECHKON SpectroJet

TECHKON SpectroJet – Scan-Measurement Device
Color control made easy

Accurate, fast and easy-to-use

TECHKON SpectroJet revolutionizes automatic measurement of print quality on print control bars, color wedges, and test charts. Color measurement is made easy: The compact measurement device is quickly guided by hand along the color bar. Tracking wheels on the bottom of the device ensure a secure and straight run. For longer scans, the device can be slid along a guidance track. The measurement data is transferred immediately to a PC with compatible software, allowing for control of color quality of the printing press.

All-purpose device

Thanks to the flexibility of the SpectroJet, it can be used for any printing process and quality standard. ISO 12647 (PSO), Fogra media wedge, Gracol G7™ or any other standardization method can be applied: SpectroJet will always deliver all the necessary measurement data for evaluating high quality prints.

ISO compliant measurements

By software command, a physical polarizing filter can be applied as the pre-condition for conforming to current print standards requirements.

By providing multiple functions – e. g. color densities, colorimetry, printing contrast, gray balance, dot gain or ink setting recom-mendations – SpectroJet is a versatile and valuable tool for achieving the highest print quality and for boosting the productivity of a printing press.

Using the latest LED technology, the new SpectroJet provides D50 illumination and therefore meets current M0, M1, M2, M3 measuring conditions in accordance to ISO 13655.

Quality assurance during the press run

Increasing customer requirements means that press runs must be completed according to defined and documented industry print quality standards. TECHKON SpectroJet and the related Windows-based software, TECHKON ExPresso, are practical utilities that adhere to the print quality standards as defined by ISO 12647 (PSO) and Gracol G7™.

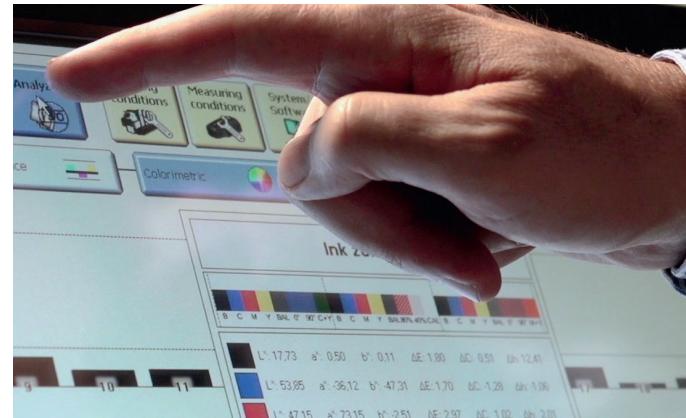### SpectroConnect and ExPresso Software

The included software, TECHKON SpectroConnect, displays measurement values clearly on the computer screen. Data is transferred from the SpectroJet via a USB connection and can also be exported into third-party applications, such as Microsoft Excel™ or TECHKON's quality control software.

Furthermore, the comprehensive software package includes many useful modules: data evaluation of test charts for color management, colorimetric quality control, recording of print-ing curves and calculation of the adjustments to be carried out for printing plate exposure, analysis of the Ugra/Fogra media wedge.

The additional available color control software, TECHKON ExPresso, is especially well-suited for the evaluation and documentation of print quality according to various quality control methods, e. g. ISO 12647 (PSO) or Gracol G7™.

Thanks to the ink zone-specific display of measurement values, the software provides quick and easy recommendations for ink key adjustment on press.

Versions and functions
SpectroJet is a scan-measurement device for automatic spectral measurements on print control strips, color wedges and test charts. Optionally it can be used for spot measurements as well. There are two different packages available. A post-purchase software-upgrade from SpectroJet Basic to the Pro version can be done easily.

SpectroJet + ExPresso Basic Software
Consists of the scan-measurement device SpectroJet and Windows-based software TECHKON ExPresso Basic with the following functions: ▪ Ink zone specific density display ▪ Color density for CMYK and spot colors (spectral density) ▪ Densitometric gray balance ▪ Dot area ▪ Dot gain ▪ Printing contrast ▪ Slur/doubling ▪ Target values and toler-ances ▪ OK-sheet ▪ Measurement data export (e. g. JDF format) ▪ Front-side and reverse printing ▪ Works with any sheet format and color bar length ▪ Display of single measurements ▪ Statistical analysis and report ▪ Supports up to 6 printing units

SpectroJet + ExPresso Pro Software
Same functions as the Basic package and additionally: ▪ Ink zone specific colorimetric CIE L*a*b*and ΔE*a*b* display ▪ ΔL*a*b* ▪ CIE L*C*h* ▪ ΔL*C*h*
▪ InkCheck: recommendation for ink key setting ▪ Display and evaluation according to ISO 12647 (PSO) ▪ GrayGuide (gray balance) according to Gracol G7™
▪ Supports up to 16 print-ing units

Software ▪ TECHKON ExPresso ; delivered on flash drive with software protection key (USB-dongle) and CD with print control strip TCS DigitalSystem require-ments: Windows 7, 8 or 10; 32- and 64-bit, minimum: IBM-compatible PC with Intel Core Duo processor or comparable processor, 4 GB RAM, 2 USB ports; screen resolution for TECHKON ExPresso: minimum 1280 x 1024 pixel
Contents ▪ Measurement device SpectroJet ▪ White standard ▪ USB cable ▪ Carrying case ▪ CD with software SpectroConnect ▪ Print control strip TECH-KON TCS Digital ▪ Manual with ISO 9000 compliant certificate
Optional accessoriess ▪ Horizontal track with two vertical bars. Standard lengths: SpectroJet Track 52 (for sheet format: 00), SpectroJet Track 74 (for sheet format: 0B) or SpectroJet Track 102 (for sheet format: 3B); special lengths on request ▪ Color reference SpectroCheck

Specifications

Measurement geometry	0°:45° optics	Standard observer	2°, 10°
Spectral range	400 to 700 nm in 10 nm steps	Density filter	DIN 16536, DIN 16536 NB, ISO/ANSI T, ISO/ANSI I, ISO E; spectral density Dmax
Measurement aperture	1.5 mm, appropriate for measuring patches with at least 3 x 3 mm (h x w)	Density measurement range	0.00 – 2.50 D
Light source	LED, provides measurement conditions M0, M1, M2, M3 according to ISO 13655	Repeatability	0.01 D; 0.03 CIE ΔE*a*b*
		Production spread	0.01 D; 0.3 CIE ΔE*a*b*
Polarization filter	Twice linear crossed, switched on and off per software command	Data transmission	USB-connection
		Power supply	USB-connection
Measurement time	Approx. 160 mm/s for 4 mm patches (equals approx. 3 seconds for 520 mm sheet length), approx. 400 mm/s for 8 mm patches,single measurement approx. 1 second	Weight	Measurement device: 360 grams
		Dimensions	55 x 70 x 135 mm (approx. 2.2 x 2.8 x 5.3 inches)
Scan length	Max. 2000 mm	System requirements for TECHKON software:	
White reference	Absolute and relative	Windows 7, 8 or 10; 32- and 64-bit, minimum: IBM-compatible PC with Intel Core Duo	
Illumination types	A, C, D50, D65, F 2/7/11	processor or comparable processor, 4 GB RAM, 2 USB ports; screen resolution for TECHKON	
		ExPresso: minimum 1280 x 1024 pixel	