

TECHKON

**Scan-Measurement Device
TECHKON SpectroJet**

**All colors under
perfect control**



Precise . Effective . Reliable
Technology Made in Germany

TECHKON SpectroJet
Scan-Measurement Device



SPECTRO
JET

Accurate, fast and easy to use

SpectroJet revolutionizes automatic measurements of print quality on print control bars, color wedges and test charts.

Color measurement 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. At longer distances the device can be slid along a guiding track. The measurement data is transferred simultaneously to a PC in order to control the color quality of the printing press.

All-purpose device

Thanks to the modular concept of 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 relevant measurement data necessary for evaluating high quality prints.

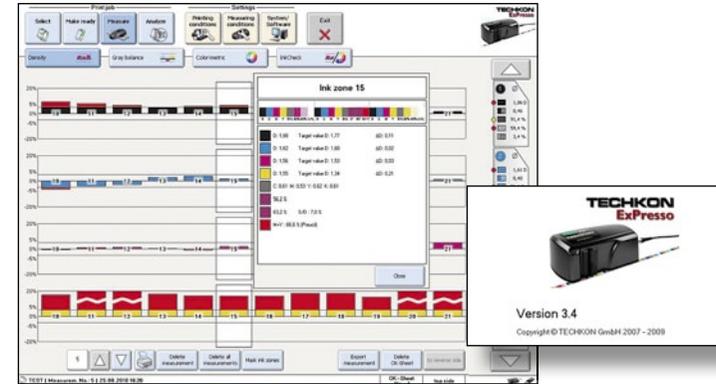
Software SpectroConnect and ExPresso

The supplied software TECHKON SpectroConnect displays clearly all measurement values on the computer screen, which are transferred by SpectroJet via an USB connection. All measurement values can be exported as well into other applications, such as Microsoft Excel™ for example.

The additionally available software TECHKON ExPresso is especially suited for the evaluation and documentation of the print quality according to various quality control methods, e.g. ISO 12647 or Gracol G7™.

ISO compliant measurements

By software command a physical polarizing filter can be inserted which is the pre-condition for conforming to the print standards. Providing multiple functions – e. g. color densities, colorimetry, printing contrast, gray balance, dot gain or ink setting recommendations – SpectroJet is a versatile and valuable tool for achieving highest print quality and boosting the productivity of a printing 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.

SpectroJet + Software ExPresso Basic

Consists of the scan-measurement device SpectroJet and the Windows 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 and printing contrast
- Slur/doubling value
- Target values and tolerances; OK-sheet
- Measurement data export
- Face- and reverse printing
- Works with any sheet format and color bar length; display of single measurements when used as a hand-held device
- Statistical analysis and report
- Supports up to 6 printing units

SpectroJet + Software ExPresso Pro

Same functions as the Basic package and additionally:

- Ink zone specific colorimetric $\Delta E^*a^*b^*$ display, CIE $L^*a^*b^*$, $\Delta L^*a^*b^*$, CIE $L^*C^*h^*$, $\Delta L^*C^*h^*$

- “InkCheck” recommendation for ink key setting
- Display and evaluation according to ISO 12647 (PSO), Gracol G7™ generator
- Supports up to 16 printing units

A post-purchase software-upgrade from the Basic- to the Pro-version can be done easily.

Software

TECHKON ExPresso;
Delivered on CD with software protection key (USB-dongle) and CD with print control strip TCS Digital

System requirements: Windows XP, Vista or 7

Contents

- Measurement device SpectroJet
- White standard with AC adapter with universal plugs
- USB cable
- Carrying case
- CD with software SpectroConnect
- Print control strip TECHKON TCS Digital
- Manual with ISO 9000 compliant certificate

Optional accessories

- Horizontal track with two vertical bars.
Standard lengths: SpectroJet Track 52 (520 mm), 74 (740 mm) or 102 (1.020 mm).
Special lengths on request

Specifications

Measurement technology	Spectral remission measurement and color density determination to ISO 5-3/4
Measurement geometry	0/45° optics to DIN 5033
Spectral range	400 to 700 nm in 10 nm steps
Measurement aperture	1.5 mm, appropriate for measuring patches with at least 3 mm height and 3 mm width; UV-Cut filter optional
Light source	Gas-filled lamp, type A illumination
Polarization filter	Twice linear crossed, switched on and off per software command
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 sec.
Scan length	Max. 2000 mm
White reference	Absolute and relative
Illumination types / Standard observer	A, C, D50, D65, F 2/7/11 / 2°, 10°
Density filter	DIN 16536, DIN 16536 NB, ISO/ANSI T, ISO/ANSI I, ISO E, spectral density Dmax
Density measurement range	0.00 D – 2.50 D
Repeatability	0.01 D; 0.03 CIE $\Delta E^*a^*b^*$
Production spread	0.01 D; 0.3 CIE $\Delta E^*a^*b^*$
Data transmission	USB-connection
Power supply	AC adapter, 100 – 240 V, 47 – 63 Hz
Weight	Measurement device: 360 grams
Dimensions	55 x 70 x 135 mm (approx. 2.2 x 2.8 x 5.3 inch)
System requirements	for TECHKON software: Windows XP, Vista or 7

The TECHKON Spectro series

Good printing is a matter of quality! The key to success is to control all steps of the process which lead to the printing product. The Spectro series provides you with the perfect tool for each of these steps.

SpectroPlate is the ideal device for checking the quality of a printing plate. Today in the age of Computer-to-Plate it is obvious: Without quality control in pre-press, there is no guarantee for quality in print!

Concerning colorimetric and densitometric measurements on printed products, the precise and compact hand-held measurement device SpectroDens is a real all-rounder. It is full of functions but nevertheless easy to use. Direct positioning of the measurement head on the measurement field ensures a secure and quick measurement.

When it comes to automatic measurement and analysis of complete print control strips, the TECHKON scan-measurement devices are used. SpectroJet is quickly guided by hand along the color bar. Optionally a guidance track supports this task, when long print control strips have to be measured. SpectroDrive is motorized and therefore scans a print control strip automatically. Both devices have a high speed of measurement in common and directly transfer the measurement data to the powerful but user-friendly Windows software TECHKON ExPresso or to other programs that control printing machines.

The world of TECHKON

As a long-established company we have more than 25 years of experience in the development and manufacture of high-quality spectral measurement technology.

One core area is the development of products for quality control in the printing industry. The color measurement instruments of the TECHKON Spectro series are regarded as the industry benchmark. A second focus is the product range of material analysis solutions with ElementCheck as our main product.

One of our specific strengths is our ability to tailor our solutions to specific applications. Our philosophy here: We observe and understand your application, deal with the complexity of the measurement technology and deliver you simple-to-use measurement solutions, which make your work safer, easier and more efficient.

Our philosophy for perfect measurement devices

As with all TECHKON-products, the innovative Spectro product series was designed by applying our four powerful principles for perfect measurement devices:

Easy and fast to use

High measurement accuracy

Solid and reliable

Functional and attractive design

The advantages at a glance

PRECISE

- Patented measurement head for exact and direct positioning
- Precise spectral engine
- Automatic measurement function displays always the relevant values
- Measurement values can be memorized with date and time tag
- Devices are factory-made calibrated permanently

FAST

- Immediately ready to use after switching on
- All measurement functions quickly accessible
- Quick measurement
- Up to 10.000 measurements per battery charge*
- Rechargeable high-capacity batteries; battery level control*
- USB port for easy and speedy transfer of measurement data to a PC

ROBUST

- Robust design for reliable function in a harsh industrial environment
- Durable precision; device is maintenance free

ERGONOMIC

- Ergonomically positioned, user-friendly measurement button
- Handy and compact
- Self-explanatory operation

VERSATILE

- Several dialog languages available
- Download of additional functions and device upgrades via PC
- Comprehensive software SpectroConnect included

* except for SpectroJet

TECHKON on the internet

Please visit our internet pages!

You will find useful information about the complete product range and themes of measurement technology. Download current program versions for the measurement instruments.

Or simply order your personal test device!

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Printed in Germany, 04/11
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