



TECHKON SpectroJet



Photo: René Staud, www.staudstudios.com

The car, a legend.

The photographer, legendary.

And now it's up to you to bring it to paper.

### Accurate, fast and easy to use

TECHKON 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.

### René Staud

Today, with more than 35 years of experience in advertising photography, René Staud is active in all areas of car photography. In this challenging and demanding environment, he is still seen as one of the most progressive innovators. The client base includes many major automotive manufacturers, whose international awareness was also shaped by his pictures.

Since then René Staud is constantly challenging himself and his team to deliver the highest creative standards and services in the industry. This includes his demands to print the images in the highest possible quality.

# TECHKON SpectroJet – Scan-Measurement Device

### 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  $G7^{\text{TM}}$  or any other standardization method can be applied: SpectroJet will always deliver all relevant measurement data necessary for evaluating high quality prints.

### 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.

# Quality assurance during the complete press run

Increasing customer demands require that the press run is printed according to defined and documented industry print quality standards. TECHKON SpectroJet and the related Windows software ExPresso are practical utilities that adhere to the print quality standards as defined by ISO 12647 (PSO) and Gracol  $G7^{TM}$ .

### Software SpectroConnect and ExPresso

The supplied software TECHKON SpectroConnect displays all measurement values clearly on the computer screen. They 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.

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

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 (PSO) or Gracol  $G7^{TM}$ .

Thanks to the ink zone specific display of the measurement values the software provides an easy and fast color adjustment on the printing machine.





# SpectroJet

# 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:

### 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 Printing contrast Slur/doubling Target values and tolerances 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 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 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) ■ Gracol G7<sup>™</sup> generator ■ Supports up to 16 printing units

A post-purchase software-upgrade from SpectroJet 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, 7 or 8;

32- and 64-bit, minimum: IBM-compatible PC with Intel Core Duo processor or comparable processor, 1 GB RAM, 2 USB ports

#### **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 (for sheet format: 00), SpectroJet Track 74 (for sheet format: 0B) or SpectroJet Track 102 (for sheet format: 3B); 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 x 3 mm (h x w)

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

Illumin. types / Standard observer A, C, D50, D65, F 2/7/11 /  $2^{\circ}$ ,  $10^{\circ}$ 

Density filter DIN 16536, DIN 16536 NB, ISO/ANSI T, ISO/ANSI I, ISO E, spectral density Dmax

Density measurement range 0.00 – 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 inches)

System requirements for Windows XP, Vista, 7 or 8; 32- and 64-bit, minimum: IBM-compatible PC with TECHKON software Intel Core Duo processor or comparable processor, 1 GB RAM, 2 USB ports