

**TECHKON**

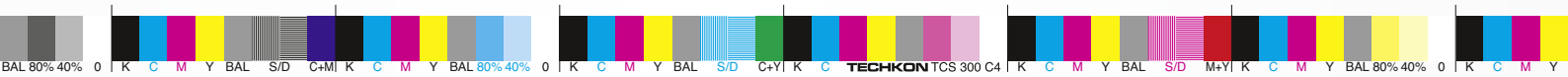
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TECHKON SpectroDrive



Photo: Franco Pace, [www.francopace.it](http://www.francopace.it)



Great move. Incredible shot.  
Brave photographer.  
And now it's up to you to bring it to paper.

### High quality and productivity

These are the two factors which are essential for today's success in the printing business. TECHKON SpectroDrive, with its automatic color and density measurement capabilities is the perfect solution to substantially increase press productivity by ensuring consistent color accuracy throughout the press run.

The system consists of two components: The motorized measurement system scans the complete color bar on a printed sheet within seconds and simultaneously sends the spectral measurement data wirelessly to the PC where all relevant information for controlling the printing press is displayed.



#### Statement Franco Pace

„Anyone can tell you that the sea is blue and the sails are white, but realistically the colors of the seas vary depending on the geographical locations and on various factors such as weather conditions.

The tones of the waves are innumerable and the colors of the sails as well. When you want to produce on paper a picture of a sailing boat in full action, even the slightest change in the colors is sufficient to alter the aesthetic balance and the atmosphere of the image. TECHKON provides the printers the optimal tool to reproduce images accurately and to meet the expectations of the photographer.“

# TECHKON SpectroDrive – Scan-Measurement System

## Increase profitability

Due to the trend of smaller print jobs and shorter press runs the time from starting a press to getting it “in color” and running with consistent quality is cost critical. SpectroDrive reduces this “non-productive” set-up time dramatically. You will increase profitability thanks to substantially reducing paper and ink waste and getting more precious time out of your printing press. The system makes your printing jobs predictable and calculable. In addition, the complaint rate will go down significantly and your customers will appreciate the sensible gain and reliability of the print quality.

The high rate of return of investment is amazing. The relative low – and only one time – investment will show in recurring profits almost immediately. Also, older printing presses get a productivity boost thanks to SpectroDrive.

## Ease of use and high speed measurement

Setting up a printing press can be compared with starting a jet plane. It is a time-critical process, where the press operator – like a pilot – must observe and perform a multitude of important tasks at the same time. Hence, during the development of SpectroDrive great care was taken in delivering a system that is easy to use, does not distract from running the press and delivers all significant information instantly and automatically.

The measurement device only has one button to start the measurement process. The Windows software ExPresso has a self-

explanatory user interface which can be operated via touchscreen. Installation is simple as well. After a few minutes the system is operable and ready to take measurements.

## Two measurement systems in one

This relates not only to the technical fact that the spectral measurements allow displaying densitometric and colorimetric data, but that SpectroDrive can be used as a scanning device as well as a hand-held instrument for single measurements. Just take the device from the horizontal track and position it wherever you want to take a color measurement.

## Software ExPresso

The TECHKON ExPresso software offers a comprehensive tool-set comprising measurement of spot colors, support of up to 16 print units, front-side and reverse printing, display of color density, dot gain, gray balance, CIE L\*a\*b\*-values and recommendations on how to adjust the ink on the press. This is only an excerpt of the complete functionality.

Thanks to its modularity, TECHKON ExPresso is expandable and versatile. The measurement data can be exported into other software applications that connect real-time to printing presses to enable a “closed loop” turn-key solution. In addition, the ExPresso software can export measured data to standard applications such as Microsoft Excel™.



**SPECTRO  
DRIVE**

For more information please visit [www.techkon.com](http://www.techkon.com)





## SpectroDrive

### Versions and functions

The scan-measurement device SpectroDrive and the Windows software ExPresso form a complete quality control system for increasing productivity and quality of a printing press. There are two different packages available:

#### SpectroDrive + Software ExPresso Basic

Consists of the spectral-measurement device SpectroDrive 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

#### SpectroDrive + 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 SpectroDrive 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 SpectroDrive
- Charging console with integrated white standard
- AC adapter with universal plugs
- Horizontal track with holder
- 2 vertical bars
- WLAN-module for wireless data transmission
- USB cable
- Carrying case
- Manual with ISO 9000 compliant certificate

#### Optional accessories

- Color reference SpectroCheck

## 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 sec. for 520 mm sheet length), single measurement approx. 1 second (if SpectroDrive is used as hand-held device)
White reference	Absolute and relative; absolute white standard integrated in charging console
Illumin. 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 – 2.50 D
Formats	52 (20") for sheet format 00 (B3+, 370 x 520 mm); 74 (28") for sheet format 0B (B2+, 520 x 740 mm); 102 (40") for sheet format 3B (B1+, 720 x 1020 mm); 105 (42") for sheet format 3B+ (B1+, 780 x 1050 mm); special formats (up to 1800 mm) on request
Repeatability	0.01 D; 0.03 CIE $\Delta E^*a^*b^*$ Inter-instrument agreement      0.01 D; 0.3 CIE $\Delta E^*a^*b^*$
Data transmission	WLAN-module for wireless data transmission with PC-sided USB connection
Power supply	NiMH battery, reg. recharge via charging console with AC adapter, 100 – 240 V, 47 – 63 Hz
Weight	Measurement device: 820 grams
Dimensions	70 x 95 x 170 mm (approx. 2.8 x 3.7 x 6.7 inches)
System requirements for TECHKON software	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