

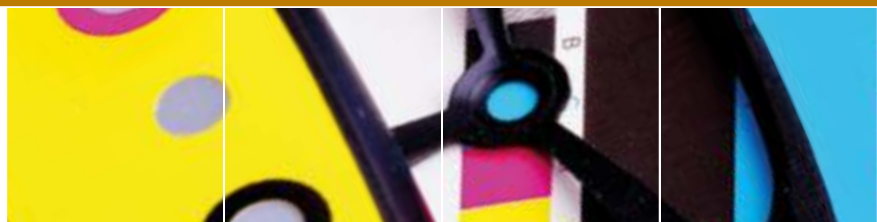
# CITO ProcessLine ... for the best quality



Optimises your production and verification processes

Profit from our R&D experience: developing a product entails repeatable measuring and testing accuracy in order to establish realistic criteria for its use in practice. We therefore set up countless simulations and tests in our laboratories and we want you to gain from this experience with our new range of devices. Our measuring and testing equipment is aimed at a working environment. We want to provide real-time testing as close as possible to the production process so adjustments can be made immediately when necessary. That's why all our devices are designed to be simple, compact and robust.

As you would expect from CITO, we apply our expertise to deliver not only the required hardware, but also full technical support. Our ProcessLine product group combines 110 years of experience in paper and cardboard converting with advanced measurement technology – this combination has made us one of the leading companies in print finishing. Tens of thousands of customers around the world appreciate this and regard us as their *partner for success*.



#### **Clearance Measuring Devices**

CITO LaserInspektor

#### **Colour Measuring Devices**

DenCITOmeter

SpektralDenCITOmeter

#### **Crease Measuring Devices**

CITO CREASY

CITO CounterControl

CITO CORRCHECK

#### **Corrugated Board Measuring Devices**

CITO CORRCHECK

#### **Braille Measuring Devices**

CITO BREYE

#### **ProcessLine Seminars / Know-how**

Online Seminars

Online Training

In-house Training

# Clearance Measuring

## CITO LaserInspektor



The CITO LaserInspektor is a tactile measuring device with a specially developed software to measure laser cutting in stamping/cutting tools. The CITO LaserInspektor for the first time allows laser cuts to be measured. Its use during ongoing production enables the optimisation of manufacturing parameters and thus ensures the constant quality of your tools.

The CITO LaserInspektor can document the measured data in a quality report. The specially developed software permits an analysis of the cross-section. The sensor installed in the hardware is guided through the die clearance to measure its course. The corresponding data are then transmitted to the software and analysed.

### Functions:

- Die clearance measurement of laser-cut stamping/cutting tools
- For flatbed cutting dies and rotary half shelves
- Unique measuring system to optimise laser cutting
- Quality report as PDF to document quality assurance
- Allows the optimisation of your setting parameters in the manufacturing process

### Technical data:

- Repeat accuracy:  $\pm 0.01$  mm
- Measuring accuracy:  $\pm 0.03$  mm
- Measuring speed pre measurement: 3 - 5 seconds
- Measuring device size: 210 × 70 mm
- *Optional:* adapter for rotary half shelves 174 - 808 mm

Order no.	Description	Unit
BYG00114	CITO LaserInspektor, incl. Software for Window and Working standard	1 piece
BYG00151	Adapter for rotary half shelves	1 piece



# Colour Measuring

## DenCITOmeter SpektraldenCITOmeter



The measurement and control of your printing process has never been so easy.

The DenCITOmeter and SpektraldenCITOmeter are the perfect measuring device for use with the printing press.

They provide precisely those measurement functions which are needed with the printing press, quickly and easily: density, dot gain value, dot value and balance, as well as Delta E 2000 with the SpektraldenCITOmeter.

Technical data:

- Zeroing to paper white
- Measurement of density values
- Measurement of dot gain values
- Measurement of the dot value
- Measurement of density and balance difference
- Measurement of Delta E 2000 (only SpektraldenCITOmeter)
- Setting for calibration
- Setting of absolute or relative density
- Power supply by 2 AA (LR6) batteries (Not included in the scope of delivery)
- Tolerances:  $\pm 0.01$  density,  $\pm 1\%$  tonal value, 0.5 Delta E

Order no.	Description	Version	Unit
BYG00108	DenCITOmeter, EPL	Offset, with polarising filter, 3 mm	1 piece
BYG00109	DenCITOmeter, EPS	Offset, with polarising filter, 2 mm	1 piece
BYG00100	SpektraldenCITOmeter, EPL	Offset, EU, with polarising filter, 3 mm	1 piece
BYG00101	SpektraldenCITOmeter, EPS	Offset, EU, with polarising filter, 2 mm	1 piece
BYG00102	SpektraldenCITOmeter, EUL	Flexo, EU, with polarising filter, 3 mm	1 piece
BYG00103	SpektraldenCITOmeter, EUS	Flexo, EU, without polarising filter, 2 mm	1 piece
BYG00104	SpektraldenCITOmeter, TPL	Offset, USA/UK, with polarising filter, 3 mm	1 piece
BYG00105	SpektraldenCITOmeter, TPS	Offset, USA/UK, with polarising filter, 2 mm	1 piece
BYG00106	SpektraldenCITOmeter, TUL	Flexo, USA/UK, without polarising filter, 3 mm	1 piece
BYG00107	SpektraldenCITOmeter, TUS	Flexo, USA/UK, without polarising filter, 2 mm	1 piece



# Crease Measuring

## CITO CREASY



### CITO CREASY

Our crease measuring device enables you to monitor creasing characteristics. It supports you during setup on the press, resulting in superior creasing and a longer service life for your tooling and creasing matrices.

CITO CREASY is a measuring device that optically records creasing characteristics and uses software to analyse these on your PC or laptop. It graphically records the width, height and symmetry characteristics of the creasing and the two folding edges, analyses these and documents them by issuing a report. This guarantees optimised converting on the folding carton gluing machine.

With the CITO CREASY you can also measure impressions or monitor the angularity of assembled folding cartons.

Technical data:

- Measures the creasing characteristics
- Measures the folding angle
- Checks the height of creasing
- Checks the width of creasing
- Checks the folding edge to the left and right
- Documents the checks in the form of a PDF quality report
- Documents the statistics in the form of a PDF quality report
- Tolerance: 0.003 mm depth measurement

Order no.	Description	Unit
BOB00040	CITO CREASY Basic	1 piece
BOB00041	CITO CREASY Premium	1 piece
BOB00042	CITO CREASY Upgrade from Basic to Premium	1 piece
BOB00044	CITO CREASY Power Crease Update	1 piece
BOB00045	CITO CREASY Power Box	1 piece
AOB00059	CITO CREASY E-Guide Pro 2	1 piece
BOB00048	CITO CREASY 3D View	1 piece
BOB00049	CITO CREASY LaserCrease	1 piece
BOB00050	CITO CREASY Rule Upgrade	1 piece
AOB00061	CITO CREASY E-Guide Pro 2 Package	1 piece
AOB00044	CITO CREASY E-Guide Pro Film, printed CITO CREASY E-Guide Pro 2 Film, printed	1 piece
BOB00060	CITO CREASY Upgrade für 5.x Software	1 piece



# Crease Measuring

## CITO CREASY Extensions



## CITO CREASY LaserCrease

The LaserCrease add-on displays the exact measured values of laser-created folding cartons.



## CITO CREASY Power Crease

With the Power Crease extension for the CITO CREASY Premium, you can now measure and check creases on the side of the crease line.



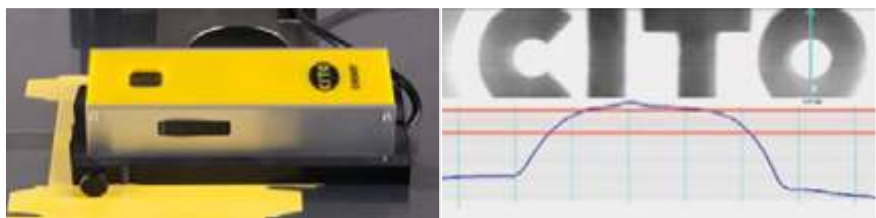
## CITO CREASY Power Box

With our Power Box extension for the CITO CREASY Premium measuring device, you can check the angularity of score lines and finished boxes.



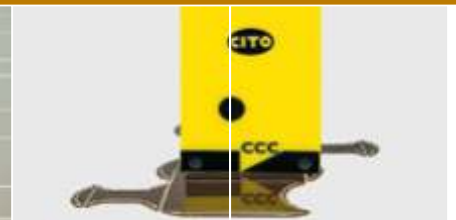
## CITO CREASY E-Guide Pro 2

With the aid of the E-Guide Pro 2, you can measure, check and optimise embossments and blind embossments in solid board.



# Crease Measuring

## CITO CounterControl



### CITO CounterControl

is an optical, non-contact measurement system for monitoring the width and depth of the creasing channel of the counter material and the counter plate.

Reduce costs resulting from measurement errors by using CITO CounterControl. Optimise and secure your production process.

CITO CounterControl allows you to test the wear on Pertinax from repeated operations and thus prevent machine downtime in advance.

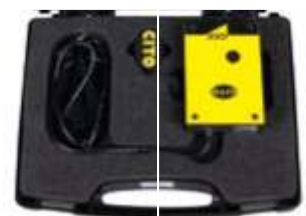
This measuring system makes it possible to achieve consistent measuring accuracy, independent of the operator. Complaints and measurement errors are now a thing of the past. As an option, the measuring system is available equipped with a laptop computer.

Technical data:

- Measures the creasing channel depth
- Measures the creasing channel width
- Measures the radius at the floor of the creasing channel
- Measures the angle at the floor of the creasing channel
- Documents the measurements in the form of a PDF quality report

- Tolerance: 0.003 mm depth measurement
- Measuring width from 0.01 up to 8 mm
- Measuring depth from 0.001 up to 3 mm

Order no.	Description	Unit
BYG00112	CITO CounterControl measuring device	1 piece



# Corrugated Board Measuring

## CITO CORRCHECK Crease and Corrugated Board Measuring Device



### CITO CORRCHECK

is an optical, non-contact measuring system to check the mechanical washboard effect, flute profiles of open flutes and the creasing process in corrugated board production.

Reduce high costs resulting from maculation with CITO CORRCHECK. CITO CORRCHECK is the technical measuring solution to the problem of washboarding.

For the first time, this measuring system makes it possible to measure the washboard effect on original sheets, without having to take into account the considerable effort and cost of preparing measurement samples. Where there are deviations from the nominal values, the appropriate remedial action can be taken immediately.

Technical data:

- Measures the flute profile
- Measures the washboard effect
- Measures the creasing
- Measures scoring
- Tolerance: 0.003 mm depth measurement
- Tolerance: 0.001 mm washboard effect

Order no.	Description	Details	Unit
BYG00111	CITO CORRCHECK	measures flute, washboard, creasing	1 piece





# Braille Measuring

## CITO BREYE



### CITO BREYE

is connected to a PC via USB. It takes 3D images of the sample which are then transmitted to the PC for analysis.

The software analyses the Braille dots and outputs the height, the base diameter and the positioning of the dots. The measurement readings are collected and statistically analysed. A quality report can be saved and printed out. CITO BREYE can be used at various stages of the production process:

- on the embossing press after the packaging is glued
- in the QA department.

CITO BREYE is a reliable, portable measuring device which checks and documents the measurement data according to DIN EN 15823. The dots themselves are not damaged by this process.

The measurement readings are automatically saved in the form of a report and are therefore tamper-proof. The report can be called up at any time.

Technical data:

- Measures the dot height
- Measures the dot width
- Measures the dot spacing
- Conforms to DIN EN 15823
- Standard Marburg database, can be edited

- Documents the checks in the form of a PDF quality report
- Documents the statistics in the form of a PDF quality report
- Tolerance:  $\pm 0.01$  mm

Order no.	Description	Details	Unit
BYG00110	CITO BREYE	Measurement of Braille dots	1 piece

