

CITO CounterControl

Manual



CITO CounterControl

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CITO CounterControl

Introduction & safety instructions

Introduction

Congratulations! You have just purchased the mobile CITO CounterControl unit for measuring creasing channels.

This device is the optimum tool for controlling the manufacturing process of tools for creasing and scoring applications. It measures the width, depth and shape characteristics of creasing channels on steel or Pertinax tools.

Important: This manual describes the current version of the CITO CounterControl hardware and software. We reserve the right to make future enhancements or modifications.

Warning

For safety reasons it is essential to read through the user's guide and all of the instructions it contains.

General safety rules

Failure to comply with the safety recommendations and instructions contained in this User Guide may result in measurement errors, data loss or physical injury or property damage.

- CITO CounterControl is not intrinsically safe. The device must therefore not be used in an environment in which there are explosive vapours, where a risk of spark ignition exists.
- CITO CounterControl may not be used in an area with strong electromagnetic fields.
- CITO CounterControl is designed for use in ambient temperatures of between 10 °C (50 °F) and 40 °C (104 °F), and must not be exposed to direct sunlight.
- As it contains no user-serviceable parts, the CITO CounterControl sensor should never be opened. Failure to comply will result in the guarantee becoming null and void. Should repair be necessary, contact your authorised dealer.
- To avoid incorrect handling, CITO CounterControl should only be operated by trained personnel.
- CITO CounterControl should only be used with dry measurement objects.
- CITO CounterControl should be protected against chemicals, corrosive vapours, strong mechanical vibrations and impacts.
- Use original spare parts and accessories only.
- Always use the original packaging when transporting.
- Clean the housing of the CITO CounterControl unit with a dry cloth.



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Software and driver installation

The CITO CounterControl device

CITO CounterControl is a high-resolution device for measuring creasing and scoring channels. CITO CounterControl is composed of a sensor head that is connected via a USB 2.0 interface to the CITO CounterControl software running on Windows™ XP, Windows™ 7 or later versions.

Software and driver installation

Do not plug the USB cable in at this time.

Start your computer and wait until all boot processes have terminated and your computer is operational.

Plug the CITO CounterControl USB Memory Stick into a free USB port and wait until Windows has recognised and registered the USB Stick as a mass storage device.

Installing the software

The USB Memory stick contains a setup utility, '**setup_CITO_CC.exe**', which can be used to install the CITO CounterControl software on your

Before termination, the video driver installer will be started automatically. Click **Install**.

Wait until the driver installation has completed.

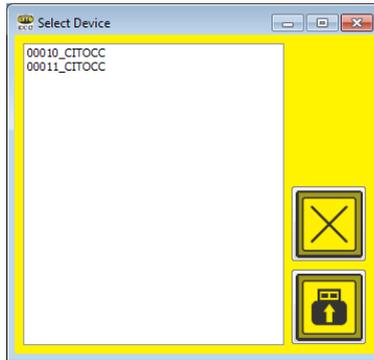
Now connect the USB cable to a free USB 2.0 port. Windows will automatically detect the driver and assign it to the device.

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Running the application

Running the application

- Launch the CITO_CC.exe file
- Click on the CITO CounterControl icon on your desktop, or
- Run CITO CounterControl from the Windows start menu.



If more than one device is installed on the same computer, a window will open in which the required device can be selected.



Select the connected device and click on the **Connect icon**. All calibration data and settings will be automatically loaded.



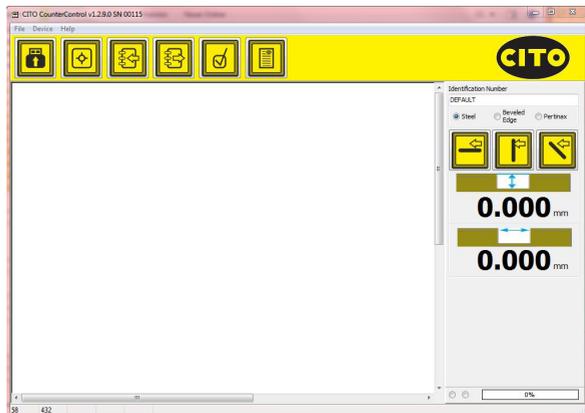
Click the **Cancel icon** to continue with the settings that were used during the last session.



CITO CounterControl

Main window

Main window



Main window icons

Main menu functions



Preview



Add 'parallel to fibre'
measurement to report



Capture



Add 'cross fibre'
measurement to report



Save image



Add 'diagonal'
measurement to report



Load image saved in
CRR format



Analyse image



Create PDF report

CITO CounterControl

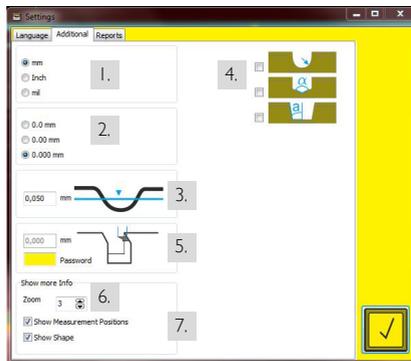
Configuring your installation

Configuring your installation

Select **Settings** in the file menu. Select your language on the **Language** page.



Select the **Additional Settings** page.

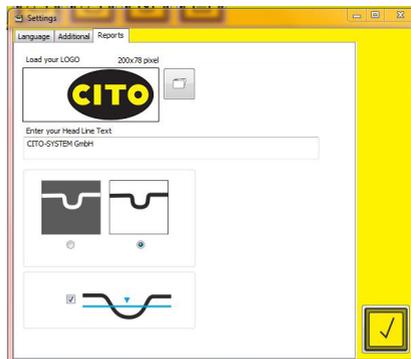


1. Select whether the measuring units should be based on the metric system (mm) or the imperial system (inches).
2. Select the number of decimal places for measurement readings.
3. Select the height at which to measure the width of the crease channel.
4. Switch radius and angle calculation on or off.
5. After entering the password **Cito!**, select the expected remaining Pertinax fibre length.
6. Select the zoom level to be displayed after recording the measurement.
7. Select which measuring lines are to be displayed after recording the measurement.

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Configuring your installation

Select the **Reports** page.



- Click on the **File Open icon** to load the company logo that you wish to apply to your quality reports. Enter your company details below as they will appear in the header of the report.
- Select whether or not the analysis window should be printed inverted in the PDF reports.
- Select whether the measurement height should be included in the reports.

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Initialising the camera

Initialising the camera

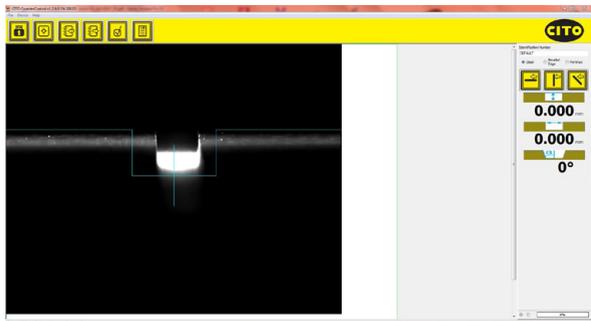


Click **Preview** to start the live camera image.

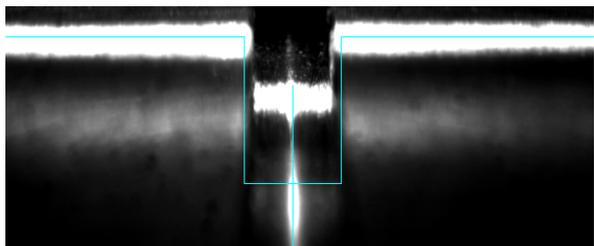


If the dot on the left flashes, this shows that the camera is active. If the dot on the right lights up constantly, this shows that the button on the device has been pressed, a new image has been captured, and the software is analysing the image.

If the camera is connected but no live image is displayed, click on the **Preview icon** to start the preview or click on the measurement button of the device.



The blue lines are an aid to centring the device on the creasing channel. The vertical blue line in the middle is there to help you align the device in parallel to the channel.





CITO CounterControl

Measuring

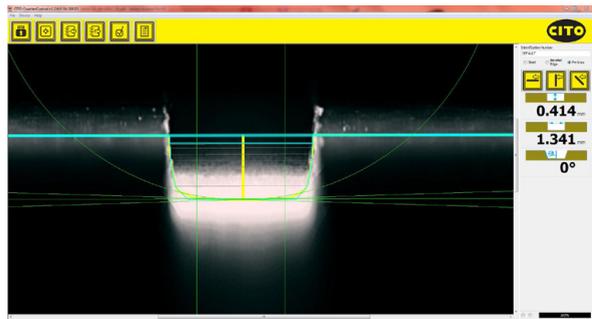
Measuring

Press the button on the device or click the **Capture icon** of the software to capture and analyse an image.



Make sure not to move the device from the measurement position as long as the progress bar is not showing 100%.

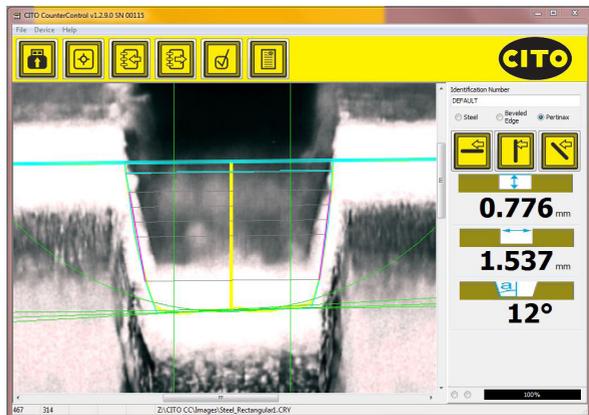
A series of images will be captured and subsequently combined into a single image to obtain measurement results with high repeatability.



Width, depth and – in the case of non-rectangular shaped channels – radius or angle are calculated and displayed automatically.

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Measuring positions



- The thick blue line indicates the surface.
- The thin blue line indicates the position at which the channel width is calculated. The position can be changed under Settings.
- The grey lines indicate the width measuring points.
- The yellow vertical line indicates the central position of the average calculated height.
- The average height value is calculated between the two green vertical lines. The two radii at the bottom of the channel are not included in this measurement.
- The violet lines at the two sides of the channel indicate the calculated angle of the channel.

The measuring position display shows the points at which the measuring values can be determined. This shows clearly that disruptive factors such as dust or worn cutters can affect the evaluation; the image of the milled cut can then be better understood by the user.

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Compiling reports

Compiling reports

A PDF quality report can contain up to 3 readings, one for 'parallel to fibre', one for 'cross fibre' and one for 'diagonal'. It is not necessary to take all 3 measurements. Only what has been measured will appear in the report.



Add 'parallel to fibre' measurement to report



Add 'cross fibre' measurement to report



Add 'diagonal' measurement to report

Enter the Job ID Number in the respective edit field:

Identification Number

With these settings, you can adjust the measurement in accordance with the material or milling geometry:

Steel
 Beveled Edge
 Pertinax

If a measurement is available for the report, this will be indicated by a check mark on the respective symbol:



Click on the icon again to delete a measurement from the report.



Click on the **PDF report icon** to create a PDF report and print out the report on your printer.

CITO CounterControl

Compiling reports

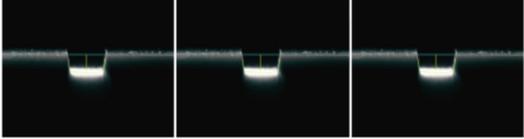
Sample report:

CITO CC Report
CITO-25787114 GmbH, Hainstorfer Straße 37-48
36271 Schwelb. Ost, Helmholz, Germany

30.10.2014-15:29:52
CITO CC Serial Number: 00009

Identification Number: CITO Report

	parallel to fibers	across the fibers	diagonal
	0.831 mm	0.831 mm	0.831 mm
	2.556 mm	2.556 mm	2.556 mm



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