WALTER
METROLOGY CENTER
10.0



# **Experience precision**

With METROLOGY CENTER WALTER is starting a new era of measuring. METROLOGY CENTER offers new possibilities to operate HELICHECK measuring machines quite simply. Simply great what this software has to offer.















Walter Maschinenbau GmbH

WALTER has produced tool grinding machines since 1953. Today, our product range is supplemented by tool eroding machines and fully automated CNC measuring machines in the HELICHECK series for contactless complete measurement of tools and production parts.

Walter Maschinenbau GmbH is part of the UNITED GRINDING Group. Together with our sister company, Ewag AG, we consider ourselves to be a supplier of systems and solutions for the complete machining of tools and can offer a wide range of products, including grinding, rotary eroding, laser machining, measurement and software.

Our customer focus and our global sales and service network of companyowned locations and employees has been appreciated by our customers for decades.

# **WALTER METROLOGY CENTER 10.0**

With METROLOGY CENTER WALTER is starting a new era of operating highly precise measuring machines. METROLOGY CENTER offers a vast number of unexpected possibilities and inspires users with simple operation which makes measuring of highly complex cutting tools a highlight of their jobs. Users are able to design their layout 100% flexible. This ensures the focus on the essentials without being drawn away by unnecessary tasks. From now on measuring is fun.





# WALTER METROLOGY CENTER 10.0 at a glance

## **Application**

- Completely new user interface for highly precise measurements of rotational symmetric cutting tools
- Flexible generation of the user interface according to customer preference
- Software completely configurable to the working environment of the customer. Integrates 100% into the existing workflow

## Software

- WALTER METROLOGY
   CENTER featuring integrated
   Grid-Technology with adjustable
   quantity of tiles per dashboard
- User defined quantity of dashboards
- Large quantity of items for customer specific adjustments in the editor
- · Drag & Drop of items
- User rights for access of items and dashboards
- Vectorized icons drawn crisp at any size
- Optimized for touchscreen operation

## Machines

- Fully automatic measuring machines HELICHECK PRECISION and PRO/PLUS Series
- Older measuring machines with CNC 06 controller unit and Windows 7 can be updated to METROLOGY CENTER



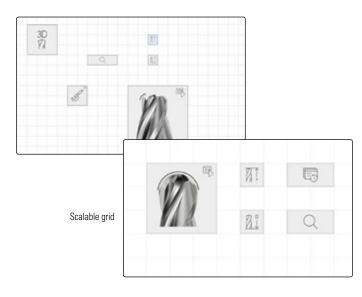
## 1. Dashboarding

Overview:

• New concept to create individual user interfaces

#### Benefit:

- Up-to-date look and feel
- 100% user identification
- Suitable for all customers



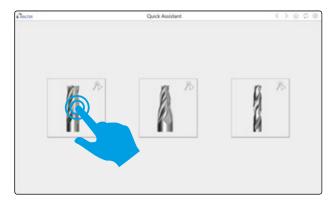
### 2. Grid-Technology

Overview:

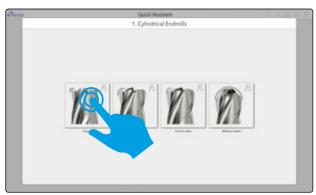
 Flexible scaling of functional areas and program icons on the grid

#### Benefit:

- Vectorized icons drawn crisp at any size
- Clear picture language
- Drag & Drop functionality
- Scalable grid









#### 3. Less Clicks

#### Overview:

 Considerably reduced amount of clicks and faster creation of measuring routines

#### Benefit:

- Up to 60% less clicks when creating a measuring routine
- **Excellent usability**
- Future-oriented



Measurement from the database



Measurement of ready made program templates



Measurement without data input

### 4. Badge-Icons

Overview:

 Automated identifier of measuring programs with the categories Quick Assistant (measurement without data input), Template (measurement of ready made program templates with optional data input) and existing program (measurement from the database)

#### Benefit:

- Automatic identification with Badge-Icons
- Explicit recognition of measuring programs



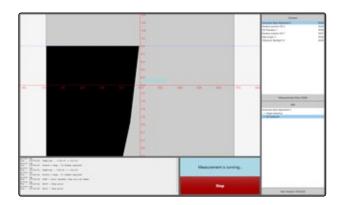
#### 5. Individual authorizations

Overview:

 Authorizations are individually adjustable

#### Benefit:

- Authorizations individually adjustable for functional areas and dashboards
- High safety in daily operation
- Avoids unauthorized modifications of preconfigured dashboards



## 6. Full screen app

#### Overview:

• The measuring sequence is shown in full screen mode

#### Benefit:

 Full Screen visualization for visual monitoring and evaluation of the measuring sequence



All apps are supplied by one database

## 7. One uniform WMC database

Overview:

 METROLOGY CENTER unites all measuring apps into one uniform network-compatible database

#### Renefit:

- All apps are supplied by one database
- Easy backup
- · Uniform reporting
- History of measurements in one place
- Easy realization of statistical analysis



#### 1. 3D Laser-Wizard

Overview:

- New Wizard based on WALTER Knowledge Base
- Optimized scan settings

#### Benefit:

- Create and process scan routines easily and fast
- · Closed point clouds
- · Reduced to the minimum



# 1. More modules for the analysis of the point cloud

Overview:

- Extraction and analysis of the spirals
- Extraction and analysis of the core
- Envelope function analyzes the resulting tool profile
- Distance measurements between surfaces
- Automatic wibble wobble compensation

#### 2. Radial Relief

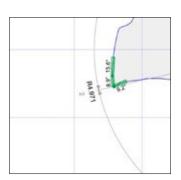
Overview:

 In addition to the measurement of clearance angles with facets now it is also possible to measure clearance angles with radial relief (logarithmic or arithmetic spiral)

#### Benefit:

 Tremendous time savings compared to usual frontlight measurement





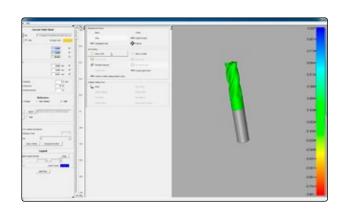
## 3. Higher Precision

Overview:

 Substantially improved precision especially on measurements of the horizontal cross section such as rake and clearance angle, core diameter, indexing, spiral lead and spiral angle

#### Benefit:

Reliability of horizontal cross section measurements



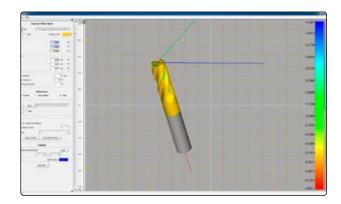
#### 1. New toolbar

Overview:

 Additional dialogue to customize the user interface

#### Benefit:

 More individual visualization possibilities

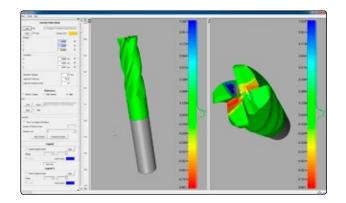


## **2. Indication of axes orientation** Overview:

 Possible indication of the axes for better orientation

#### Benefit:

 More individual visualization possibilities



#### 3. Split-View

Overview:

 Thanks to the Split-View the user can now apply two tolerance fields

#### Benefit:

- Individual zones of the tool can be treated diversely
- Fast differentiation of critical and uncritical tool areas



## 4. Multiple alignment of the point cloud at the reference model

Overview:

- When using tools with multiple teeth the operator can key in the number of teeth
- The alignment will be made multiple times according to the number of teeth
- The optimum alignment is being done automatically by the system
- Following analyses and calculations are generated with highest precision

#### Benefit:

Suitable for tools with variable indexing and variable spirals



#### The movie to the WALTER METROLOGY CENTER

Click here for the video



#### 5. Individual Best-Fit

Overview:

- Individual disabling of axes according to specific fitting tasks
   Benefit:
- Selective control of the fitting direction
- · Fixed height references





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