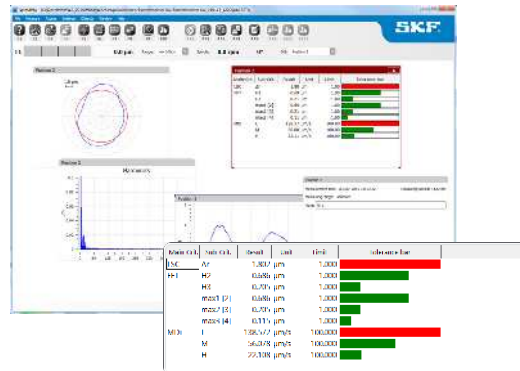


# SKF Waviness Analyzer

Electronics and software

MEC 7000 A and WinMWA



## General description

The MEC 7000 A electronics and the WinMWA software represents one of the latest state of technology for roundness and waviness evaluation. However, the search for better methods of quality control is a continuous process and SKF QT, as part of the worldwide SKF organisation, is in the forefront of this development. This is why it is recommendable that we renew or supplement your standard MEC 7000 A software from time to time.

## Hardware

The MEC 7000 A is an industrial PC with specific hardware components and a measuring box connected via Ethernet.

The measurement box records the measurement data and the evaluation PC calculates and displays these measurements.

Various inductive measuring sensors are used and a high-precision data acquisition board (A/D card) is used to read in the measuring signals.

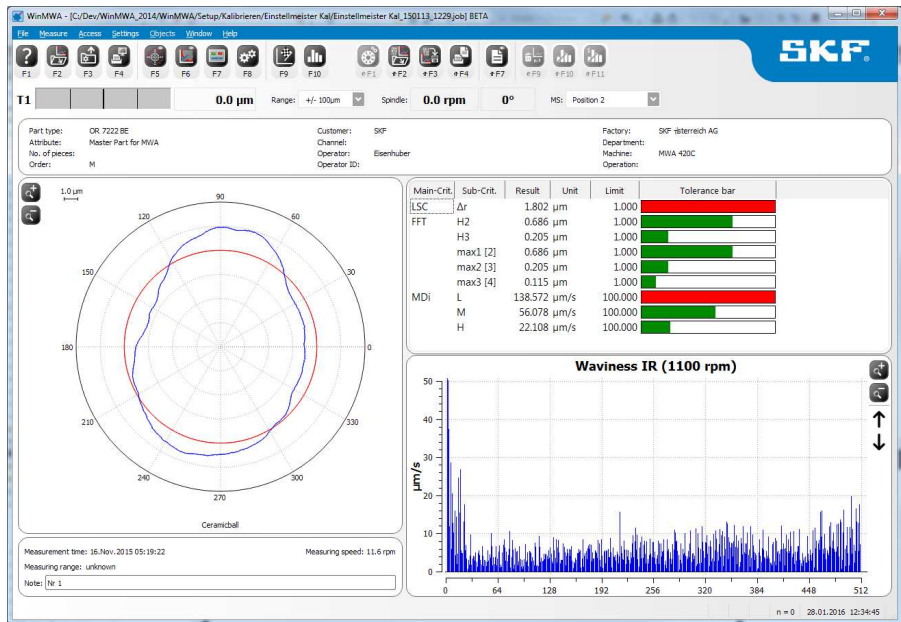
## Software

The WinMWA software provides the user with two basic modes of operation, namely analysis mode and measurement mode. The analysis mode allows investigation of parts according to the many criteria offered. However these powerful analysis capabilities require a thorough knowledge of the WinMWA software.



After the machine is properly set up and programmed, the routine measurement mode is available. This mode allows an operator to perform routine measurements, without any special knowledge about the MEC 7000 A/WinMWA capabilities. The operator only needs to position a workpiece, attach the sensor and call up the pre-programmed measuring routine for the specific part.

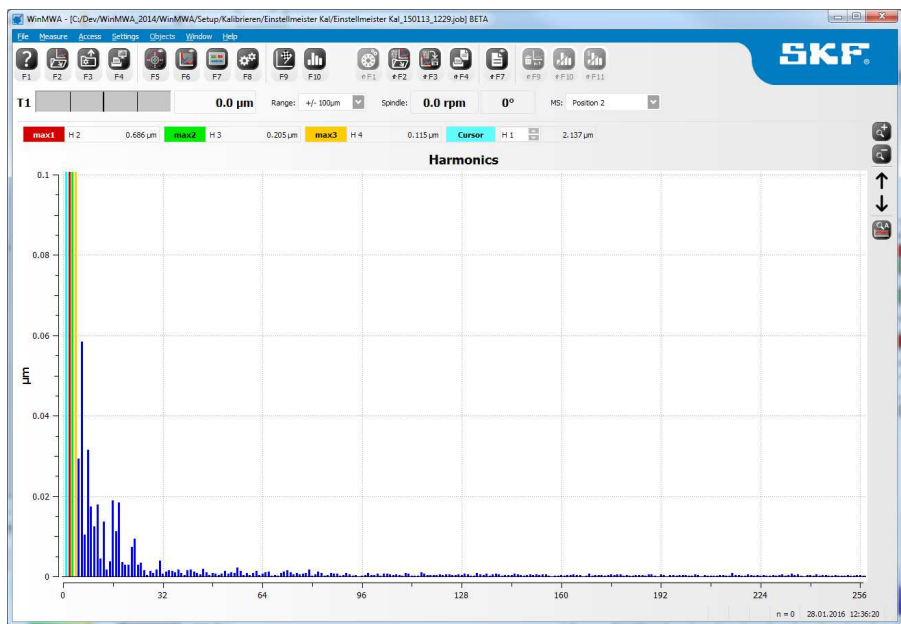
## Evaluation Screens



### Polar diagram

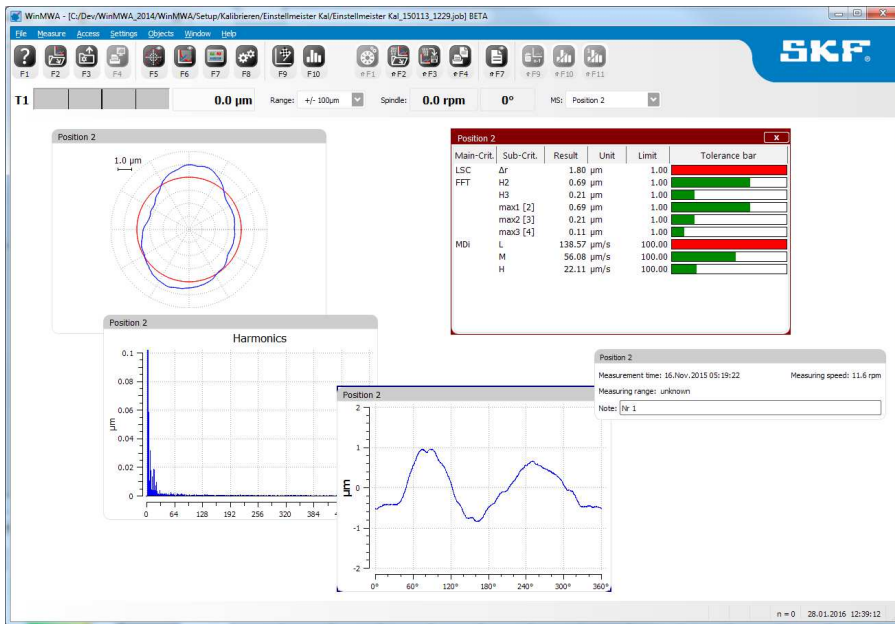
The display polar diagram is divided into different object fields:

- Identification field
- Polar diagram
- Results display
- Field for spectrum or linear diagram
- Place for notes
- Object fields can be sized to personal requirements.



### Spectrum diagram

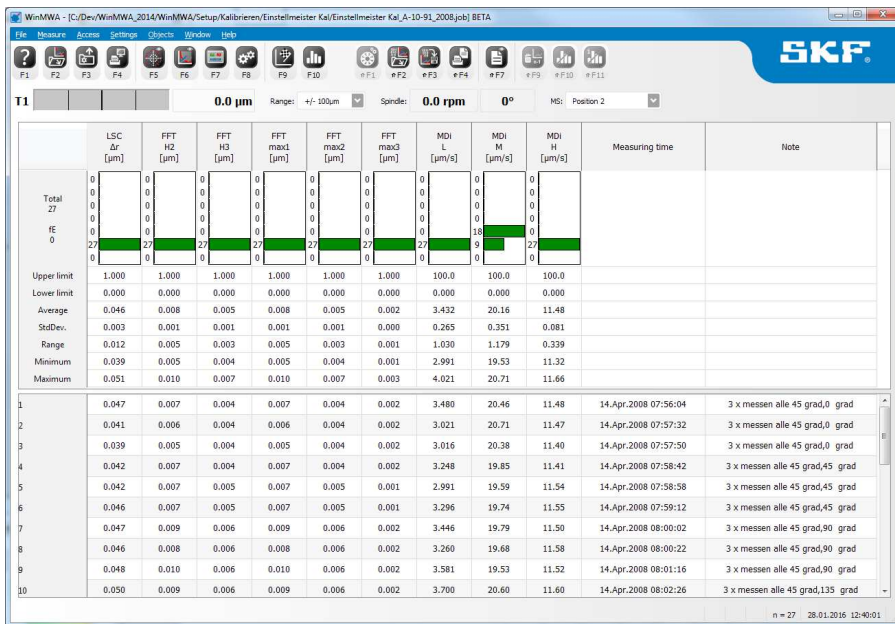
The display spectrum makes it possible to depict up to 2 048 harmonics in one bar diagram. The range of harmonics displayed and the scales are freely configurable.



## Configuration window

In this window you can design your own evaluation display. For example, you can position multiple polar diagrams/linear diagrams/harmonics for different measuring points, in the same window.

User-defined information can be entered in text fields or as graphics images.



## Statistic window

This window displays the measurement result of each defined criteria.

Also some statistics data as average, standard deviation, range, minimum and maximum are shown.

# Technical specifications

- MWA Measuring box
  - Processor: ARM 9 32-Bit
  - Memory: 64 MB SDRAM
  - Operating System: Linux
  - Measuring range:  $\pm 100 \mu\text{m}$ ,  $\pm 500 \mu\text{m}$
  - Sensors: Various inductive measuring sensors
- CMME 7000 B – Evaluation PC:
  - Processor: Intel mobile core i5-3610ME, 2,7 GHz, 3 MB cache (will be updated continuously)
  - Memory: 8 GB SO-DIMM SDRAM, PC1066
  - Operating System: Microsoft Windows 7 Ultimate. 64-bit, english
  - Solide state drive: 256 GB SSD SATA-6G 2,5"
  - Interface:
    - Front
      - 2 x Display Port
      - 2 x USB 3.0
    - Back
      - 2 x DB9 for RS-232 COM Port
      - 1 x DB44 for 3 x RS-232 and 1 x RS-232/422/485 COM Port
      - 2 x RJ45 for Gigabit-LAN
      - 2 x USB 3.0
      - 2 x USB 2.0
      - 1 x VGA
      - 1 x DVI-D
      - 2 x Audio for Mic-in and loud speaker
- Network: 1 x Intel 82574L Gigabit-LAN, 1 x Intel® 82579LM Gigabit-LAN
- Housing: 19 in. industrial PC, EMC-protection, IP 54
- Monitor: 17 in. or 22 in. wide screen LCD monitor
- Keyboard: USB PC-keyboard with touchpad
- Printer: All Windows supported printers
- Dimensions and power requirements
  - Dimensions (H x W x D): 4HE 177 x 430 x 445/505 mm (6.97 x 16.93 x 17.52/19.88 in.)
  - Weight: Approx. 17,5 kg (38.58 lbs)
  - Power requirements: 115 to 230 50/60 Hz, max. 600 W

Technical specifications subject to change without notice.

For more information on your specific application, please contact our engineers at SKF QT.

Please contact:

**SKF Österreich AG**  
**Quality Technology**

Seitenstettner Strasse 15 · Postfach 205 · A 4401 Steyr · Austria  
Tel: +43 (0)7252 797-571 · Fax: +43 (0)7252 797-574 · E-mail: qt-steyr@skf.com

**Web: [www.skf.com/qt](http://www.skf.com/qt)**

© SKF is a registered trademark of the SKF Group.  
Windows 7 is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.  
Intel is either a registered trademark or trademark of Intel Corporation in the United States and/or other countries.

© SKF Group 2016  
The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein. SKF reserves the right to alter any part of this publication without prior notice.

PUB CM/P2 14652/2 EN · November 2016

