

Measuring Electronic

MC 10



Advantages

- Easy operating
- 15" touch-screen
- MC10 is a HOFMANN in-house production
- High accuracy
- Various unbalance correction methods
- Different access planes
- Display of errors
System diagnosis
- Maintenance plans
- Windows XP® operating system

Range of use

- Acquiring and detecting of unbalance values in production/development
- For manual and semi-automatic machines
- Modernisation of old machines
- Installation in control cabinets and measuring unit housings possible
- Operation with more than one measuring electronic
- Processing of measurement values of multiple stations or multiple autarkic machines

Description (Design)

- High-end industrial PC with autarkic measuring electronic
- Digital signal processing in the measuring electronic
- Internal failure-free measuring BUS IPC-measuring electronic with CAN-Bus-technology
- Measuring range from 60 to 14.000 RPM
- Measured value display digital, polaric or in components
- Windows XP®-operating system
- Touch-Screen technology
- Virtual screen keyboard
- Storing of rotor data in XML-format
- Optional: Ethernet interface for data interchange
- Data interchange via USB stick
- Multilingual, switchable
- Individual set-up of display
- IP65 for screen

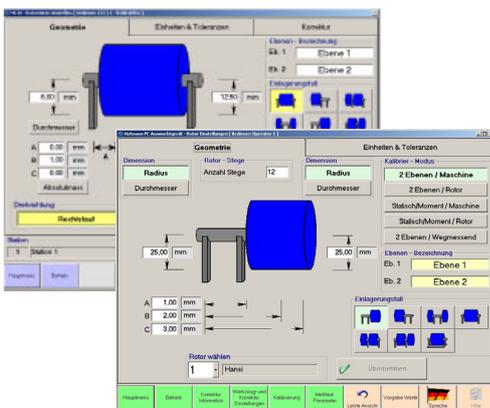
Applications



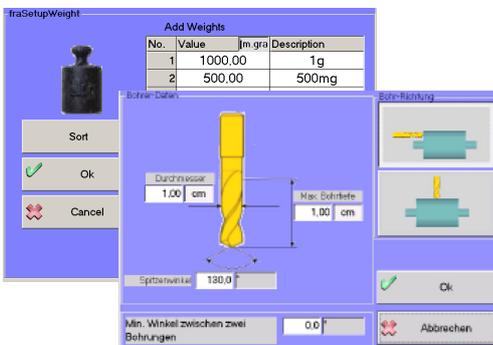
Standard program and functions



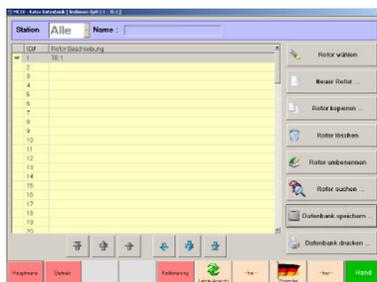
Measuring display 1 plane / 2 planes



Definition of geometry



Correction method



Rotor storing

Standard programm

For force measuring and distance measuring 1 and 2-plane standard balancing machines. Measurement and display of polar unbalance in numerical and graphical format..

Measurement

- Consideration of pre-unbalance
- Control of stability of the measured values
- Automatic control of measure value stability via time slice
- Zeroing, remount balancing, remount error compensation

Unbalance display

- Polarsymmetrical, symmetrical or asymmetrical components
- Unbalance display in mgmm, gmm, gin, ozin
- Dynamic unbalance, static unbalance or moment unbalance

D.U.C.I.

Direct UnbalanceCorrectionInstruction
Detection of correction, exact calculation of material quantity in correction steps for usual correction methods like drilling or setting of weights

Tolerance guided colour remount

- Green = in tolerance
- Yellow = Correction needed and practicable,
- Red = out of tolerance

Optional marking of tolerances as a coloured ring in the vector diagram

Calibration

- Simple performance with procedure description
- Permanent or rotor specific

Storing of rotor data

Storing for 100 work pieces (or more - optional)

Storing of measuring data

On hard disk, storing in pdf-format possible

Work piece calculator

According DIN ISO 1940

Protection of access via password

Access for operator, shift foreman, service

Languages

German, English, French, Spanish (other languages on request)

One button automatic

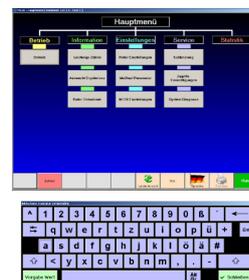
Measuring electronic turns off the power unit after successful measuring run

Miscellaneous

Performance counter, system diagnosis



Direct language choice



Virtual screen keyboard

Special function and options

| | |
|----------------------------------|---|
| Dual electronic | Measuring unit on 2 balancing machines |
| Posiquick C | Positioning device and remount angle display with light bar (only with connected angle decoder) |
| Drill depth display | and turn off (only with connected encoder) |
| D.U.C.I. - enhancement | D irect U nbalance C orrection I nstruction: More correction methods on request e. g.: Milling, strip-add on, machining curves, angular drilling etc. |
| Statistic package | Rotor specific Histograms, unbalance value and angle, cloud display, calculation of averages, standard deviation, maximum and minimum values, Q-DAS - QS-STAT- package |
| Storage of measuring data | Storing of balance results on hard disc or as ASCII value via serial interface, separated by " ;" |
| Recording | Customer specific recording head (company logo) |
| Housing | Installation in control cabinet (examples see right column) standard equipment: protection, external outer socket for 230V, USB, Ethernet |
| Miscellaneous | 2nd monitor (without TOUCH) with VGA-adaptor and holder Keyboard with drawer Labelprinter Barcode reader Expandability for function modules |
| Indexing | Automatic indexing on first correction position |



System 1800

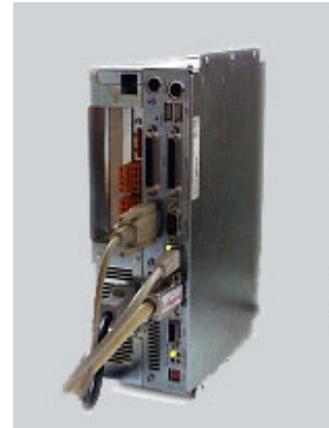
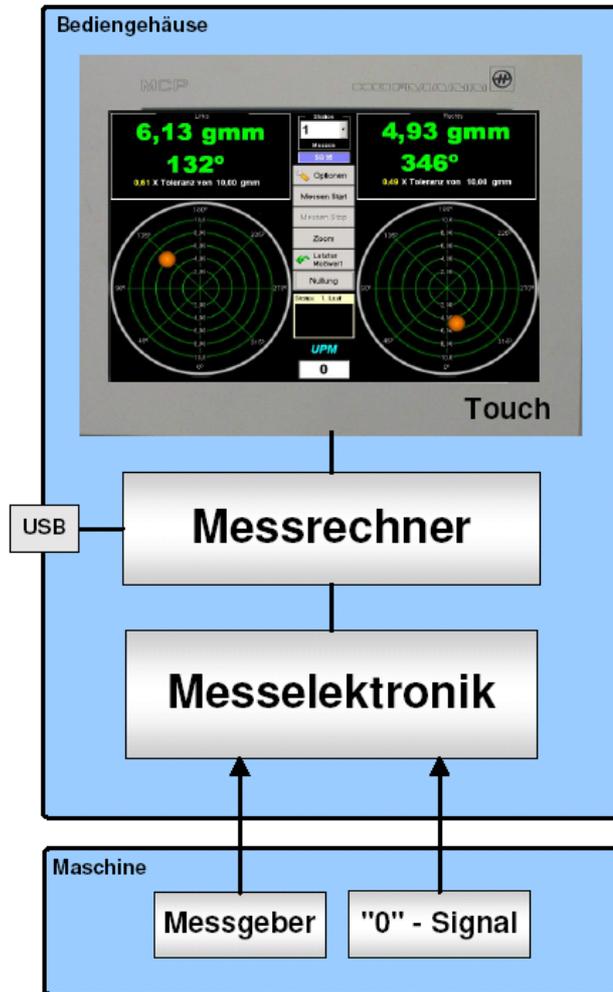


System 600



Swivel desk

System assembling



Industrial PC
(picture similar)



MC 10 - measuring electronic
HOFMANN in-house production

Technical Data

| | |
|------------------------------|--|
| General: | |
| Applications | Force and distance measuring horizontal and vertical balancing machines |
| Measuring electronic: | |
| Speed range | 60...14.000 RPM (standard), other speeds on request |
| min. measurable unbalance | up to 0.02 gmm, depending on rotor and machine |
| Measure time | min. 3 sec, depending on rotor and machine |
| Measuring method | Separation of measure signal from disturbing external vibrations by a wattmetric measuring method with upstream running filter |
| Interfaces | Hofmann-CAN measuring BUS, sensor-connections |
| Dimensions | 1 HE for cabinet installaton, 450 mm x 45 mm x 300 mm (W x H x D) |
| Power consumption | 110/230 V +/- 10 % 50/60 Hz |
| Industrial PC: | |
| Operating system | WIN 2000® / WIN XP® |
| RAM | min. 128 MB |
| Hard disc | min. 10 Gbyte |
| Interfaces | USB, CAN-measuring BUS, CD-ROM drive (optional) |
| Screen | 15" Touchscreen |
| Data storing | via USB stick, external hard disc, Ethernet |
| Recording | time and date via printer, with customer specific comments as digits, lists or single sheet documenta- tion as PDF-file |
| Power consumption | 110/230 V +/- 10 % 50/60 Hz |