CAB 920 – The perfect combination of simplicity and performance

The new CAB 920 is the latest development of the legendary Computer Aided Balancing (CAB) measuring systems from Schenck. By combining the most powerful instrumentation features available with an unsurpassed level of simplicity, the CAB 920 creates a new balancing standard for any application. You find it easy to significantly improve your balancing results whether performing simple balancing tasks or the most complex balancing procedures.

Simple to use – the key to more security

Technical specifications

- **Function:**
  - Vector and numeric display
  - Measure dynamic unbalance in 2 planes, the static unbalance and the couple unbalance
  - Automatic tolerance comparison
  - Display of polar or equally, non-equally distributed components
  - Averaging of the measured values over time, rotor type related
  - Tolerance calculation according to ISO 1940
  - Convergence of setup data
  - Single compensation, line compensation, index balancing
  - Drive control for automatic measuring cycle
  - Definition and storing of user-related balancing procedures for simplification
  - Convertion of all setup data
  - Balancing protocol in PDF format
  - Single compensation, key compensation, index balancing
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  - Convertion of all setup data
  - Balancing protocol in PDF format
  - Single compensation, key compensation, index balancing

- **Display:**
  - Active 15” TFT colour display with high luminosity

- **Input:**
  - Context dependent assignment of function keys, touchscreen

- **Measuring methods:**
  - Efficient, fully digital measured data processing for highest measurement accuracy

- **Unbalance measuring range:**
  - 1 : 2,000,000

- **Speed range:**
  - 100 to 5,000 rpm, optional up to 100,000 rpm

- **Data storage:**
  - Dependent on the size of the storage medium, practically unlimited

- **Interfaces:**
  - USB for peripherals
  - Frontside USB for data export to storage media, etc.
  - Network interface for data back up, ethernet

- **Options:**
  - Protocol printer
  - Marking measured values, averaging over runs
  - Angle indexing indicator
  - Extensive balancing software e.g. for drilling, milling, setting weights
  - Overlapping cycle
  - Rotor specific calibration
  - Alternating operation of 2 balancing machines with one measuring unit
  - Measured value recording and storage during startup
  - Monitoring measuring cycle with single and double (2f) reference frequency
  - Measurement range dynamic / static unbalance
  - Additional measurement channels for runout measurement, etc.
  - Statistical software

- **RC 1034 -1 e · 10.0806 · BESP · D.O.G. All information without obligation. Subjects to change without notice
CAB 920 – The measuring system for peak balancing performance

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<td>– Drive control for automatic measuring cycle.</td>
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<td>– Definition and storing of polar related balancing procedures for simplification of complex work sequences.</td>
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<td>– External receiving help, technical assistance and self test.</td>
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Calculating the unbalance tolerances to the current DIN ISO 1940

A clear user dialog makes entering a new rotor type child’s play in the eMode.

Clear vectorial and numerical display of the unbalance with coloured marking when the tolerance is reached.

The display menu in your own language also makes it easier for operators to quickly and easily perform tasks.

Different tolerance specifications for static and dynamic unbalance can be displayed on one screen.

By marking the measured value and averaging over several runs, it is possible to correct the unbalance behaviour of unstable rotors.

The measured values for an elastic rotor can be saved for both planes during the startup and displayed as a Nyquist diagram.

The unbalance effect of an elastic rotor can be measured during the startup and displayed versus speed in a Bode diagram.

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Log book function
All measurement sequences for a rotor are saved in a central database so that if “problem cases” occur you have access to a history of preceding steps, which often points out the solution.

Networking ensures information flow
CAB 920 can be easily integrated in your company network. You can exchange the balancing results electronically with colleagues in the quality assurance department and can even further process them with standard office programs. It also enables online remote diagnosis with extensive service functions.

The operator can even display the angle and amount of unbalance when balancing elastic rotors in three planes.

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Convenient touchscreen control
All communications between you and the measuring system take place via the touch screen monitor. Your control is your index finger and in this way communicate with the balancing machine. Values and texts are entered in dialog fields with the help of interactive direct input windows and no keyboard or mouse is required.

Clear, easily understood dialogs
We place special value in clear dialogs in order to avoid misinterpretations or incorrect input. Even when setting up a rotor for the first time you will see how easy it is to work with the CAB 920. This is made possible by clear menu structures based on the work sequence and a financial layout of the functions.

Fast unbalance detection
After the measuring run it is your aim to quickly and reliably assess the rotor. The unbalance visualisation with vector display has proven ideal for this. Together with the numerical display, you can detect the precise location and size of the unbalance at a glance.

The eMode – The key to easy balancing
eMode simplifies the controls of the balancing machine to two sides of dialog: Input of the rotor data and the results module with balancing instruction. Additional functions like automatic determination of the balance speed or calculation of the balance tolerances to ISO 1940 makes balancing easy with the CAB 920. All standard balancing methods, e.g. drilling, milling or attaching weights are supported.

Individual assignment of the function keys
Some of the function keys can be individually assigned. You can therefore directly call up frequently used functions and achieve a perfectly balanced rotor even faster.

Balancing protocol with integration of graphic elements
With the balancing protocol you can document the balancing of each rotor in detail and have an overview of the stored type and calibration data. You can individually change it to your own requirements and integrate graphic elements, such as your company logo or even photos of the balanced rotor.

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Clear user dialog control
All communications between you and the measuring system take place via the touch screen monitor. Your control functions with your index finger and in this way communicate with the balancing machine. Values and test results are entered in dialog fields with the help of interactive direct input windows and no keyboard or mouse is required.

Clear, easily understood dialog
We place special value in clear dialogs in order to avoid misinterpretations or incorrect input. Even when setting up a rotor for the first time you will see how easy it is to work with the CAB 920. This is made possible by clear menu structures based on the work sequence and a hierarchical layout of the functions.

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Innovative user dialog
The display menu in your own language also makes it easier for operators to control and perform tasks.

Different tolerance specifications for static and dynamic unbalance can be displayed on one screen.

Calculating the unbalance tolerances to the current DIN ISO 1940

Log book function
All measurement sequences for a rotor are saved in a central database so that if “problem cases” occur you have access to a history of previous steps, which often points out the solution.

Networking ensures information flow
CAB 920 can be easily integrated in your company network. You can exchange the balancing results immediately with colleagues in the quality assurance department and can thus further process them with standard office programs. It also enables online remote diagnosis with extensive service functions.

Upgrade old to new
The CAB 920 is ideally suited for modernising older horizontal and vertical balancing machines, even those of external make. So that you upgrade your existing balancing machines with state-of-the-art measuring technology.

The measured values for an elastic rotor can be saved for both planes during the startup and displayed as a Nyquist diagram.

The unbalance effect of an elastic rotor can be measured during the startup and displayed in a Bode diagram.

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- Display of polar or equally non-equally distributed components  
- Averaging of the measured values over time, rotor type specific  
- Tolerance calculation according to ISO 1940  
- Expansion to other setup data  
- Single compensation, homogeneous rotors  
- Drive control for automatic measuring cycle  
- Definition and storing of parameter balancing procedures for simplification of complex work sequences  
- Context-sensitive help function  
- Monitoring measuring cycle  |
| **Display**                                                            | Active 15" TFT colour display with high luminosity |
| **Input**                                                              | Context dependent assignment of function keys, touchscreen |
| **Measuring Methods**                                                  | Efficient, fully digital measured data processing for highest measurement accuracy |
| **Unbalance Measuring Range**                                          | 1:2,000,000 |
| **Speed Range**                                                        | 100 to 5,000 rpm, optional up to 100,000 rpm |
| **Data Storage**                                                       | Dependent on the size of the storage medium, practically unlimited |
| **Interfaces**                                                         | - USB for peripherals  
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