SCHENCK

cab920 smarttouch

CAB 920SmartTouch

Precise measurement, easy balancing

CAB 920SmartTouch
The reference point in balancing

What is the foundation for optimum balancing? Rapid and precise measurement. This is only achievable when the measuring instrument combines the highest ease of use with the highest precision in every task. CAB 920SmartTouch passes this test with flying colors. Its ingeniously simplified operating concept with superb logical visualization takes you by surprise. The result is simply captivating: rapid and reliable functionality with a short learning curve. Whatever the rotor application, be it low-speed, high-speed, rigid or flexible, vertical or horizontal, the CAB 920SmartTouch is the most competent measuring instrument.

Everything at your fingertips

All you need to operate your CAB 920SmartTouch is your fingertip. The robust touch screen allows full control of measuring functions and communication with the balancing machine. Ease of use is paramount: large display keys and clearly labeled interactive input fields for numeric and text entries allow direct control of the balancing procedure no need for a keyboard or mouse.

Seeing what's what

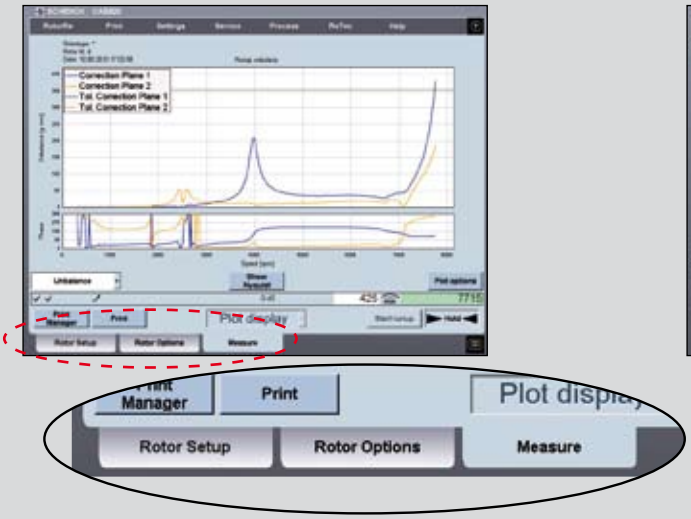
In displaying the unbalance, CAB 920SmartTouch uses the most proven combination of unbalance visualization and easily understood vectormeters in conjunction with exact numeric value displays. This allows a comprehensive display of pertinent data for rotor unbalance on one screen. If required, CAB 920SmartTouch will compute an exact balancing instruction for all standard balancing methods like drilling, milling or welding.

SmartTouch
Enabling reliable results

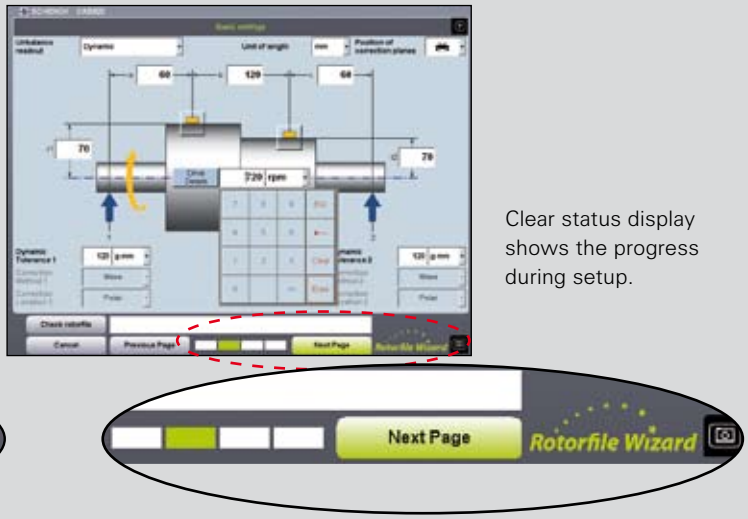
Smart Touch is the name of the intuitive user interface. All information for the balancing procedure is clearly combined and called up through three tabs. Depending on your balancing experience, two navigation methods are easily accessible.

Method 1: Guided navigation

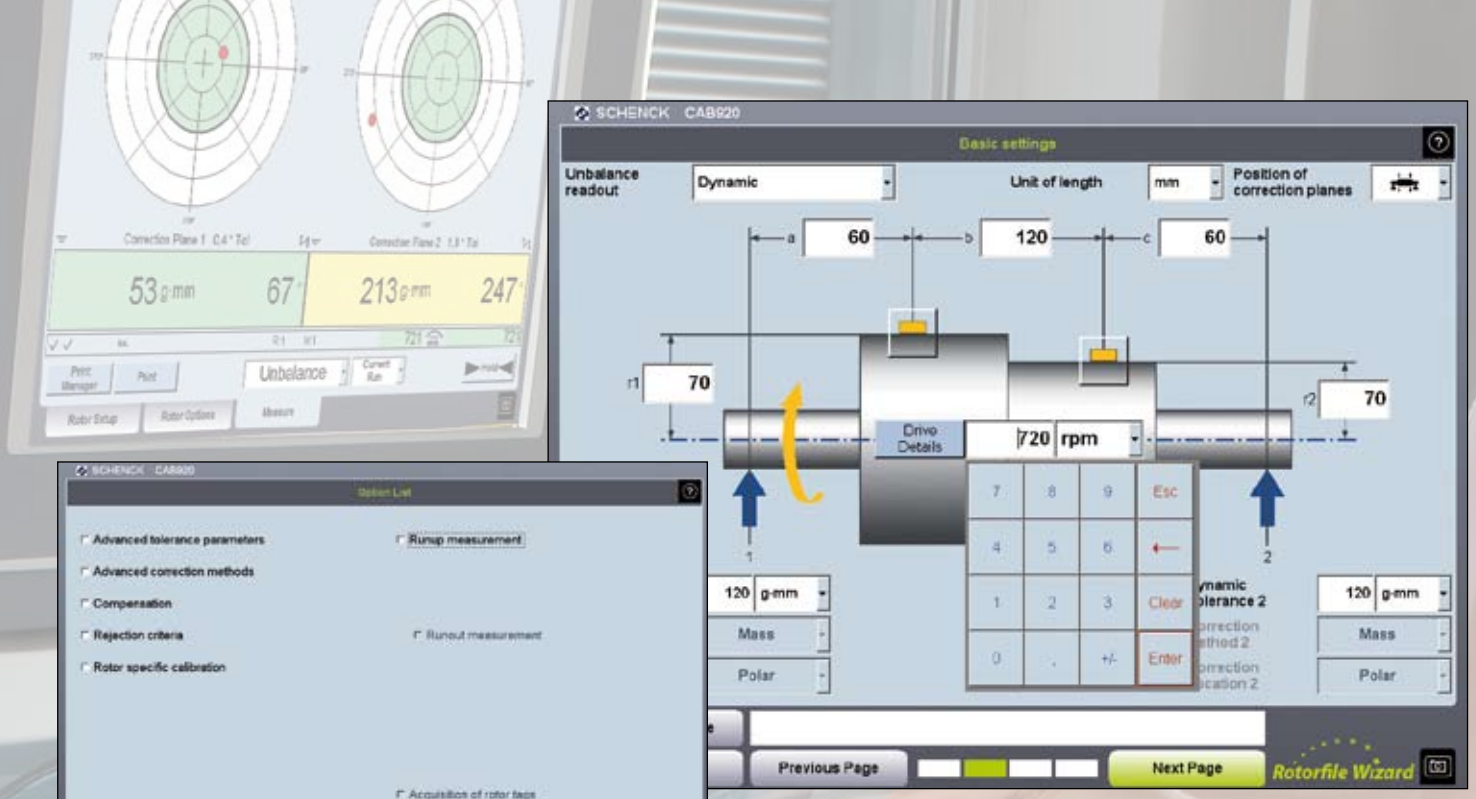
SmartTouch guides you skillfully through all input steps, making rotor setup a breeze even with the most complex rotor geometries. To start the process simply start the "Rotor File Wizard" and be guided step by step to completion. First, choose the correct balance step and then define the parameters in the rotor setup. With "Shopping Lists" that are easy to work through, visual aids and a clear and consistent basic structure, your set up file inputs will quickly be complete. Once an automatic plausibility check has been performed on all inputs, all you need to do is start the balancing process. It couldn't be simpler.



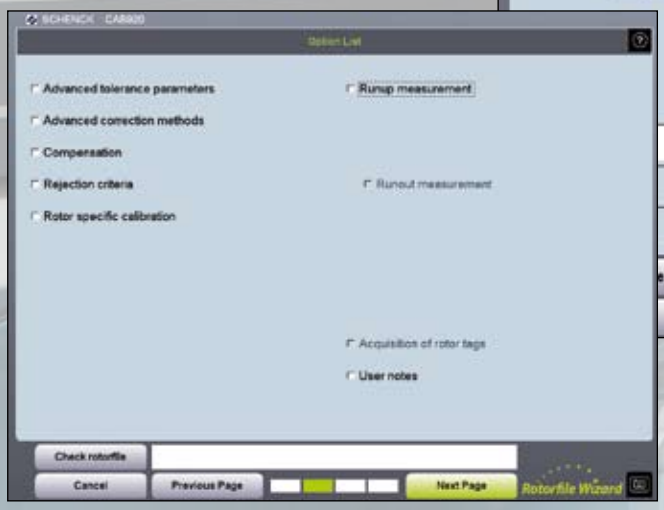
3-tab navigation field for fast and direct access to all functions.



Clear status display shows the progress during setup.



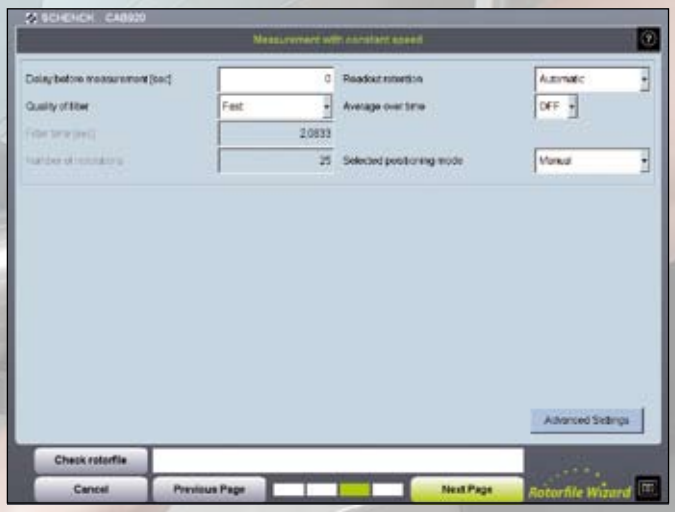
Fast and clear input of rotor data and balancing parameters is supported by the intuitive user interface.



You select the functions required for your balancing tasks from the options list.

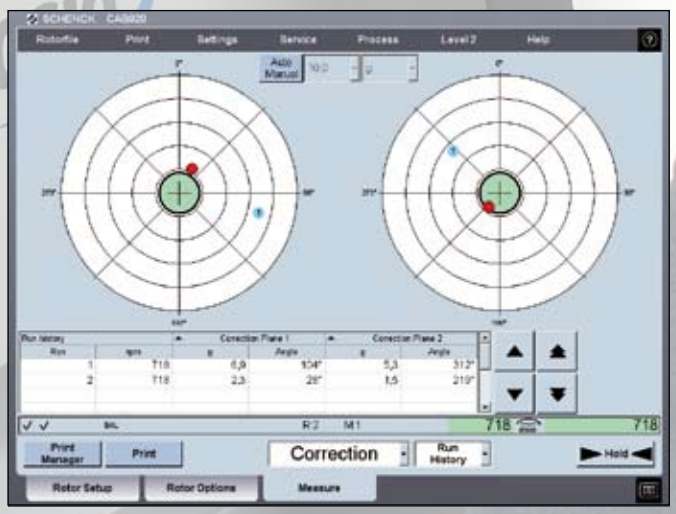
Method 2: Standard navigation

You control how you move through the setup procedure. Balancing operators enter their data quickly and directly. At the end, before starting the balancing process, you can perform a plausibility check on the inputs to make sure that you are always on the safe side.



Defining the extended functions of the selected software options.

Saving rotor data and starting the measuring run.



The measuring result is displayed together with all important data.

Solutions for all balancing tasks

Precision even in a harsh environment

Highly sensitive measuring instruments typically belong in a laboratory. Nevertheless, balancing machines, including their sensitive measuring technology, are usually located in the rather harsh environment of machine shops. The design of CAB 920SmartTouch is extremely robust and solid, built with a powerful industrial PC with a TFT touch screen.

CAB 920SmartTouch utilises the Microsoft Windows operating system and can be easily integrated into the company network. This makes it easy to exchange data, balancing results and reports with other departments and to further process and analyze them in the standard MS Office® programs.

Reporting made easy

A printed report enables you to document the balancing of each rotor in detail and provide an overview of the stored type and calibration data. The print manager of CAB 920SmartTouch enables you to adapt your reports, with the dynamic print preview showing the print view on the screen.

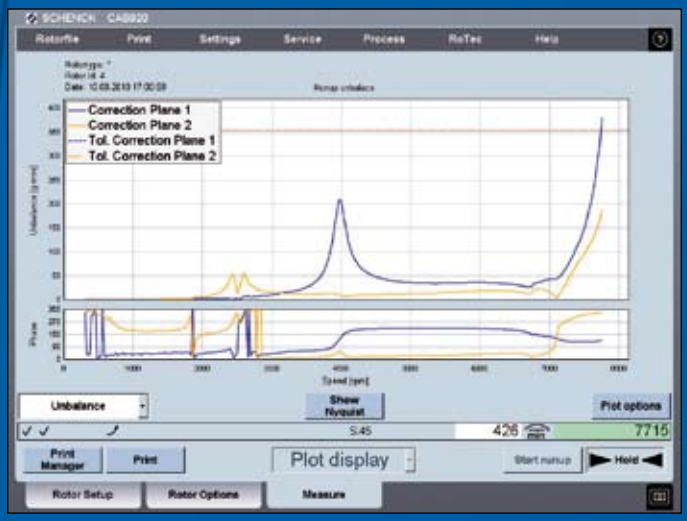
We also offer the additional option of our convenient report configurator, which loads the measuring results automatically into the designated fields. You can then use standard programs like MS Word or MS Excel to organize your report.

Many balancing functions are pre-installed in the basic system of CAB 920SmartTouch. The measuring unit can be upgraded to include other functions and industry-specific solutions.

By marking the measured value and averaging over several runs, you can correct the unbalance behavior of unstable rotors.

Even in the case of flexible rotors that need to be balanced in 3 planes, the operator only needs to glance at the screen to see the amount and angle of unbalance.

The unbalance effect of a flexible rotor can be measured during start-up displayed in a Nyquist diagram.



The measured values for a flexible rotor can be saved for both planes at start-up and displayed as a Bode diagram.

Technical Data

Application	Universal for horizontal or vertical balancing machines, hard-bearing or soft-bearing
Basic system	Modular and service-friendly design with measurement, analysis and display units. Data processing and calculation via integrated industrial PC with Schenck "Computer Aided Balancing", software using the SmartTouch user interface
Functions	– Rotorfile Wizard for user-prompted rotor data input – Vector and numeric display – Measuring dynamic unbalance in 2 planes, static unbalance and couple unbalance – Automatic in/out of tolerance display – Polar display or display of equal/unequal components – Averaging of the measured values over time – Tolerance calculation according to ISO 1940 – Configurable log report in PDF format via print manager – Single compensation, key compensation, index balancing – Drive control for automatic measuring cycle – Definition and storage of balancing procedures for simplification of complex work sequences – Context-sensitive help function, automatic self-test – Monitoring of measuring signals
Display	Active 15"TFT color display
Input	Touch screen (also possible with separate keyboard and mouse)
Measuring methods	Powerful, fully digital measured data processing for highest measurement accuracy
Unbalance measuring range	1 : 2,000,000
Speed range	100 to 5,000 rpm, optional 40 to 100,000 rpm
Interfaces	– USB for peripherals – Frontside USB for data export to storage media, etc. – Network interface for data backup, teleservice and remote maintenance
Options	– Customer-specific report, freely configurable – Marking measured values, averaging over runs – Angle indexing indicator (electronic protractor) – Extensive balancing software, e.g. for drilling, milling, applying weights – Overlapping cycle – Rotor specific calibration – Operation of 2 balancing machines with one measuring unit – Measuring during run-up – Vibration velocity measuring mode with single and double (2f) reference frequency – Additional measurement channels for runout measurement, etc. – Statistical software – Printer – Industry specific solutions for the – Paper and printing rolls: laser scanning, special reporting, 3-plane display, etc. – Propeller shafts: up to 4 planes in parallel, permanent or rotor specific calibration, compensation of reactive forces – Electric motors and generators: high-speed balancing, including -up measurement and balancing in 3 planes – Crankshafts: correction calculation in different planes in accordance with the rotor geometry and prohibited zones

SCHENCK

Balancing and
Diagnostic Systems

SCHENCK TREBEL CORPORATION
535 Acorn Street
Deer Park, New York 11729 USA
T: (631) 242 - 4010
F: (631) 242 - 4147

www.schenck-usa.com
sales@schenck-usa.com

The DÜRR Group

RM 1049 USe · 083010 · BESP · KDr · All information without obligation. Subjects to change without notice.