PORTABLE EQUIPMENT

N200

- Vibrometer
- Bearing analysis
- Frequency analyzer
- Tachometer

CEMB
BALANCING MACHINES

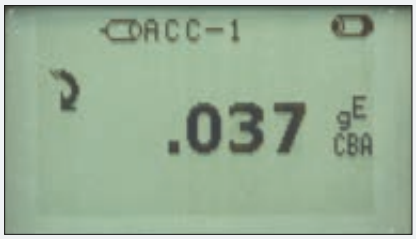
N200

VIBRATION MEASUREMENT & BEARING ANALYSIS (CBA)

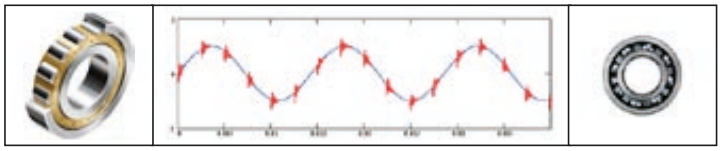
CEMB has always been dedicated in the world of integrated maintenance. The addition to the "N" range of portable instruments introduces the new N200, easy to use tool for the detection of rotating machinery vibration and bearing condition with the CBA function to measure the wear of bearings. The user will now have an additional tool for machinery diagnostics.

The CBA measurements goes up to 10KHz ensuring reliability and accuracy, the N200 expands and provides all the functionality present in the N100.

With N200 instrument you now have the capability to measure overall level of vibration (ISO10816-3), store values, display the 5 main peaks making up the overall vibration, measure the CBA value for the diagnosis of the bearing. Also perform synchronous measures (1xRPM) through the optional photocell.



CBA: Cemb Bearing Analysis



Bearings are widely used in rotating machines, but unfortunately are subject to numerous types of damage (outer race, inner race, cage and balls).

To minimize the downtime or the potential damage is useful to determine the initial signal value of the bearing and to properly plan the maintenance and replacement activities through regular vibration checks / measurements.

The first symptoms of damage are presented as small defects on the metal surfaces on some of the elements (inner / outer race, cage or balls / rollers) that produce small impacts "metal on metal" on a regular basis. Each time that a rotating element meets a defect, the vibration shows a peak. This peak is repeated periodically with a frequency that depends on the position of the defect and from the bearing geometry.

CEMB has developed a specific feature called CBA (CEMB Bearing Analysis), implementing it in the N200 tool to assess the status of the bearings, in order to help engineers in planning their activities.

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N200 A COMPLETE TOOL FOR DIAGNOSTIC

STANDARD FEATURES:

- Nr. 1 practical carrier case
- Nr. 1 accelerometer transducer
- Nr. 1 accelerometer connection cable
- Nr. 1 magnetic base
- Nr. 1 probe
- Nr. 1 USB cable for downloading data
- Nr. 1 battery charger
- quick user manual
- instruction manual on CD-rom

OPTIONAL ACCESSORIES:

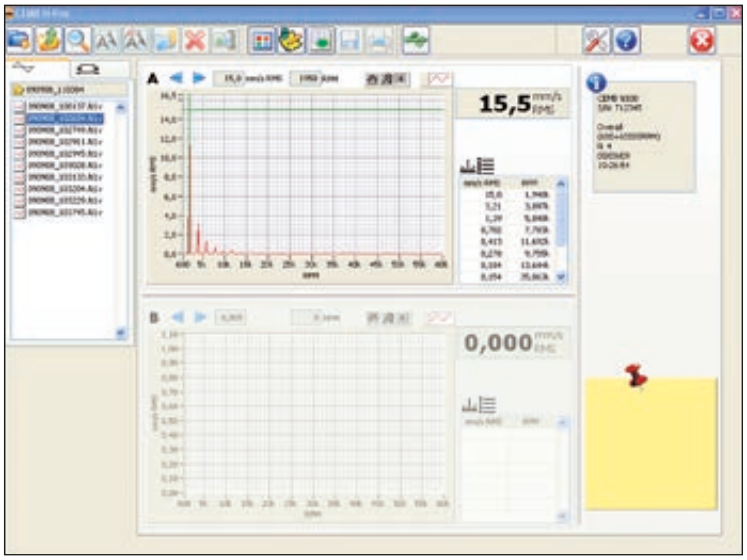
- Photocell (18000RPM) complete with stand and magnetic base
- 10 m extension lead for transducers
- Sensor cables, length 5 m
- N-Pro data control software with provision for customizing the reports

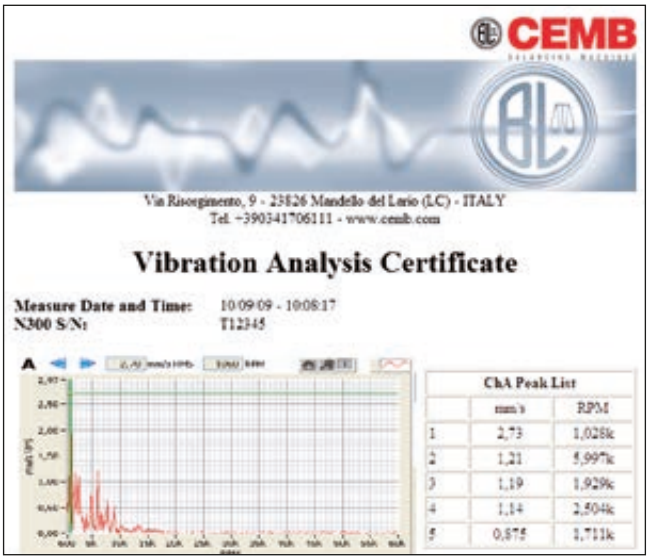
N-Pro, software package designed for archiving and analysis of your data

N-Pro, Professional Environment for N-Instruments, is the compatible software for the **N200** instrument. By simply pressing a button this software can transfer all data stored in the instrument to the PC and also to perform automatic archiving. At any moment it is possible to display, process or analyze the data and use such data to generate special reports in pdf format or hard copy.

The report forms supplied together with the software are suitable for the more frequent situations, but it is also possible to create new fully personalized report forms thereby catering for the needs of the most demanding customers.

Thanks to the data saved by the **N200**, the N-Pro SW is able to display FFT spectra for trouble shooting on rotary machines.




CEMB

Via Risorgimento, 9 - 23826 Mandello del Lario (LC) - ITALY
Tel. +39 0341 706111 - www.cemb.com

Vibration Analysis Certificate

Measure Date and Time: 10/09/09 - 10:08:17
N300 S/N: T12345

ChA Peak List		
	mm/s	RPM
1	2,73	1,028k
2	1,21	5,997k
3	1,19	1,929k
4	1,14	2,504k
5	0,875	1,711k

DATI TECNICI

FUNCTIONS

- Bearing analysis with CBA
- Measurement of the overall vibration value (acceleration, velocity, displacement)
- Measurement of synchronous vibration value and phase
- Analysis of vibration in the frequency range

MEASUREMENT TYPES

- RMS value (RMS)
- Peak value (Pk)
- Peak-to-peak value (PP)

UNITS OF MEASUREMENT

- Acceleration: [g]
- Velocity: [mm/s] o [inch/s]
- Displacement: [μm] o [mils]
- Frequency: [Hz] o [Rpm]

INPUTS

- 1 Independent measuring channels (acceleration transducer, velocity transducer)
- 1 photocell channel (velocity and angle reference)
- 1 mini USB port for data transmission
- 1 battery charger input

BEARING ANALYSIS CBA

- Measure gE CBA (acceleration envelope with CBA Technology) up to 10kHz

VIBROMETER FUNCTIONS

- Measurement of the overall vibration value in predefined frequency bands (1-100Hz 2-200Hz 5-500Hz 10-1000Hz)
- Measurement of the value and phase of the vibration of the main frequency and the first five harmonics.
- List of the five highest peaks.

TACHOMETRIC FUNCTION

- Display of the speed through photocell (optional)

FFT FUNCTION (Analysis in frequency)

- FFT analysis with N-Pro software
- Maximum allowed frequency (1-100Hz 2-200Hz 5-500Hz 10-1000Hz)
- Resolution (400 lines)
- Number of averages: from 1 to 16

GENERAL CHARACTERISTICS

- Display: 128x64 LED
- Approx. dimensions: 180 x 84 x 45 mm
- Weight: approx. 300 gr

OPERATING CONDITIONS

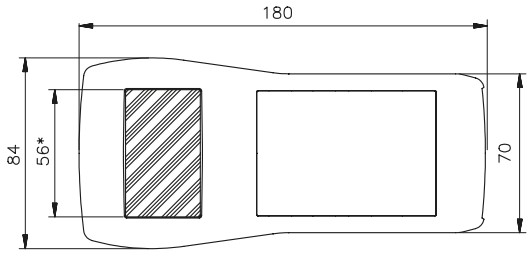
- Temperature: from -10° to +50° C
- Air humidity: from 0 to 95% without condensate

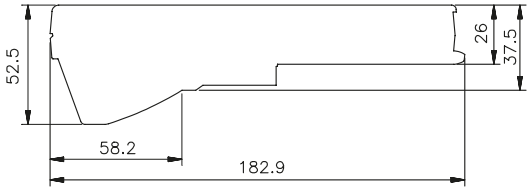
POWER SUPPLY

- Rechargeable 1.8Ah Lithium battery
- Charging time: < 5 hours (when battery is fully discharged)
- Battery charger for 100-240 Vac, 50/60 Hz (8.4V DC, 0.71 A, 60W max)
- Battery life: > 10 hours based on typical use

ITALIAN HEART:
All of the design
and production
is strictly MADE IN ITALY

CE





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CEMB S.p.A.
Via Risorgimento, 9
23826 MANDELLO DEL LARIO (LC) Italy
www.cemb.com

Vibration analysis division:
phone +39 0341 706111
fax +39 0341 706299
e-mail: stm@cemb.com

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