



New form of field balancing that pursues
operation efficiency with special-purpose
software

Portable Balancer Model 7135

SHOWA SOKKI CORPORATION

**From field measurement to the output of work reports....
Model 7135 condenses functions and user-friendliness that
enable efficient field balancing into a compact body.**

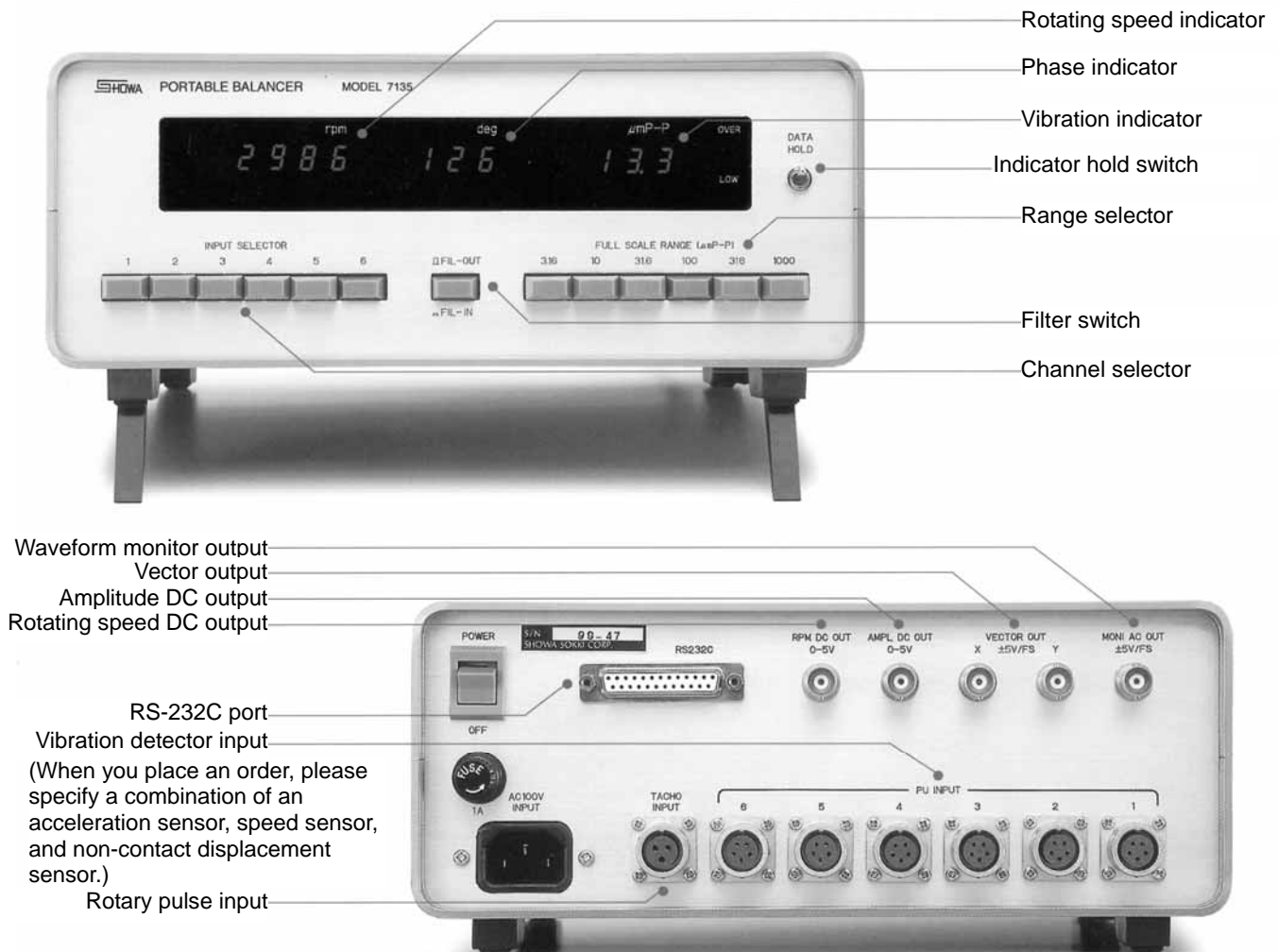
Outstanding

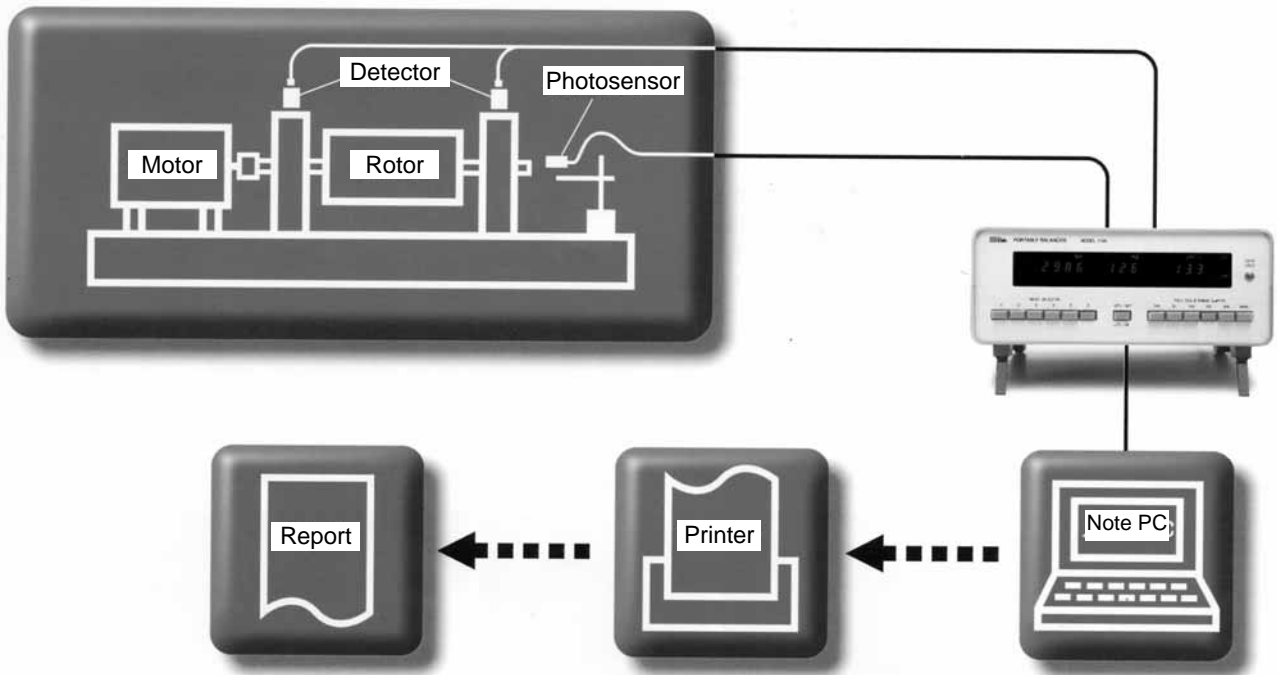
- (Simple balancing without
the need of removal)
- (user-friendliness with
special-purpose software)
- (Various handy functions
that increase its versatility)

Model 7135 is a portable balancer that can be easily rebalanced with the target rotary machine installed. The model provides comprehensive balancing when a dynamic balancing test with a rotor alone is impossible or after its assembly is completed, and other mobility performance that enables field work more efficiently. It is automatically tuned with a tracking filter, thus facilitating measurement work.

Special-purpose software "Balance One" enables very efficient work in combination with a notebook PC. Balancing can be easily done by operating the keys while watching the screen of the notebook PC. What is more, the model comes with a report format (Excel-compatible), thus enabling the data to be used for reporting purposes. All you have to do then is to go back to the office and print them out. The work is now complete. The model is outstandingly user-friendly, with the capability of integrated processing from beginning to end.

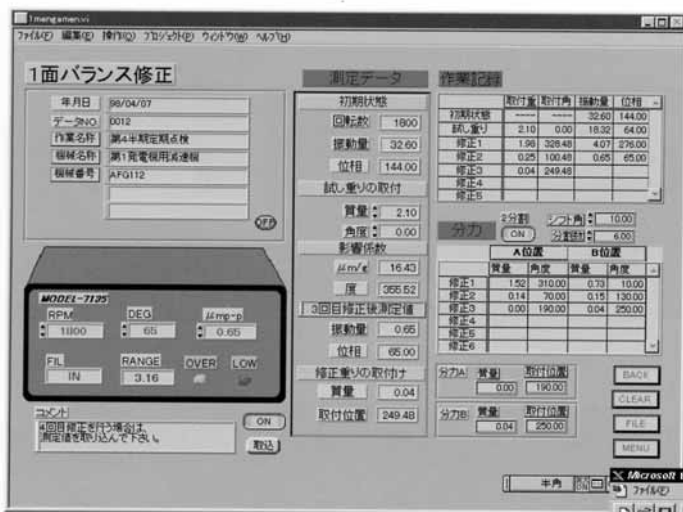
Model 7135 is compatible with rotary machines from 180 to 30,000 rpm as a field balancer. It also allows users to select from among an acceleration sensor, speed sensor, and non-contact displacement sensor. It incorporates a vector output as well, thus enabling polarograms with an X-Y recorder and offering high versatility as a vibration gage, vibration monitor, and tachometer.





Rebalancing program "Balance One"

7135-dedicated software that not only facilitates delicate rebalancing but also provides a report format



It displays measurements sent from Model 7135 on the screen whenever necessary. Pressing the capture button causes the PC to capture the data, while calculating and displaying the quantity of correction weights and their locations. The operator then has only to make entries on the keyboard while watching the screen. He can then easily perform delicate rebalancing. Pressing the file button saves a history of tasks as text data just as they are performed. The data can be read with Excel or other spreadsheet. Balance One enables single-side correction, double-side correction, component force calculation, and other operations.

- System requirement: Windows 95

Balance One automatically creates work reports in a report format (Excel-compatible) with data obtained by rebalancing. Clerical work that is bothersome in many aspects can be done very efficiently if only you have Balance One.

The screenshot shows an Excel spreadsheet titled '回転機/バランス修正報告書' (Rotating Machine/Balance Correction Report). The report includes the following data:

| 項目 | 内容 |
|---------|---|
| 提出先会社名 | 〇〇〇〇〇〇〇〇 様 |
| ご担当者名 | 〇〇〇〇〇 様 |
| 測定年月日 | 1998/4/7 |
| データ No. | 12 |
| 作業名称 | 第4半期定期点検 |
| 機種名称 | 第1発電機用減速機 |
| 機種番号 | AFG112 |
| 回転数 | 1900 |
| 初期状態 | 質量: 2.10, 角度: 0.00, 振動量: 32.60, 位相: 144.00 |
| 修正値1 | 質量: 1.98, 角度: 328.48, 振動量: 4.07, 位相: 276.00 |
| 修正値2 | 質量: 0.248, 角度: 100.48, 振動量: 0.65, 位相: 65.00 |
| 修正値3 | 質量: 0.04, 角度: 249.48, 振動量: 0.00, 位相: 0.00 |

Specifications for the Portable Balancer Model 7135

| | | | |
|----------------------------|--|-------------------------------|--|
| Applicable detectors | [Acceleration detectors] 1V/G (OP: 0.5 to 5V/G) Capability to incorporate a power supply for servo detector or amplifier-equipped detector [Speed detectors] 80mV/cm/s (OP: 50 to 500mV/cm/s) Capability of incorporating a low-range compensation circuit [Displacement detectors] 4V/mm (OP: 2 to 20V/mm) Capability of incorporating a drive power supply for non-contact detector Note: When in a standard configuration, the model is for channel 6 "speed detector." | Measurement range | 3.16, 10, 31.6, 100, 316, 1000 μm (P-P) /FS |
| Number of input channels | 6 channels at the maximum. Channel numbers for each detector can be changed from channel 1 to 6. With a channel selector, you can select and display any channel. | Frequency range | 3 to 500 Hz \pm 1 dB (depending on the frequency characteristics of the detector) |
| Rotary pulse input | Photosensor or pulse signals 0 to +12V, pulse width 10 μs or more, with a +12V power supply for driving the photosensor | Tachometer indicator | 180-30,000 rpm; resolution: 1 rpm |
| Vibration indication range | 0.01 to 1000 μm (P-P), resolution: 0.01 μm p-p (high-sensitivity range) | OVER and LOW lamps | Indicators for appropriate range indication |
| | | Outputs | [Waveform monitor output] $\pm 5\text{V}/\text{FS}$ [Vector output] $\pm 5\text{VDC}$ for both X and Y [Amplitude DC output] 0 to +5VDC [Rotating speed DC output] 0 to +5VDC |
| | | RS-232C | Capability of data reading the control of range and filter on a PC D-SUB 25 pin connector |
| | | Power supply | 100V AC $\pm 10\text{V}$, 1A or less |
| | | Outside dimensions and weight | 260 (W) x 100 (H) x 180 (D) mm (except for the lugs), approx. 2.3kg |

Accessories

- Electromotive detector Model 2007: 1 unit
- Detector cable (5m) CA2422-5: 1 pc
- Detector-installing magnet MG-2: 1 pc
- Photosensor GSR-05R: 1 unit
- Photosensor extension cable (5m) CA3512-5: 1 pc
- Magnet stand MB-B: 1 unit
- Case ALM-1: 1 pc
- Reflection tape for photosensor REF-100: 1 pc



Electromotive detector
Model 2007



Photosensor
GSR-05RN



Detector-installing
magnet MG-2



Magnet stand
MB-B

Options

- Electromotive detector (low-range compensation type, 10Hz and up) Model 2008
- Electromotive detector (vertical, low-range compensation type) Model 2014
- Electromotive detector (horizontal, low-range compensation type) Model 2015
- Acceleration detector (500mV/G)/7254A-500
- Servo detector (1V/G) Model 2200
- Non-contact displacement detector SSC-7510
- Rebalancing calculator CAL-30
- PC-use rebalancing program "Balance One"



Electromotive detector
Model 2014, 2015



Acceleration detector
2450, 2364



Non-contact displacement detector
SSC-7510



Rebalancing calculator
CAL-40



Rebalancing program
"Balance One"

PC-use rebalancing program "Balance One"

- Single-side rebalancing, double-side rebalancing, component force calculation
 - Capability of saving measurements in text files
 - Capability of reporting with a spreadsheet (such as EXCEL)
- Note: Specifications may vary according to the version of the software used.

Rebalancing calculator CAL-40

- Single-side rebalancing, double-side rebalancing, component force calculation



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