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

Portable Balancer
Model 7135
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.

Simple balancing without the need of removal

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.

Outstanding user-friendliness with special-purpose software

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.

Various handy functions that increase its versatility

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.

Rotating speed indicator
Phase indicator
Vibration indicator
Indicator hold switch
Range selector
Filter switch
Channel selector

Waveform monitor output
Vector output
Amplitude DC output
Rotating speed DC output
RS-232C port
Vibration detector input
(Rotary pulse input
(When you place an order, please specify a combination of an acceleration sensor, speed sensor, and non-contact displacement sensor.)
Rebalancing program “Balance One”

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.
### Specifications for the Portable Balancer Model 7135

<table>
<thead>
<tr>
<th>Applicable detectors</th>
<th>Measurement range</th>
<th>Frequency range</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Acceleration detectors] 1V/G (OP: 0.5 to 5V/G) Capability to incorporate a power supply for servo detector or amplifier-equipped detector</td>
<td>3.16, 10, 31.6, 100, 316, 1000 µm (P-P) /FS</td>
<td>±500 Hz ± 1 dB (depending on the frequency characteristics of the detector)</td>
</tr>
<tr>
<td>[Speed detectors] 80mV/cm/s (OP: 50 to 500mV/cm/s) Capability of incorporating a low-range compensation circuit</td>
<td></td>
<td></td>
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<tr>
<td>[Displacement detectors] 4V/mm (OP: 2 to 20V/mm) Capability of incorporating a drive power supply for non-contact detector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: When in a standard configuration, the model is for channel 6 &quot;speed detector.&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of input channels</th>
<th>Tachometer indicator</th>
<th>OVER and LOW lamps</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 channels at the maximum. Channel numbers for each detector can be changed from channel 1 to 6.</td>
<td>180-30,000 rpm; resolution: 1 rpm</td>
<td>Indicators for appropriate range indication</td>
</tr>
<tr>
<td>With a channel selector, you can select and display any channel.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Rotary pulse input</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photosensor or pulse signals 0 to +12V, pulse width 10 µS or more, with a +12V power supply for driving the photosensor</td>
<td>[Waveform monitor output] ±5V/FS [Vector output] ±5VDC for both X and Y [Amplitude DC output] 0 to +5VDC [Rotating speed DC output] 0 to +5VDC</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Vibration indication range</th>
<th>RS-232C</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.01 to 1000 µm (P-P), resolution: 0.01 µm-p (high-sensitivity range)</td>
<td>Capability of data reading the control of range and filter on a PC</td>
</tr>
<tr>
<td></td>
<td>D-SUB 25 pin connector</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power supply</th>
<th>Outside dimensions and weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>100V AC ±10V, 1A or less</td>
<td>260 (W) x 100 (H) x 180 (D) mm (except for the lugs), approx. 2.3kg</td>
</tr>
</tbody>
</table>

### 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

### 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”

### 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-30

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

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