Balancing of general rotors

Horizontal Hard-Bearing Balancing Machine UHK 11.1 / 12.1

Advantages

- High productivity by fast changeover
- Hofmann-force-measuring principle for high-precision unbalance measuring and high machine availableness
- Protractor Posiquick C for exact transfer of the unbalance position to the rotor
- Compact and space saving design

Application

- Balancing of any kind of small up to medium rotors
  - with own bearing journals
  - on an auxiliary shaft
  - as complete assembly in an adapter plate
- Applicable in
  - manufacturing (single or series)
  - maintenance
  - design and development
- Balancing of rotors like
  - electro armatures
  - textile spindles
  - turbochargers
  - small turbines
  - tool spindles

Description

The Hofmann balancing machines UHK 11.1 and UHK 12.1 are particularly designed for the requirements of balancing any kind of rotors in the weight range up to 20 kg or 50 kg.

Just a few maneuvers are necessary to adapt the pedestals and the belt drive to another rotor type. The hard-bearing machines are permanently calibrated. For a new rotor type the unbalance measuring system has to simply be set to the specific locations of the unbalance correction planes and the correction radii, only. Then the balancing process may instantly start. Time consuming calibration runs are being omitted.

The unbalance measuring system MC 10 H provides a digital processing of the measuring data with a high selectivity for precision unbalance measurement. The Windows® operating system guarantees an intuitive, simple and reliable operation. The unbalance correction is being displayed in terms of mass-, unbalance- or correction-units.

The pedestals comprising the Hofmann force measuring principle provide a high stiffness. The integrated piezo-electric force sensors are measuring the centrifugal force generated by the rotor unbalance on a direct way and with a very high sensitivity. As a benefit those sensors are not sensitive to temperature fluctuations and external electro-magnetic fields. As a result unbalances may be measured already at low speeds with a very high preciseness.

Typical rotors
<table>
<thead>
<tr>
<th>Options</th>
<th>Scope of supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional roller bearings</td>
<td>1 Machine table</td>
</tr>
<tr>
<td>Prism bearings</td>
<td>2 Pedestals with force measuring sensors and roller bearings</td>
</tr>
<tr>
<td>Negative load roller for rotors in overhung positions</td>
<td>1 Belt drive</td>
</tr>
<tr>
<td>Adapting tooling for complete assemblies</td>
<td>2 Axial counter bearings</td>
</tr>
<tr>
<td>Safety device according to DIN ISO 21940-23</td>
<td>1 Speed sensor with stand</td>
</tr>
<tr>
<td>Test rotor with test weights</td>
<td>1 Unbalance measuring system MC 10 H</td>
</tr>
<tr>
<td>Unbalance measuring system MC 10 H (see separate data sheet)</td>
<td>1 Protractor Posiquick C</td>
</tr>
<tr>
<td>Protocol printer</td>
<td></td>
</tr>
</tbody>
</table>

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