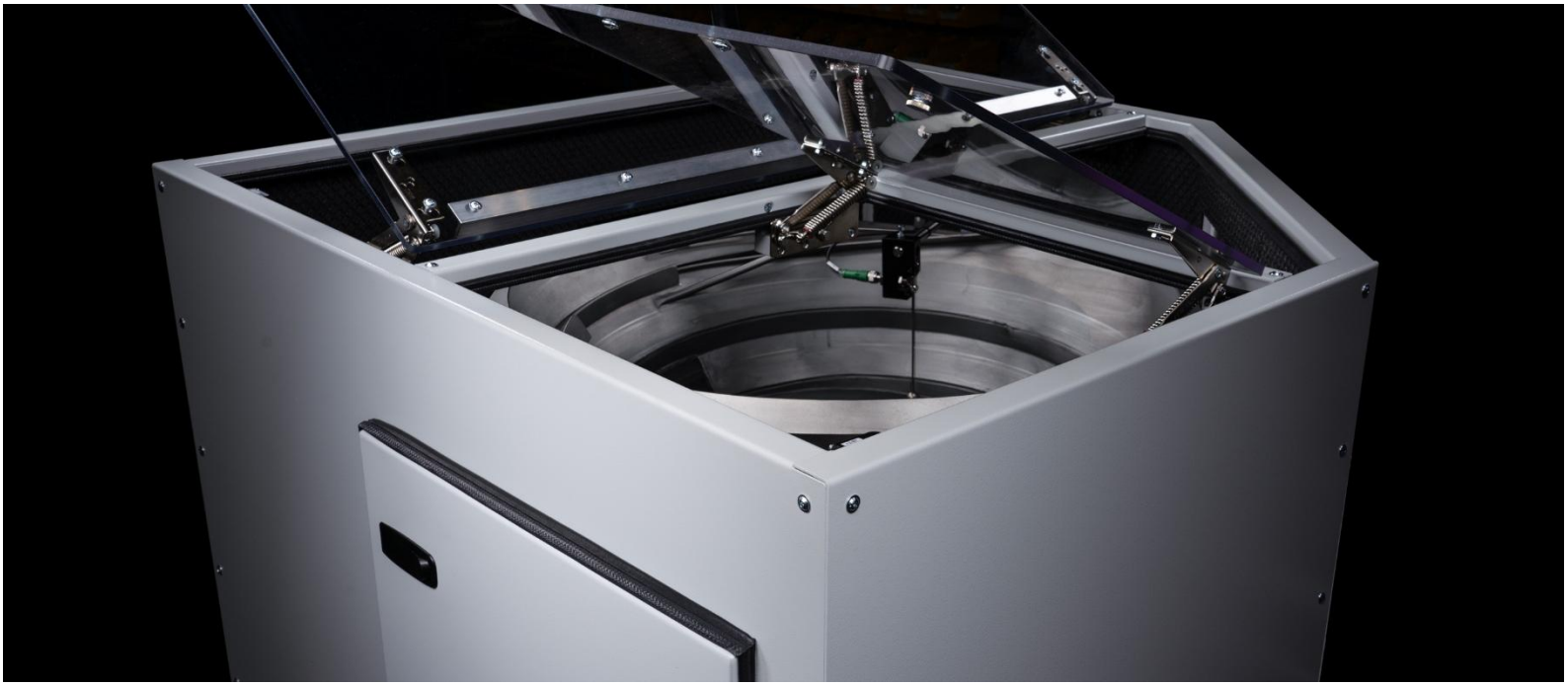


RNA INFORMATION

Sound Pressure Measurement

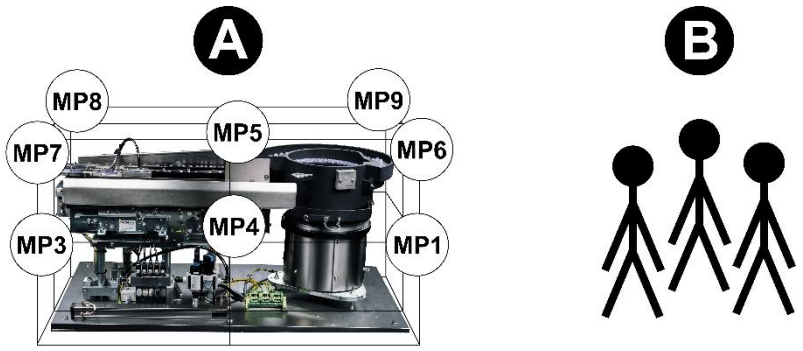
As a manufacturer of machines, RNA is obliged under the Machinery Directive 2006/42/EC to carry out sound power measurements on all its machines. The standards DIN EN 3744 and DIN EN ISO 12001 to 12005 are used for this purpose.

The measurement methods used take into account both existing room effects and external noise. The measurement is carried out at rated power over the entire machine cycle.

In the technical documentation, the emission sound pressure level L_{PA} is always specified from 70 dB(A) onwards, and for values > 80 dB(A) the sound power level L_{WA} is also specified. Personal hearing protection must be provided from this value onwards.

The three parameters of sound pressure measurement

- **Sound power level** → L_{WA}
  The sound power level of a machine indicates how much noise it emits in all directions. This value is measured in accordance with DIN EN 3744 Class 2, with a comparative standard deviation δRo ≤ 1.5dB.
- **Workplace-related emission value** → L_{PA}
  The emission sound pressure level, specified in dB(A), describes the volume at the workstation directly assigned to the machine. This indicates how loud it would be there if only the sound generated by this machine were present, without background noise or reflections from walls and ceilings. The value is determined in accordance with DIN EN ISO 11203.
- **Maximum value** → L_{cpeak}
  This is the highest value measured during a machine cycle. This value is determined in accordance with DIN EN ISO 11200.



Number of measuring points depending on the size of the system

Summary:

A: The measurements and noise emission levels provided by RNA in accordance with the above-mentioned Machinery Directive provide information about the sound power emitted by the machine into the room.

B: The measurements and level specifications do not describe how much sound arrives at a specific location and affects a person there. This corresponds to the determination of sound immission, which is measured in accordance with the Noise and Vibration Occupational Safety and Health Ordinance. At the final installation site, noise protection measurements must be carried out by the user in conjunction with the overall system and the intended workplace.
If required, we will be happy to offer you a suitable noise protection housing.

Further information can be found at: Productinformation_Soundproofing Housing

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