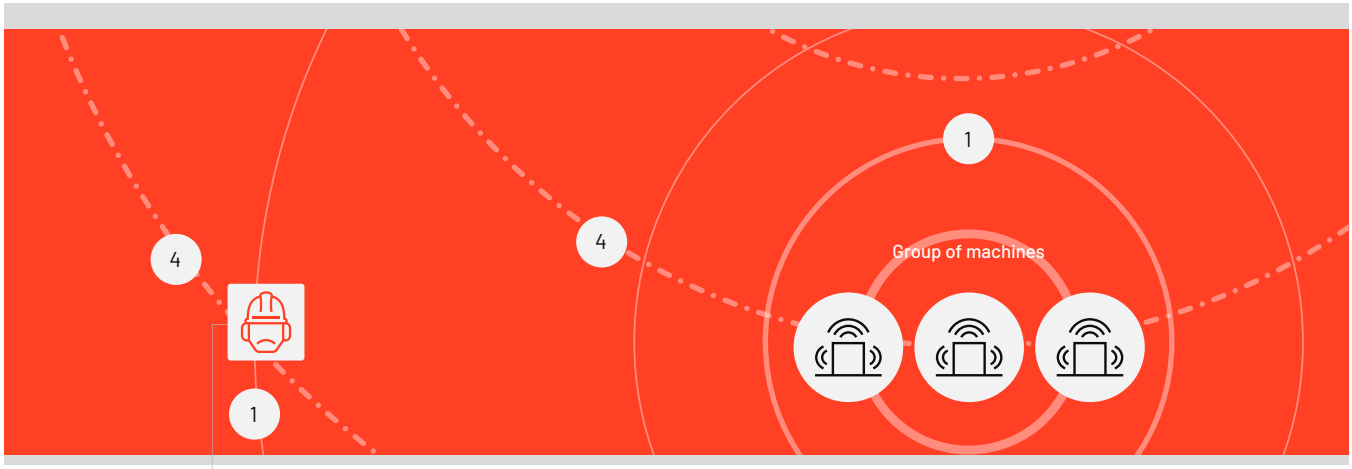
EXAMPLE SITUATION

Inside the industrial hall, a stationary workplace is exposed to noise from many machines and devices. The noise level results from the effect of the direct wave emitted from the machines, but also from the reflected waves from the internal surfaces of the room.

1 Direct wave
4 Reflected wave

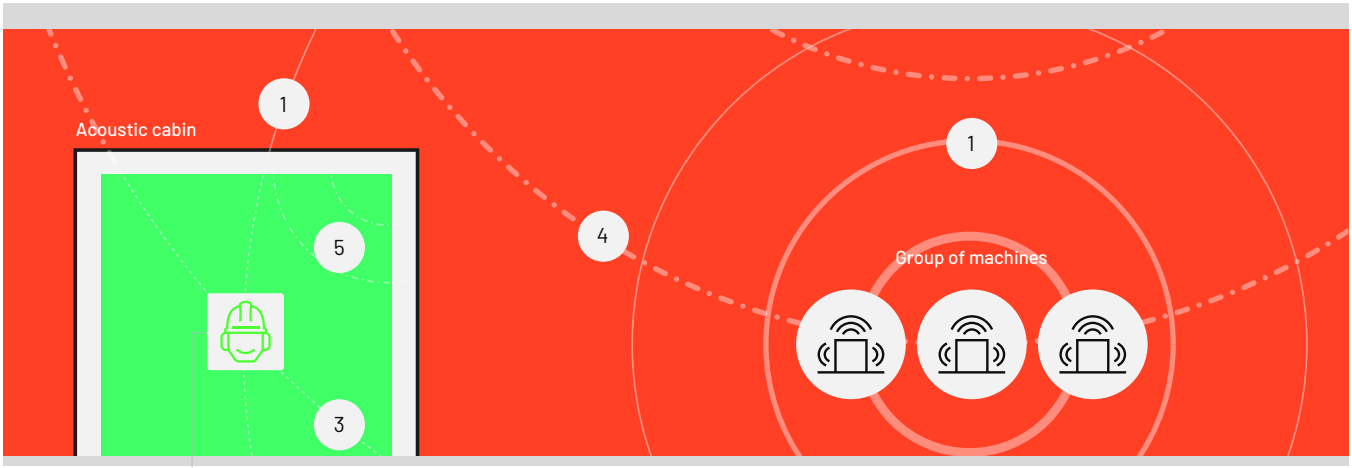


80-85 dB

WORKING PRINCIPLE

The acoustic cabin allows to acoustically separate a silent zone from the hall area, ensuring the work comfort of production line operators, control staff in areas requiring concentration, telephone communication and other office work in the immediate vicinity of machines.

3 Wave transmitted through panels
5 Wave reflected inside the enclosure



50-60 dB

Sound pressure insulation

25-35 dB

The sound pressure insulation of the cabin is defined in accordance with EN ISO 15667 as the difference in sound pressure levels at a given location before and after the use of the cabin.

The measurements are carried out using various methods depending on the situation, most often according to the PN-EN ISO 11957 standard, determining the apparent sound pressure insulation of the cabin.

Remark

The presented value of insulation is obtained for complete cabins, where all openings in the walls and roof of the cabin have been acoustically protected.

Sound pressure insulation depends on the following factors:

- acoustic parameters of materials,
- the noise spectrum in the place of installation of the cabin,
- leak ratio (ratio of the area of all openings to the surface area of the cabin without openings),
- acoustic protection of culverts and ventilation openings,
- the size and location of windows.