

Sound Level Measurements Services



Depending on the local conditions, EMA Indutec systems or other machines can produce a sound pressure level that can cause noise-induced hearing loss. At a level of more than 85 dB(A), the operating personnel must wear hearing protection.

Alternatively, sound protection measures can be installed.

As a service, and at the customer's request, we can produce **sound measurement reports** for our own systems and for any other machines and systems.

The measurements are carried out according to the **current standards and regulations** and, if necessary, according to the customer's specifications.:

- DIN 45635: Noise measurements on machines
- DIN EN ISO 3746:2011: Acoustics: Method using an enveloping measurement surface
- IEC 804/DIN EN 60804: Integrating-averaging sound level meters
- Directive 2006/42/EG
- Directive 2003/10/EG



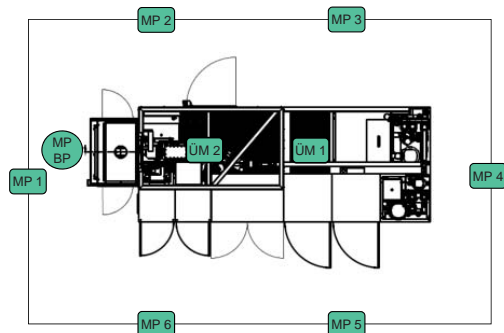
Protocols

For each measured machine you will receive a meaningful protocol. In our company we evaluate the measured values at the individual measuring points for you.

This evaluation is made available to you as a measurement report.

The protocol is also an important part of your machine documentation.

Example



Measuring protocol (example):

Mittlerer Schalldruckpegel	LCpeak	Messfläche der quaderförmigen Hüllfläche
Bedienplatz	74,33 dB	Länge 8,00 m
Messpunkt 1	73,83 dB	Breite 4,00 m
Messpunkt 2	68,94 dB	Höhe 4,20 m
Messpunkt 3	71,54 dB	Oberfläche Quader Gesamt
Messpunkt 4	77,70 dB	132,80 m²
Messpunkt 5	74,23 dB	
Messpunkt 6	69,28 dB	
über Maschine 1	69,09 dB	
über Maschine 2	69,09 dB	
	72,00 dB	
Mittlerer Schalldruckpegel:		
$\Delta L =$		72,00 dB
Berechnung ohne Korrekturfaktor K1 & K2		
LWA =	72,00 + 10 lg	132,8
LWA = 74,13 dB		

Measured values (example):

Hall base level	52,38 dB(A)
Equivalent continuous noise level (according to DIN IEC 804)	MP 1-6: 72,58 dB(A)
	MP BP: 74,33 dB(A)
	MP ÜM: 69,09 dB(A)

Measuring points:

- Measuring points (MP) 1 – 6 are recorded at a distance of 1.0 m from the system and 1.6 m above the ground.
- Measuring point BP is at the operating station, 1.6 m above the ground.
- Measuring points ÜM 1 – 2 are recorded 1.0 m above the system.

Soundproofed workroom

