

# ACCREDITATION SCOPE OF CALIBRATION LABORATORY No AP 146

Issued by  
**POLISH CENTRE FOR ACCREDITATION**  
01-382 Warsaw, ul. Szczotkarska 42

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AP 146	Name and address  <b>SVANTEK Sp. z o.o.</b> <b>CALIBRATION LABORATORY</b> <b>ul. Strzygłowska 81</b> <b>04-872 Warsaw</b>
Category of laboratory: Acting in constant headquarters (S)	Areas of accreditation <sup>1)</sup> Acoustics and ultrasounds (2.01, 2.03)

Edition: A

<sup>1)</sup> The numbering of fields and sub-fields in accordance with the classification given in the Annex to document DAP-04, available online at [www.pca.gov.pl](http://www.pca.gov.pl)

**MANAGER OF CALIBRATION  
ACCREDITATION DEPARTMENT**

**ELŻBIETA GRUDNIEWICZ**

This document is an addendum to the Certificate of Accreditation Nr AP 146 from 30.11.2016  
The certificate of accreditation is valid until 04.12.2020.  
Accreditation status and current scope of accreditation can be confirmed on the website of the PCA [www.pca.gov.pl](http://www.pca.gov.pl)

Name of the physical quantity and the type of measuring instrument	Measurement range	Calibration and Measurement Capability (CMC)	Lab. Cat.	Identification of the method
<b>2. Acoustics and ultrasounds</b>				
<b>2.01 Acoustics</b>				
Acoustic calibrators: - sound pressure level	90 dB ÷ 120 dB (rel. to 20 µPa) nominal frequency: 1 kHz	0.08 dB	S	IN-01 (IEC 60942:2005)
Sound level meters: - response to a signal from the acoustic calibrator - response to the electrical measurement signals - frequency response of the sound level meter in the free field	90 dB ÷ 120 dB (rel. to 20 µPa)  0 dB ÷ 140 dB (rel. to 20 µPa) frequency range: 20 Hz ÷ 20 kHz frequencies: 125 Hz, 1 kHz, 4 kHz 8 kHz	0.2 dB  0.2 dB  0.3 dB 0.4 dB		IN-02 (IEC 61672-3:2005 IEC 61672-3:2013)
1/1 and 1/3 octave filters: - relative attenuation	0 dB ÷ 100 dB; ≤ 70 dB > 70 dB centre frequency of the filter 20 Hz ÷ 20 kHz	0.2 dB 0.3 dB		IN-04 (IEC 61260:1995 IEC 61260-3:2016)
Personal sound exposure metres - response to signal from acoustic calibrator  - response to electrical measurement signals - frequency characteristics in the free field, expressed in dB, rel. to 20 µPa	Sound pressure level of the calibrator: 90 dB ÷ 120 dB, measurement time: 60 s ÷ 120 s 0.3 Pa <sup>2</sup> h ÷ 105 Pa <sup>2</sup> h  63 Hz ÷ 4 kHz 4 kHz ÷ 8 kHz	4.0 %  3.0 %  0.4 dB 0.6 dB		IN-03 (IEC 61252:2000)
<b>2.03 Mechanical vibrations</b>				
Vibration transducers  - reference sensitivity  - frequency response	(0.1 ÷ 1000) pC·m <sup>-1</sup> ·s <sup>-2</sup> (0.1 ÷ 1000) mV·m <sup>-1</sup> ·s <sup>-2</sup> frequencies: 16 Hz and 80 Hz  0.5 Hz ÷ 2 kHz frequencies: 0.5 Hz ÷ 0.8 Hz 1 Hz ÷ 16 Hz 20 Hz ÷ 500 Hz 630 Hz ÷ 2000 Hz	1.8 %  2.3 % 2.1 % 1.8 % 2.1 %	S	IN-07 (ISO 16063-21:2003)
Human response to vibration - Measuring instrumentation  - response to reference signal to mechanical signal  - frequency characteristics of the meter for mechanical signals for Wk, Wd filters  - frequency characteristics of the meter for mechanical signals for Wh filter  - amplitude linearity	1 ms <sup>-2</sup> for 15.915 Hz 10 ms <sup>-2</sup> for 79.580 Hz  frequencies: 0.63 Hz 0.8 Hz ÷ 1 Hz 1.25 Hz ÷ 125 Hz  frequencies: 5 Hz ÷ 20 Hz 25 Hz ÷ 500 Hz 630 ÷ 1000 Hz  (0.1 ÷ 25) ms <sup>-2</sup> for 15.915 Hz (5 ÷ 100) ms <sup>-2</sup> for 79.580 Hz	1.8%  3.3 % 2.9 % 2.5 % 2.6 %  2.3 % 2.1 % 2.3 %  1.8 %		S

Name of the physical quantity and the type of measuring instrument		Measurement range	Calibration and Measurement Capability (CMC)	Lab. Cat.	Identification of the method
	Vibration calibrators	for frequency and acceleration nominal values: 16 Hz, 1 ms <sup>-2</sup> 80 Hz, 10 ms <sup>-2</sup> 160 Hz, 10 ms <sup>-2</sup> 630 Hz, 1 ms <sup>-2</sup>	1.5 %	S	IN-06
	Meters for vibration of machines - response to reference signal for mechanical signal - frequency characteristics of the meter for mechanical signals	10 ms <sup>-2</sup> for 80 Hz frequencies: 8 Hz ÷ 20 Hz 25 Hz ÷ 500 Hz 630 Hz ÷ 1600 Hz 2000 Hz	1.8 % 2.3 % 2.1 % 2.3 % 2.4 %	S	IN-10

Edition: A

The Calibration and Measurement Capability (CMC) is the expanded uncertainty at a confidence level of app. 95%. Value expressed as a percentage refers to the percentage of the measured value. In other cases, the CMC is expressed in units of the measured value.

## **List of changes Accreditation Scope No AP 146**

Status of changes: the original version – A

**Approved status of changes**

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