



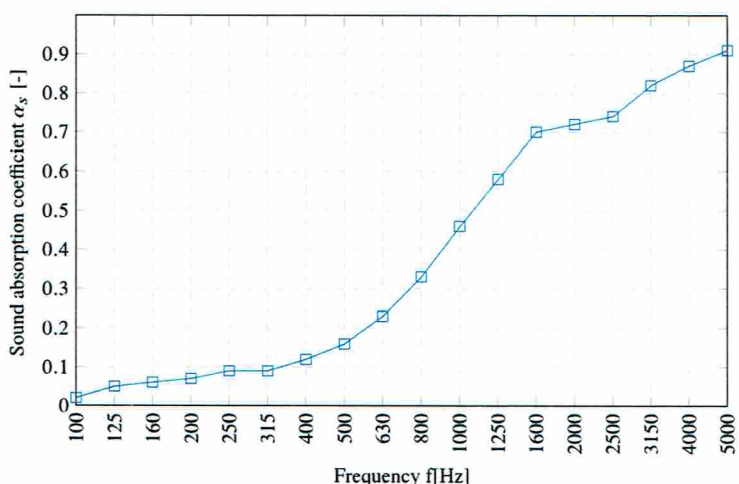
AGH University of Science and Technology
Faculty of Mechanical Engineering and Robotics
Department of Mechanics and Vibroacoustics
Al. Mickiewicza 30, 30-059 Kraków
Tel/fax (4812) 617-35-17

Client:
Bejot Sp. z o.o.
ul. Wybickiego 2a, Manieczki
63-112 Brodnica k/Poznań

Measurement of sound absorption coefficient in a reverberation chamber according to PN-EN ISO 354:2005

| | | |
|------------------------------------------|--|--------------------------|
| Test date: | | 25.07.18 |
| Sample: | | |
| Alberi Screen – sound absorbing panels - | | |
| Conditions: | | |
| Sample size [mm]: | | - |
| Element size [mm]: | | - |
| Element number [no.]: | | 3 |
| Sample area [m ²]: | | 11,2 |
| Mounting method: | | Discrete sound absorbers |
| Producer: | | |
| Bejot Sp. z o.o. | | |
| ul. Wybickiego 2a, Manieczki | | |
| 63-112 Brodnica k/Poznań | | |
| Sample description: | | |
| Filling: | | |
| - felt tape 3mm, | | |
| - nonwooven 7mm, | | |
| - MDF plate 10mm, | | |
| - nonwooven 7mm, | | |
| - felt tape 3mm, | | |
| Covering: decorative felt 3mm | | |
| Temperature with sample t[°C]: | | 25.4 |
| Temperature without sample t[°C]: | | 25.4 |
| rel. humidity with sample[%]: | | 50.3 |
| rel. humidity without sample[%]: | | 51.8 |
| Microphone positions: | | 6 |
| Loudspeaker positions: | | 2 |
| Diffusors number: | | 5 |
| Chamber volume [m ³]: | | 180,4 |
| Walls area [m ²]: | | 193,6 |

| f [Hz] | T ₁ [s] | T ₂ [s] | α_s | α_p |
|--------|--------------------|--------------------|------------|------------|
| 100 | 11.21 | 10.43 | 0.02 | 0.05 |
| 125 | 7.97 | 6.90 | 0.05 | |
| 160 | 8.21 | 6.95 | 0.06 | |
| 200 | 9.40 | 7.51 | 0.07 | 0.10 |
| 250 | 10.12 | 7.54 | 0.09 | |
| 315 | 9.56 | 7.18 | 0.09 | |
| 400 | 9.10 | 6.40 | 0.12 | 0.15 |
| 500 | 8.05 | 5.31 | 0.16 | |
| 630 | 8.06 | 4.70 | 0.23 | |
| 800 | 7.26 | 3.73 | 0.33 | 0.45 |
| 1000 | 6.64 | 3.05 | 0.46 | |
| 1250 | 6.03 | 2.56 | 0.58 | |
| 1600 | 4.97 | 2.11 | 0.70 | 0.70 |
| 2000 | 4.47 | 1.98 | 0.72 | |
| 2500 | 4.00 | 1.86 | 0.74 | |
| 3150 | 3.62 | 1.68 | 0.82 | 0.85 |
| 4000 | 2.99 | 1.48 | 0.87 | |
| 5000 | 2.50 | 1.32 | 0.91 | |



Absorption class: D
 α_w : 0,30(H)

α_s Sound absorbtion coefficient PN-EN ISO 354:2005
 α_p Practical sound absorbtion coefficient PN-EN ISO 11654:1999
 α_w Weighted sound absorbtion coefficient PN-EN ISO 11654:1999
 T_1, T_2 Chamber reverberation time while empty and with sample PN-EN ISO 354:2005

Stamp:
im. Stanisława Staszica w Krakowie
Wydział Inżynierii Mechanicznej i Robotyki
Katedra Mechaniki i Vibroakustyki
30-059 Kraków, Al. Mickiewicza 30, paw. D-1
tel. 12 617-30-64 fax 12 633-23-14
NIP 9780001923

Project manager:
dr hab. inż. Tadeusz Kamisiński prof. AGH
kamisins@agh.edu.pl

Technical specialist:
mgr inż. Wojciech Binek
mgr inż. Jacek Frączek



AGH University of Science and Technology
Faculty of Mechanical Engineering and Robotics
Department of Mechanics and Vibroacoustics
Al. Mickiewicza 30, 30-059 Kraków
Tel/fax (4812) 617-35-17

Client:
Bejot Sp. z o.o.
ul. Wybickiego 2a, Manieczki
63-112 Brodnica k/Poznań

Measurement of sound absorption coefficient in a reverberation chamber according to PN-EN ISO 354:2005

Sample:
Alberi Screen – sound absorbing panels -

Producer:
Bejot Sp. z o.o.
ul. Wybickiego 2a, Manieczki
63-112 Brodnica k/Poznań

Sample description:

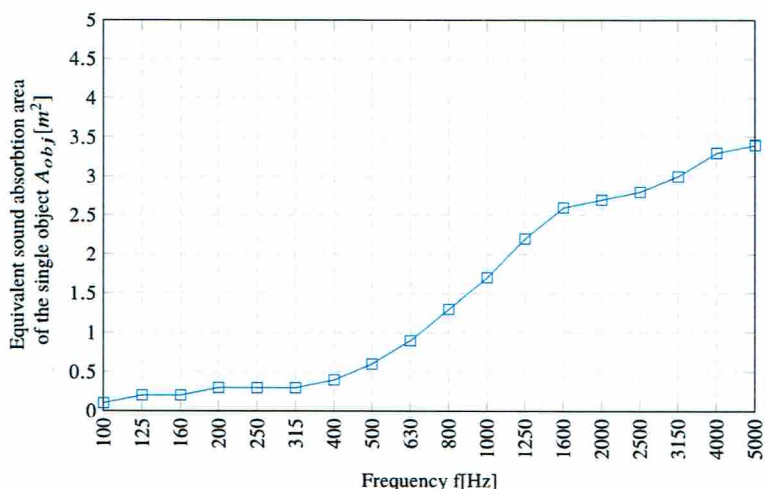
Filling:
- felt tape 3mm,
- nonwoven 7mm,
- MDF plate 10mm,
- nonwoven 7mm,
- felt tape 3mm,
Covering: decorative felt 3mm

Test date: 25.07.18

Conditions:
Sample size [mm]: -
Element size [mm]: -
Element number [no.]: 3
Sample area [m^2]: 11,2
Mounting method: Discrete sound absorbers

Temperature with sample $t[^\circ C]$: 25,4
Temperature without sample $t[^\circ C]$: 25,4
rel. humidity with sample [%]: 50,3
rel. humidity without sample [%]: 51,8
Microphone positions: 6
Loudspeaker positions: 2
Diffusors number: 5
Chamber volume [m^3]: 180,4
Walls area [m^2]: 193,6

| $f[Hz]$ | $T_1[s]$ | $T_2[s]$ | $A_{obj}[m^2]$ | |
|---------|----------|----------|----------------|-----|
| 100 | 11.21 | 10.43 | 0.1 | 0.2 |
| 125 | 7.97 | 6.90 | 0.2 | |
| 160 | 8.21 | 6.95 | 0.2 | |
| 200 | 9.40 | 7.51 | 0.3 | 0.3 |
| 250 | 10.12 | 7.54 | 0.3 | |
| 315 | 9.56 | 7.18 | 0.3 | |
| 400 | 9.10 | 6.40 | 0.4 | 0.6 |
| 500 | 8.05 | 5.31 | 0.6 | |
| 630 | 8.06 | 4.70 | 0.9 | |
| 800 | 7.26 | 3.73 | 1.3 | 1.7 |
| 1000 | 6.64 | 3.05 | 1.7 | |
| 1250 | 6.03 | 2.56 | 2.2 | |
| 1600 | 4.97 | 2.11 | 2.6 | 2.7 |
| 2000 | 4.47 | 1.98 | 2.7 | |
| 2500 | 4.00 | 1.86 | 2.8 | |
| 3150 | 3.62 | 1.68 | 3.0 | 3.2 |
| 4000 | 2.99 | 1.48 | 3.3 | |
| 5000 | 2.50 | 1.32 | 3.4 | |



A_{obj} Element equivalent sound absorption area PN-EN ISO 354:2005
 T_1, T_2 Chamber reverberation time while empty and with sample PN-EN ISO 354:2005

Stamp:
AKADEMIA GÓRNICZO-HUTNICZA
im. Stanisława Staszica w Krakowie
Wydział Inżynierii Mechanicznej i Robotyki
Katedra Mechaniki i Vibroakustyki
30-059 Kraków, Al. Mickiewicza 30, paw. D-1
tel. 12 617-30-64 fax 12 633-23-14
NIP 6750001823

Project manager:
dr hab. inż. Tadeusz Kamiński prof. AGH
kamisins@agh.edu.pl

Technical specialist:
mgr inż. Wojciech Binek
mgr inż. Jacek Frączek