

Geschüttelt, gerührt, gemischt und geschichtet - Schallabsorption granularer Materialien

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We examine the sound absorption coefficient of granulates. We are especially interested in how the sound absorption depends on the mixture and the size of the granular materials. Our experiment is implemented by a variant of Kundt's Tube which sends an acoustic signal to granulates and appraises the reflected sound wave. With these data we can calculate the sound absorption coefficient. Moreover we analyze how and why the sound absorption coefficient changes when we blend sound-absorbing and sound-reflecting granular materials.