

Research on the coefficient of sound absorption in turbid water (PDF)

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Title: Research on the coefficient of sound absorption in turbid water

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摘要: China's coastal waters are turbid and the properties of the seabed are complex. This negatively impacts the performance of underwater detection equipment. The properties of sound absorption in turbid water are not well understood. In this paper, the coefficient of sound absorption in turbid water was measured by the reverberation technique. All work was done in a reverberation barrel made of seamless aluminum. First, pure water was poured into the reverberation barrel and its reverberation time measured. Next, various concentrations of turbid water were poured into the barrel and their reverberation time measured. After all data had been gathered, the coefficient of sound absorption in turbid water of different concentrations was calculated. From this we determined a law of sound absorption in turbid water as summarized in the paper.

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