

Manufacturing of polyurethane foams for sound absorption materials

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Acoustic absorbent is important material in vehicle industry. Drivers need to decrease noise pollution for their comfortable feeling. Nowadays, these materials are called feeling materials in automative. The typical material for improved sound absorption properties is flexible polyurethane foam. This is mainly used for absorbing sound at high frequency range because of open cell structure. The sound absorption properties can control through changing various additives. Also, flexible polyurethane foam have advantage in car lightening research by low density. Therefore our aim in this study is to propose guideline for manufacturing flexible polyurethane foam for improved sound absorption property. The morphology effect of flexible polyurethane foam by various additives was examined through SEM and the mechanical development was characterized UTM. The acoustic properties was tested by using impedance tube.