

## 비정질 합금의 소성 증가에 대한 방법론

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## Methodologies of improving plasticity of amorphous alloy

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### Abstract

The elastic deformation behaviors of bulk amorphous alloys during elastostatic compression were examined. The elasticity of the amorphous alloys consisted of the strain components characterized by ideal-elasticity, anelasticity, and viscoelasticity depending on their deformation characteristics. The strain component associated with the viscoelasticity is not only irreversible, but also causes the generation of excess free volume, which in turn alters the mechanical properties. This article discusses how the properties of amorphous alloys can be altered by the application of elastostatic compression.

**Key Words** : amorphous alloy, elastostatic compression, elastic shear stress, free volume, plasticity

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