Seungwoo Kim

## Research Interests

• Metal Plasticity and Anisotropic Hardening

• Finite Element Analysis

• Mechanical strength prediction considering complex strain and thermal path

• Anisotropic plasticity of can battery cell

## Publications

Choi, S., Kim, S., Kang, S. C., & Lee, M. G. (2025). Distortional hardening revisited: Advanced strength prediction model after multi-directional forming. International Journal of Mechanical Sciences, 286, 109856.

## Conferences

“Prediction of tensile strength after multi-axial pipe forming processes using distortional hardening model”, Seungwoo Kim, Seonghwan Choi, Soo-Chang Kang, and Myoung-Gyu Lee, Korean Society for Technology of Plasticity and Materials Processing (2024 KSTP spring meeting), Seoul, Republic of Korea, May 23-24, 2024

“A Novel Distortional Hardening Model for Predicting the Strength of Steel Pipes Under Elevated Temperatures and Complex Deformations”, Seungwoo Kim, Seonghwan Choi, Soo-Chang Kang, and Myoung-Gyu Lee, Korean Institute of Metals and Materials (2025 KIM spring meeting), Jeju, Republic of Korea, April 23-25, 2025

## Achivements & Awards

“Jinhap academic award(진합학술상)”, Korean Society for Technology of Plasticity and Materials Processing (2024 KSTP spring meeting), May 23, 2024