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Study of Small Dimension Specimens on SHPB Test DAWU XIAO,

YINGLEI LI, SHISHENG HU, University of Science and Technology of China — By SHPB tests combining with theoretical and numerical analysis of series dimension of 2024 aluminium alloy,we concluded that stress-strain curves by specimen of small dimension is reliable.also an attempt is made to get curves of strainrate over 10^4 s⁻¹ by small dimension specimen.Accuracy of measurements of transmitted wave is analysed and discussed by experiments and numerical simulation of eccentric compression tests of small specimen.it showed that the distortion of signals can be eliminated by mounting straingages in series or far away from the specimen-bar interfaces.

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