Dynamic material parameters of closed-cell foams under high-velocity impact

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Highlights

- The effect of meso-structural and base-material parameters is investigated.
- The analysis is based on cell-based FE models and the D-R-PH shock model.
- A dynamic material parameter is evaluated with dimensional analysis and tests.
- The dynamic material parameter varies linearly with the relative density.
- An expression of D-R-PH idealization involving the relative density is obtained.