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Study of expanding fracture behavior of a copper cylinder under hollow explosive loading.[1] CHENG FAN, ZHAOLIANG GUO, MINGTAO LIU, TIEGANG TANG, None — We study the expanding fracture behavior of a copper cylinder under hollow explosive loading. Besides the tensile fracture along the circumferential direction, spall fracture along radial direction occurs, which is evidenced by the step-like behavior with three velocity jumps in the free surface velocity curves and microstructure study of the soft recovered fragments. After considering the spall fracture mechanism, a numerical simulation is carried our and the result shows good agreement with the experiment data.

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