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Dynamic Strength Measurements in Polymethylmethacrylate (PMMA)

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In a 1996 paper by Bat'kov and co-workers, the dynamic strength in several polymer systems was shown to increase with longitudinal stress to some critical stress and subsequently fall off to zero. The authors attributed this to the increased temperature in polymers at high pressures resulting in decreased strength. In this study, the dynamic strength of PMMA was determined using longitudinal and lateral manganin gauges across a wide range of pressure inputs. The dynamic strength as a function of input pressure will be presented.

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