

Abstract: We study the continuity of mappings of finite distortion, a set of mappings intended to model elastic deformations in non-linear elasticity. We focus on continuity criteria for the inner-distortion function and prove that certain modulus of continuity estimates are sharp, i.e. cannot be improved. We also give a proof of the continuity of mappings of finite distortion under simplified conditions on the integrability of the distortion function.