Abstract

In the present study, a thick walled cylinder with a semi elliptical crack located at the inner surface is considered. Weight functions for the surface and the deepest point of an internal semi elliptical crack in a thick-wall cylinder were derived from a general weight function and two reference. The weight functions were validated against finite element data given by Mettu and hybrid weight the paper are valid for cylinders with an inner radius to wall thickness ratio, Ri/t = 4. complex stress fields. All stress intensity factor expressions given in several linear and nonlinear.
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