



















































国立大学法人 **東京工業大学**

Engineering Calculation of Stress Intensity Factor

Pedro Albrecht/ K. Yamada, ASCE, STR, Feb.1977

$$K = F(a)\sigma\sqrt{\pi a}$$

$$F(a) = F_e \cdot F_s \cdot F_w \cdot F_g$$

Fe: The Shape of Crack Front,

which is often assumed as an elliptical crack, correction *Fs*: Effects of Free Surface, Front Free Surface Correction *Fw*: Finite Width, The Back Surface Correction *Fg*: Non-uniform Opening Stresses, Stress Gradient Correction























































$$\frac{\mu \pm k + \mu \pm k}{\mu \pm k + \mu \pm k} = \frac{\mu \pm k + \mu \pm k}{\mu \pm k + \mu \pm k} = \frac{\mu \pm k + \mu \pm k + \mu \pm k}{\mu \pm k + \mu \pm k} = \frac{\mu \pm k + \mu \pm k + \mu \pm k}{\mu \pm k + \mu \pm k} = \frac{\mu \pm k + \mu \pm k + \mu \pm k}{\mu \pm k + \mu \pm k + \mu \pm k} = \frac{\mu \pm k + \mu \pm k + \mu \pm k + \mu \pm k}{\mu \pm k + \mu \pm k + \mu \pm k + \mu \pm k} = \frac{\mu \pm k + \mu \pm k$$











































