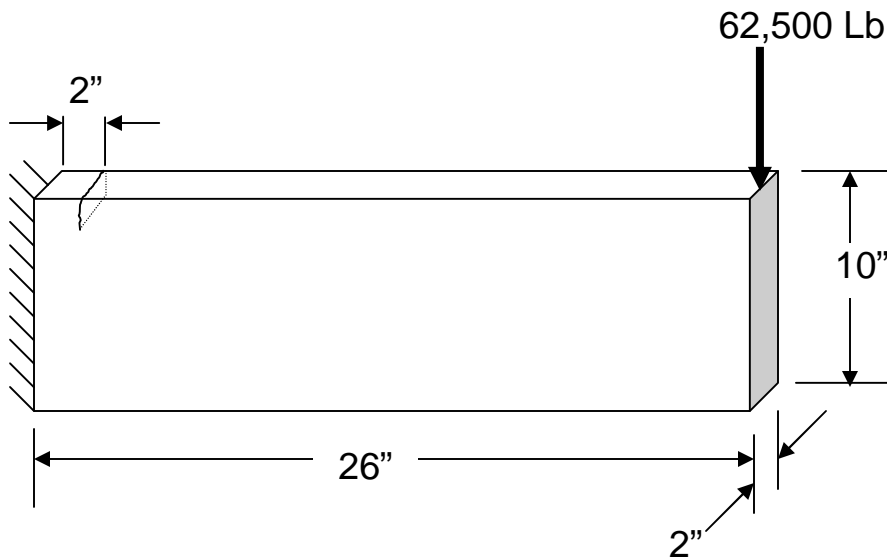


FRACTURE MECHANICS HOMEWORK

ME312



Material: Titanium 6AL-4V
 $E = 16 \times 10^6$ PSI
 $K_{IC} = 60.0$ KSI $\sqrt{\text{in.}}$
 $S_y = 130.0$ KSI
Crack Depth = 0.3 in.

Considering this as an edge crack in pure bending, what is the factor of safety for the crack not unzipping?

Don't forget to check for yielding.