



Objective(Maximize):

$$\text{Bending stiffness per mass of material} = \frac{EI}{m}; \text{ Where } m = \rho V$$

$$= \frac{EI}{\rho V}$$

$$\text{This results in a material index } M = \frac{E}{\rho}$$

$$\log(M) = \log(E) - \log(\rho)$$

$$\text{Material index loci in the form of: } \log(E) = \log(\rho) + \log(M)$$