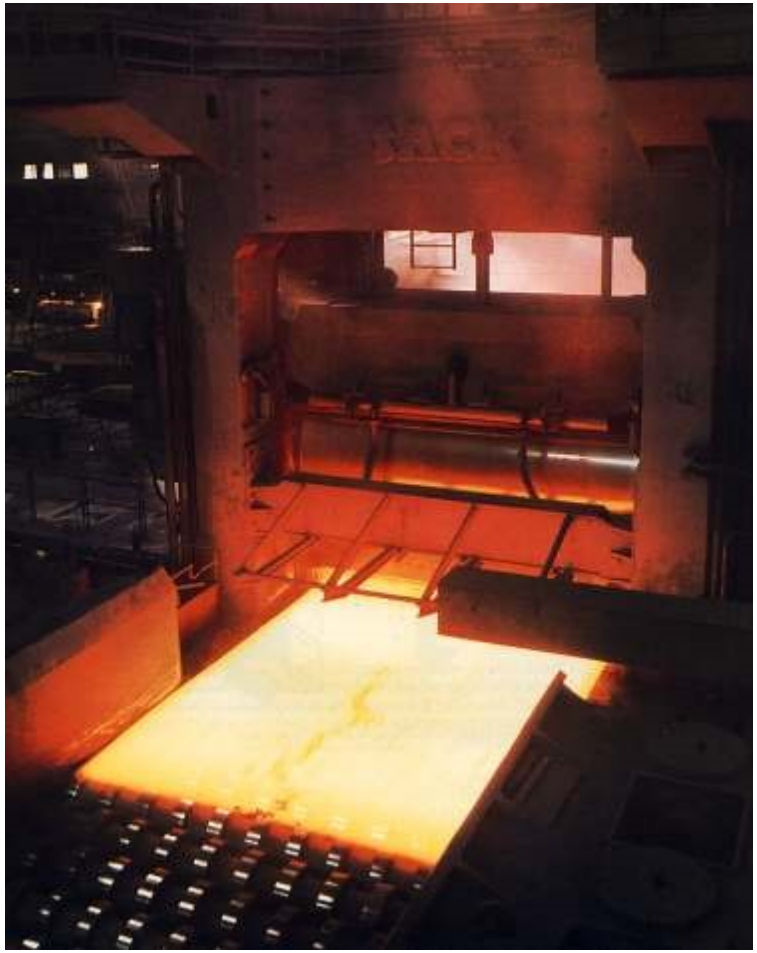

Ferryman Company, a titanium producer in Pennsylvania, expanded its operations with the purchase of a $10 million rolling mill. Assume the new mill was fired up at the start of 2005, and has a peak capacity of 4 million pounds of output per year. Assume that each pound of output generates $9.00 in revenue while costing $4.00 to produce. O&M costs are $10 million in 2005 and grow by $1 million per year after that. At the end of 10 years the mill will be sold for scrap for $500,000.

How much of their peak capacity must they use in order to exactly earn their 15% MARR?