

Friel Co plans to buy a new machine to meet expected demand for a new product, Product L. This machine will cost \$500,000 and will last for four years, at the end of which time it will be sold for \$10,000. Friel Co expects demand for Product L to be as follows :

Year	1	2	3	4
Demand (units)	70,000	80,000	100,000	50,000

The selling price for Product L is expected to be \$24.00 per unit and the variable cost of production is expected to be \$15.60 per unit. Incremental annual fixed production overheads of \$50,000 per year will be incurred. Selling price and costs are all in current price terms.

Selling price and costs are expected to increase as follows :-

	<i>increase</i>
Selling price of Product L	3% per year
Variable cost of production	4% per year
Fixed production overheads	6% per year

Other information

Friel Co has a real cost of capital of 6% and pays tax at an annual rate of 30% one year in arrears. It can claim capital allowances on a 25% reducing basis. ✓

Friel Co has a target return on capital employed of 20%. Depreciation is charged on a straight-line basis over the life of an asset.

Requirements :

Calculate the net present value of buying the new machine and comment on your findings (work to the nearest \$1,000).