

ACME Widget Example 2 (Revenue Alternatives)



Source: <https://www3.epa.gov/recyclecity/factory.htm>

ACME Widget Manufacturing Company has \$20,000 left in its capital budget and it has identified three ways to increase profits:

1. Spend \$20,000 to replace an existing injection molding machine with a newer version that will reduce O&M costs by \$5000 per year.
2. Spend \$15,000 to modernize an existing CNC milling machine to reduce the number of defective parts, saving \$2500 per year in reworking costs.
3. Spend \$17,500 for equipment to manufacture parts in-house that are currently purchased from a vendor, saving \$4000 per year.

Pick the best use of the remaining capital based on a 10-year study period and an MARR of 14% per year. Assume salvage values are 20% of the initial costs.