

CH402 CHEMICAL ENGINEERING PROCESS DESIGN

Lab 5: Process Economics in CHEMCAD

Read: Project Handout

Problems: None

Objectives (Cadets will be able to):

1. Use sizing and heuristics to determine the purchase cost of a variety of equipment.
2. Perform an economic analysis of a process and use key indicators to assess the viability of a process.

Definitions (from lesson 19):

Return on investment (ROI)

Bond Rate

Payback period (PBP)

Preferred and Common Stock Dividend

Net present worth (NPW)

Minimum Acceptable Rate of Return

Discounted cash flow rate of return (DCFR)

Reference Payback Period (eq 8-2c)

(DCFR is also known as Internal Rate of Return (IRR)).

Cadet Notes: