

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)

Payback period (PBP)

Net present worth (NPW)

Discounted cash flow rate of return (DCFR)

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

Bond Rate

Preferred and Common Stock Dividend

Minimum Acceptable Rate of Return

Reference Payback Period (eq 8-2c)

Cadet Notes: