

CH402 CHEMICAL ENGINEERING PROCESS DESIGN

Lesson 14: Cost estimation and Capital Investments

Read: Pages 226-239

Problems: 6-1, 6-2 (Problem Set 7)

Objectives (Cadets will be able to):

1. Use an I/O diagram to estimate total cash flow for a process.
2. Calculate the different types of cash flow in a chemical process.
3. Calculate equipment costs using capacity scaling factors.

Definitions:

Working capital, nonmanufacturing and manufacturing fixed costs, direct and indirect costs, total capital investment, gross profit, purchased equipment costs, operating labor costs, utility costs, depreciation, annual total product costs, cumulative cash position, cost capacity scaling factors

Cadet Notes: