TOPIC 6: PROCESS COSTING

more than one work-in-process account (one for each process) than job costing

TWO COST CLASSIFICATIONS OF PROCESS COSTING

Process costing systems separate costs into cost categories according to the timing of when costs are introduced into the process.

Direct materials	Conversion costs
They are frequently added at one point in time	All are added at about the same time, but in a pattern different from direct materials costs.
often the start (0%) or the end (100%) of the process	often added throughout the process

EQUIVALENT UNITS

Equivalent Units (EU) are the number of (whole) units which could have been completed if all production effort had been used to produce fully complete units.

HOW WOULD THE EU DIFFER IF USING FIFO OR WEIGHTED AVERAGE

FIFO
↳ assumes that all the higher-cost prior-period units in work in process are the first to be completed and transferred out
↳ ending work in process consists of only the lower-cost current-period units.
↳ results in a <u>higher cost of units completed and transferred out</u> and a <u>lower ending work-in-process inventory</u>

The weighted-average method
↳ smoothens the cost per equivalent unit by assuming that more of the lower-cost units are completed and transferred out
↳ some higher-cost units in beginning work in process are placed in ending work in process.
↳ results in a <u>lower cost of units completed and transferred</u> out and a <u>higher ending work-in-process inventory</u>

CHOOSING BETWEEN FIFO AND THE WEIGHTED-AVERAGE METHOD

- If cost fluctuates a lot and production is unstable → FIFO
- If production and cost are stable across time → Weighted average

FIFO

Under the FIFO method, equivalent units are calculated as the equivalent units of work done in the current period only.

Major advantage

- shows lower operating income and higher cost of goods sold, it lowers taxes.
- it provides better information for managing the business because it keeps separate the costs of the current period from costs incurred in previous periods
- However, managers may have an incentive to use the weighted-average method
  - show higher income if the managers' compensation increases with higher operating income or if there are debt covenants that would be violated by showing lower income.

TOPIC 7 - ACCOUNTING FOR SPOILAGE, REWORK AND SCRAP

SPOILAGE
- units of production that do not meet the standards required by customers for good units and that are discarded or sold at reduced prices.

NORMAL SPOILAGE
- inherent in a particular production process that arises even under efficient operating conditions.
- included as part of the cost of good units manufactured
  - ↳ *Unit cost of a good unit = (Total cost – gain from normal spoilage) ÷ total good units*
  - ↳ *Normal spoilage rate = Units of normal spoilage ÷ Total good units completed*

Direct normal spoilage
- – attributable to a specific job
- – The costs incurred on the bad units are already part of the balance in WIP

With Salvage value:

> **Dr** Cash / Account receivable / Materials Control
>   **Cr** Work in Process Control (Job #X)

No Salvage value -> **NO ENTRY**

Indirect normal spoilage
- – spoilage may be considered a normal characteristic of a given production cycle.
- – common to all jobs - not charged to a specific job
- – Budgeted for and **included in OH**

With Salvage value:

> **Dr** Cash / Account receivable / Materials Control
> **Dr** Overhead Control
>   **Cr** Work in Process Control (Job #X) ⎤ When No Salvage value

ABNORMAL SPOILAGE
- would not arise under efficient operating conditions. Regarded as avoidable and controllable.
- It is recorded as separate cost and it is posted to a separate ledger account
- the net loss is highlighted and always charged to an abnormal loss account.

Total spoiled units – Normal spoilage in units = Abnormal spoilage in units
Normal spoilage in units = good units*normal spoilage rate

To recognise cost of abnormal spoilage
With Salvage value:

> **Dr** Materials Control / Cash / Account receivable
> **Dr** Loss from Abnormal Spoilage ⎤ When No Salvage value
>   **Cr** Work in Process Control (Job #X) ⎦