



# Chapter 4

## Akuntansi Overhead Pabrik



# Learning Objectives

---



- Identify cost behavior patterns.
- Separate semivariable costs into variable and fixed components.
- Prepare a budget for factory overhead costs.
- Distribute service department factory overhead costs to production departments.



# Learning Objectives

---



- Apply factory overhead using predetermined rates.
- Account for actual and applied factory overhead.



# Accounting for Factory Overhead

---



- Identifikasi Pola Perilaku Biaya.
- Anggaran Biaya overhead Pabrik.
- Akumulasi biaya overhead Pabrik Aktual.
- Aplikasi perkiraan overhead pabrik ke produksi.
- Menghitung dan menganalisa perbedaan antara biaya overhead aktual dan dibebankan.



# Cost Behavior Patterns

---




- Biaya variabel adalah biaya yang berubah proposional dengan perubahan volume.
- Biaya tetap konstan.
- Biaya semivariabel memiliki karakteristik biaya tetap dan variabel.

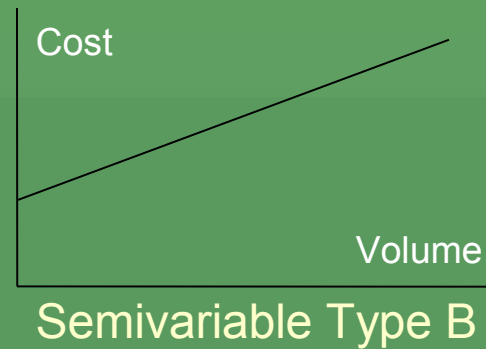
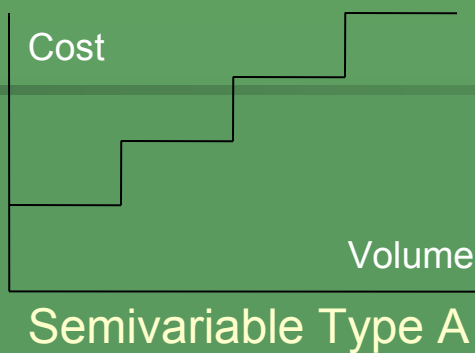
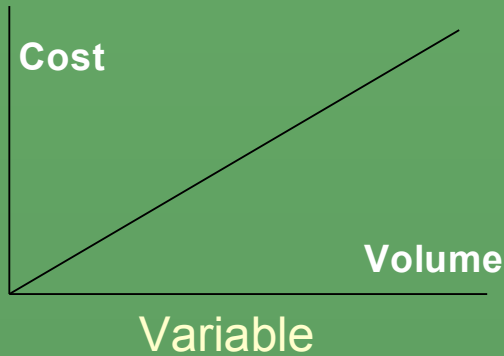
Type A –konstan sebatas range of production, selanjutnya berubah.

Type B – berubah tetapi tidak langsung proporsional dengan perubahan volume.

---



# Cost Behavior Patterns



# Techniques for Analyzing SemivARIABLE Costs

---



- Observation Method (Account Classification Method)
- High-Low Method
- Scattergraph Method
- Method of Least Squares



# Budgeting Factory Overhead Costs

---



- Anggaran adalah rencana operasi manajemen dalam bentuk kuantitatif.
- Biaya-biaya dipisahkan ke dalam komponen tetap dan variabel.
- Anggaran dipersiapkan pada tingkat produksi yang berbeda (flexible budget).
- Alat manajemen yang dapat dinilai untuk perencanaan dan pengendalian biaya.



# Accounting for Factory Overhead

---



- Ayat-ayat yang dibuat pada jurnal umum untuk bahan tidak langsung dan upah tidak langsung yang berasal dari ringkasan pengeluaran bahan dan upah kerja.
- Biaya-biaya overhead pabrik dicatat di general ledger berasal dari faktur dan skedul untuk biaya tetap.
- A factory overhead subsidiary ledger boleh digunakan jika jumlah perkiraan overhead pabrik menjadi banyak.



# Examples of Factory Overhead Accounts



- Defective Work
  - Depreciation
  - Employee Fringe Benefits
  - Fuel
  - Heat and Light
  - Indirect Labor
  - Indirect Materials
  - Insurance
  - Janitorial Service
  - Lubricants
  - Maintenance
  - Materials Handling
  - Overtime Premium
  - Plant Security
  - Power
  - Property Tax
  - Rent
  - Repairs
  - Small Tools
  - Spoilage
  - Supplies
  - Telephone/Fax
  - Water
  - Workers' Compensation Insurance
- 

# Factory Overhead Analysis Sheets

---


- These sheets may be used to keep a subsidiary record of factory overhead expenses.


Expense-type  
analysis spreadsheet  
Department-type  
analysis spreadsheet



# Schedule of Fixed Costs

---



- Biaya-biaya tetap di asumsikan tidak berubah jumlahnya dari bulan ke bulan.
  - Karena biaya tetap dapat diperkirakan, sehingga skedul dapat dipersiapkan juga.
  - Ayat jurnal biaya tetap dicatat berasal dari skedul biaya tetap.
- 
- 

# Example of Schedule of Fixed Costs



## Schedule of Fixed Costs

	January	February	March
Depreciation-Machinery			
Dept. A	\$300	\$300	\$300
Dept. B	200	200	200
Total	\$500	\$500	\$500
Property Tax			
Dept. A	\$280	\$280	\$280
Dept. B	270	270	270
Total	\$550	\$550	\$550
Total Fixed Costs	\$1,050	\$1,050	\$1,050



# General Factory Overhead Expenses

---



- Ketika biaya overhead pabrik tidak diidentifikasi pada departemen tertentu, maka dibebankan pada departemen alokasi prosesnya.
- Boleh masing-masing item biaya yang dibebankan, atau biaya akumulasi dan dialokasikan pada akhir periode.



# Summary of Factory Overhead



## Summary of Factory Overhead

	Dept. A	Dept. B	Dept. C	Total
Expenses				
Indirect materials	\$100	\$50	\$40	\$190
Indirect labor	200	150	140	490
Power	150	140	120	410
Depreciation	300	200	150	650
General factory expenses	<u>150</u>	<u>350</u>	<u>200</u>	<u>700</u>
Total	\$900	\$890	\$650	\$2,440



# Distributing Service Department Expenses



- Departemen pelayanan (Jasa) adalah sebuah bagian organisasi yang penting, tetapi mereka tidak secara langsung memproduksi.
- Departemen produksi melakukan operasi manufaktur yang mana mengubah fisik unit yang diproduksi.
- Biaya departemen jasa harus dibagi ke departemen produksi.
- Analisa departemen jasa harus dilakukan untuk menghubungkan ke departemen lain.



# Common Bases for Distributing Service Department Costs



## *Service Departments*

## *Basis for Distribution*

Building Maintenance

Floor space occupied by other departments

Inspection and Packing

Production volume

Machine Shop

Value of machinery and equipment

Human Resources

Number of workers in departments served

Purchasing

Number of purchase orders

Shipping

Quantity and weight of items shipped

Stores

Units of materials requisitioned

Tool Room


Total direct labor hours in departments served



# Methods of Distributing Costs

---



- Direct Distribution Method
    - Biayadeparteen jasa di alokasikan hanya ke departemen produksi.
  - Sequential Distribution or Step-Down Method
    - Distribusi biaya departemen jasa ke departmen jasa lain, kemudian ke departmen produks.
  - Algebraic Distribution Method
    - Distributes costs by simultaneous equations recognizing the relationship of services rendered by departments to each other.
- 
- 

# Applying Factory Overhead to Production

---



- Biaya overhead tidak diketahui sampai akhir periode..
- Biaya pekerjaan dibutuhkan segera setelah selesai. Jadi metode perkiraan untuk memperkirakan overhead yang dibebankan harus disiapkan.



# Methods of Predetermined Factory Overhead Rates

---



- Direct Labor Cost Method
- Direct Labor Hours Method
- Machine Hours
- Activity-based Costing (ABC)



# Direct Labor Cost Method



- Uses the amount of direct labor cost that has been charged to the product as the basis for applying factory overhead.

## Job 100

Direct materials	\$1,000
Direct labor	3,000
Factory overhead (50% of direct labor \$)	1,500
Total cost of completed job	\$5,500



# Direct Labor Hour Method



- Estimated factory overhead cost is divided by the estimated direct labor hours to be worked.

## Job 100

Direct materials	\$1,000
Direct labor (500 hours)	3,000
Factory overhead (500 hours @ \$4)	2,000
Total cost of completed job	\$5,500




# Machine Hour Method



- This method best serves highly automated departments where the amount of factory overhead cost incurred on a job is primarily a function of the machine time that a job requires.

## Job 100

Direct materials	\$1,000
Direct labor (500 hours)	3,000
Factory overhead (300 machine hours @ \$10)	3,000
Total cost of completed job	\$7,000



# Activity-Based Costing Method

---



- Perusahaan harus, pertama adalah mengidentifikasi aktivitas pabrik dan menciptakan biaya.
- Selanjutnya sebuah dasar atau cost driver harus dibagi ke masing-masing kelompok aktivitas.
- Pendekatan ini terbaik dibandingkan pendekatan tradisional, yaitu cost drivers meliputi labor hours dan machine hours.



# Accounting for Actual and Applied Factory Overhead



*Entry to apply estimated factory overhead to production*

Work in Process	XX	
Applied Factory Overhead		XX

*At the end of the period, the applied factory overhead account is closed to factory overhead.*

Applied Factory Overhead	XX	
Factory Overhead		XX



# Under- and Overapplied Factory Overhead



- After the applied factory overhead account is closed, the underapplied (debit balance) or overapplied (credit balance) balance in the factory overhead account is moved to work in process.

Under- and Overapplied Factory Overhead	XX	
Factory Overhead		XX

Cost of Goods Sold	XX	
Under- and Overapplied Factory Overhead		XX



# Period Costs and Product Costs



- Period Costs

- Seluruh biaya yang ditetapkan ke produk, tetapi diakui sebagai biaya dan beban yang diperhitungkan pada periode berjalan.

- Product Costs

Biaya-biaya yang meliputi bagian dari biaya-biaya persediaan dan diekspresikan sebagai harga pokok penjualan.

