

* (CH-4, Job costing) * تقيس تكلفة

* Job-costing :- المنتجات التي ينتجها يكون صغيرة بحيث كل منتج يختلف عن الآخر مثل :-
صنع الملابس - يصنع كل منتج غير عن الآخر وعلى رغبة الزبون أي أن المنتجات تكون صغيرة وبكميات قليلة ومن الأمثلة عليها أيضاً :-
(Advertising, movies, ice rinks, patient health care)

* Process-costing :- المنتجات التي ينتجها يتقوم نفس بعضها وتكون بكميات كبيرة مثل
تشي كيك بيسه (كميات كبيرة من كيك البيسه نفس الشكل واللون والطعم) ومن الأمثلة :-
(soft drinks, oil, computer chips, Chemical)

* Job-order costing :- بما أن كميات أو المنتجات في ال Job costing صغيرة ومختلفة عن بعضها إذا كيف يمكن حساب تكلفة كل منتج على حدة :-

- 1] Cost object - تحديد
- 2] Direct cost of the job - تحديد
- 3] select the cost allocation base to use for allocating indirect costs to the job.
- 4] ~~Match~~ Match Indirect costs to their respective cost allocation base.
- 5] Calculate an Budgeted overhead allocation Rate
- 6] Allocate overhead costs to the job
- 7] compute Total Job costs by adding all direct and Indirect costs together.

***EX:-** A manufacturing company is planning to sell a batch of 25 special machines (Job 650) to a retailer for \$114,800, DM used on costs is \$50,000, DL is \$19,000. The cost allocation base is machine hours. 2,480 machine hours were made by all jobs, (Job 650) used 500 MH. (Job 650) direct manufacturing overhead costs is \$65,100 for all jobs.

1] (Job 650) is the cost object.

2] Direct costs are:- Direct material \$50,000
Direct Labor \$19,000

3] The cost allocation base is machine hours.

Job 650 used 500 MH

2480 MH were used by all jobs

4] MOH costs were \$65,100

5] actual indirect cost rate is:-

$$65,100 / 2480 = \$26.25 \text{ per MH}$$

$$6] \$26.25 \times 500 = \$13,125$$

7] + DM 50,000

+ DL 19,000

+ MOH 13,125

TC \$82,125

~~For the~~
→ TMOH

* Budgeted indirect cost (TMOH) rate = $\frac{\text{Budgeted annual indirect costs}}{\text{Budgeted total quantity of the cost allocation base}}$
 ← الكلفة المباشرة المخطط لها ÷ الكمية المخطط لها = المعدل

* Actual indirect cost rate = $\frac{\text{Actual annual indirect costs}}{\text{Actual annual quantity of the cost allocation base}}$

* Actual costs Vs. Normal costs

* Actual costs :- هي التكاليف التي وقعت فعلياً وبالتالي يستخدم الأرقام التي نتجت فعلياً مع كل شيء لها علاقة السنة أو نهاية فترة التصنيع من أعمار التكلفة الفعلية.

* Normal costs :- هي التكاليف المتوقعة حدوثها أو توقعها في بداية السنة وما يثبت لها في السنة وليس أقل من التكاليف الفعلية. كما أنه يجب أن يعرف Normal costs أن يكون من وضع selling price.

* (MHs: machine Hours) - كم نفقات الماكينات السابقة!
 Assume that the manufacturing company budgets 60,000 for TMOH costs and 2,400 MH.

□ what is the budgeted indirect cost rate?

$$\text{budgeted indirect cost rate} = \frac{60,000}{2,400} = \$25 \text{ per hour}$$

2] How much indirect cost was allocated to (Job 650) :-

$$500 \text{ MH} \times \$ 25 = \$ 12,500$$

3] what is the cost of (Job 650) under normal costing?

$$\begin{aligned} \text{TC} &= \$ 50,000 + 19,000 + 12,500 \\ &= \$ 81,500. \end{aligned}$$

* Q:- Comfort manufacturing company, using machine hours as the single indirect cost rate to allocate manufacturing overhead costs. the name of Job is Winton Highschool.

	Company	W.H school
DM DM	40,000	2000
DL	19,000	4000
MOH	45,000	
Machine hours	100,000	900

1] For the comfort manufacturing, what is the annual manufacturing overhead cost allocation rate?

2] What amount of MOH costs will be allocated to this Job?

3] What are the total manufacturing costs of this Job?

$$\text{Mott cost rate} = \frac{\text{Mott}}{\text{allocation base}} = \frac{45000}{100,000} = 0.45 \text{ per MH}$$

$$\text{Mott cost will allocated to this Job} = 0.45 \times 900 \text{ MH} = \$405 \text{ per MH}$$

$$\begin{aligned} \text{TMC for this Job} &= \text{DM} + \text{DL} + \text{Mott} \\ &= 2000 + 400 + 405 \\ &= \$2805 \end{aligned}$$

* Mott costs = Budgeted Mott allocation $\times$ Actual Base Rate $\times$ activity for Job
or Indirect costs

* **Example:-** Job costing System

Indirect cost allocation rate computed as percentage of direct labor cost :-

DL hours	17,000 hours
DL costs	2,550,000
office rent	300,000
support staff salaries	900,000
Utilities	330,000

the company estimates that this job will require about 220 hours (DL hours)

Find:-

1] hourly direct labor cost rate.

$$\begin{aligned} \text{DL cost rate} &= \frac{\text{DL cost}}{\text{allocation base}} \quad \therefore \text{doll} \\ &= 2,550,000 / 17,000 \\ &= \$ 150 \text{ per DL hour.} \end{aligned}$$

2] Indirect cost allocation rate :-

$$\begin{aligned} \text{Indirect costs} &= 300,000 + 900,000 + 330,000 \quad \therefore \text{doll} \\ &= 1,530,000 \end{aligned}$$

لأنه سيكون DL costs



$$\text{Indirect cost allocation rate} = \frac{\text{Indirect cost}}{\text{allocation base DL costs}}$$

$$= 1,530,000 / 2,550,000$$

$$= 0.60 = 60\%$$

3 Compute the predicted cost of the company Job

$$\text{Cost} = \text{DM} + \text{DL (for Job)} + \text{MOH (for Job)}$$

$$= 0 + \text{rate} \times 220 + 60\% \times \text{DL (for Job)}$$

$$= 0 + 150 \times 220 + 0.6 \times \text{DL (for Job)}$$

$$= 33,000 + 0.6 \times 33,000$$

$$= \$52,800$$

4 إذا زادت الأرباح 50% من تكلفة ال Job في
يجب أن يكون ال Price ال Job -

$$\text{price} = 52,800 + 50\% \times 52,800$$

$$= 52,800 + 26,400$$

$$= \$79,200$$

* Journal Entries :-

EX 1:- purchase Direct material on account, 100,000

DM 100,000

A/p 100,000

EX 2:- Material costing \$ 130,000 were requisitioned for production. of this total, 30,000 were indirect material.

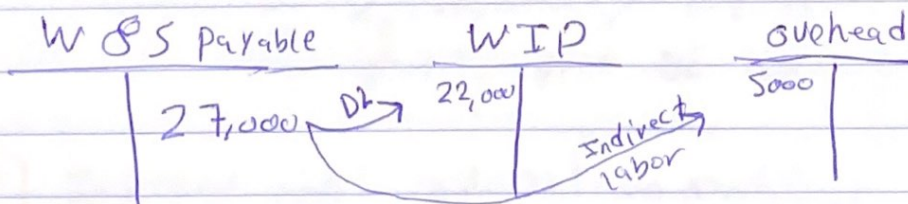
Direct (100,000) indirect 30,000

Work in process 100,000

Overhead 30,000

Material 130,000

EX 3:- Labor time records show that direct labor of \$ 22,000 and indirect labor of \$ 5,000 were incurred but not yet Paid.



WIP 22,000

Overhead 5,000

Wages and salaries 27,000

Ex: - مصنع يقوم بصناعة أثاث خشبي ووتر الأرباح عن التكاليف

التكاليف

Woods الأخشاب 260,000 — ①

Nails مسامير , glues لاصق , staining طلاء 21,000 — ②

Depreciation on saws آلات قطع الخشب 4,500 — ③

Indirect manufacturing labor عمال تصنيع غير مباشرين 41,000 — ④

Depreciation on delivery truck 2,100 — ⑤

Assembly-line workers wages 59,000 — ⑥

* What the balance of MOH account prior to applying overhead to production.

1 ⇒ DM , 3 ⇒ other OH - items التكاليف

2 ⇒ In M , 4 ⇒ In L

5 ⇒ period cost , 6 ⇒ DL

	Actual	Applied
In M	21,000	
In L	41,000	
other OH	4,500	
	<u>\$ 66,500</u>	

* ① :- SKY company has two departments :- X Y

Direct M-L-H	\$ 20,000	\$ 40,000
Machine-Hours	40,000	20,000
MOH	200,000	400,000

↓ A single indirect cost rate based on direct manufacturing Labor hours for the entire plant is

$$\begin{aligned} \text{Sol:- MOH for entire plant} &= 200,000 \\ &+ 400,000 \\ &= 600,000 \end{aligned}$$

4 سوالات

* Labor hours for the entire plant :-

$$20,000 + 40,000 = 60,000$$

Indirect cost rate = $\frac{\text{TMoH}}{\text{cost allocation base}}$

$$= \frac{600,000}{60,000} = \$10 \text{ per LH}$$

2] the budgeted indirect cost driver rate for X based on the number of machine hours is in excess of Y by :-

X	Y
MoH = 200,000	MoH = 400,000
M-H = 40,000	M-H = 20,000

Budgeted indirect cost rate = $\frac{\text{MoH}}{\text{allocation base}}$ BI = $\frac{\text{MoH}}{\text{allocation base}}$

$$= \frac{200,000}{40,000}$$

$$= \$5 \text{ per M-H}$$

$$= \frac{400,000}{20,000}$$

$$= \$20 \text{ per M-H}$$

Y excess of X by :-

$$\$20 - \$5 = \$15 \text{ per M-H}$$

X will be paid in N.