

3

Labour costs

this chapter covers...

In Chapter 1 we saw how costs can be classified by element as materials, labour and expenses. In this chapter we focus on labour costs and explain:

- *the factors that affect labour costs*
- *the methods by which the direct labour employees of a business can be paid*
- *how payroll information is gathered*
- *overtime, idle time and equivalent units*
- *the use of a time sheet to calculate gross wages*
- *the bookkeeping entries for labour costs*

ACCOUNTING FOR LABOUR COSTS

Labour cost is one of the elements of costs – all businesses incur labour costs which are the costs of wages and salaries of all their employees.

factors that affect labour costs

There are many factors that need to be considered by a business when deciding how much to pay employees. The starting point will always be the amount that is paid by other businesses in the area for similar grades of employees but, at the same time, the wider economic implications of supply and demand will affect wage rates.

The factors to consider include:

- wage rates paid by other local businesses
- comparisons with national average wage rates
- the national living wage rate imposed by government
- any government incentives to take on additional employees, such as young people or the long-term unemployed
- local employment conditions – high unemployment in the area will drive down wage rates; conversely low unemployment, and especially a shortage of skilled labour, will increase wage rates
- housing and transport costs in the locality
- the impact of interest rate changes, and exchange rates (eg against the euro) on business confidence
- for a new business, it might be prudent to choose to locate in an area of high unemployment – in addition to lower wage rates, there may be government incentives in the form of reduced rents and rates, training and other grants

Before taking on labour, a business must decide how to calculate gross pay for its employees. Labour payment methods are looked at in detail on the next page. Wages are usually calculated according to time worked or work done, or a combination of both.

LABOUR PAYMENT METHODS

Direct labour cost is the wages paid to those who work on a production line, are involved in assembly, or are involved in the output of a service business.

The three main payment methods for direct labour are:

time rate Time rate, or basic pay, is where the employee is paid on the basis of time spent at work. Overtime is often paid for hours worked beyond a standard number of hours, or for work carried out on days which are not part of the working week, eg Saturdays or Sundays. Overtime is often paid at rates such as ‘time-and-a-quarter’, ‘time-and-a-half’, or ‘double-time’. ‘Time-and-a-half’, for example, means that 1.5 times the basic hourly rate is paid.

Time rate is often referred to as a ‘day rate’.

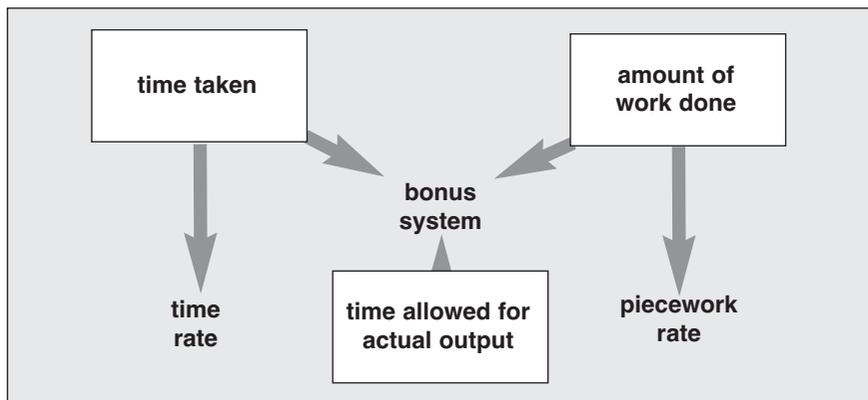
piecework rate The employee is paid an agreed sum for each task carried out or for each unit of output completed. Units of output can be based on an agreed output per hour, which is referred to as ‘standard hour produced’.

In some cases, employees may have a guaranteed minimum wage.

bonus system The employee is paid a time rate and then receives a bonus if output is better than expected when comparing the time allowed with the time taken. The bonus is calculated as an agreed percentage of the time saved multiplied by the time rate.

Bonus systems base employees’ earnings on a combination of time taken and work done.

Most other employees, eg factory supervisors, sales staff, office staff, are usually paid on a weekly or monthly basis. Such wages and salaries – classed as indirect labour costs – may be increased by bonus payments; for example, a production bonus for factory supervisors, commissions for sales staff, a profit-sharing scheme for all employees.



There are many variations on the three methods outlined above and, indeed, changing patterns of employment create different payment methods from those that would have been the norm just a few years ago. For example, the contracting out of many business support services – such as cleaning, security, computers – means that the costing of such services by the provider may incorporate time rates and bonus systems whereas previously the employees would have been paid on a weekly or monthly basis.

In order to calculate gross wages, information about hours worked and/or work done must be recorded. The documents used include:

- **time sheets**, where employees record the hours they have worked
- **clock cards**, where employees ‘clock in’ at the start of work, and ‘clock out’ at the end – these are often computerised
- **piecework tickets**, completed by employees who work on a batch of output
- **job cards**, where each employee records the amount of time spent on each job
- **route cards** – which are used to follow a product through the production process – on which employees record the amount of time they spend working on the product
- **computer cards** – ‘swipe’ cards which link direct into the computerised payroll are increasingly being used by employers to record attendance

qualities of a good labour payment method

These include:

- reward should be related to effort and fair to all staff
- the method should be easy to manage and administer, and cheap and efficient to run
- it should be easy for employees to understand how pay is calculated
- payment should be made at regular intervals and soon after the event, eg employees on piecework should be paid in the week after the production has been achieved
- the principles of the scheme should remain constant, but there should be flexibility to deal with changes in production techniques

summary

The three main labour payment methods, together with some alternative systems, are summarised in the table on the next page.

As an accounts assistant, always remember that payroll information is confidential and any queries should be referred to the appropriate person – for example, the payroll manager, or the accounts supervisor.

Labour payment methods – a summary			
	Time rate	Piecework rate	Bonus system
Situation	This method is used where it is difficult to measure the quantity of output and where quality is more important than volume of output.	This method is used where the work is repetitive and quantity of output is more important than quality.	This method is used to motivate employees, where the work is not so repetitive as in piecework but is measurable.
Gross Pay Calculation	<i>Hours worked x rate per hour = basic pay.</i> This is easy to calculate and understand. Overtime often paid for extra hours worked	<i>Number of items produced x rate per item.</i> This is easy to calculate and understand.	<i>Basic pay + proportion of the time saved.</i> Time saved is the difference between time allowed and time taken to do a task. More complex to calculate and understand.
Motivation	Pay is not linked to output and therefore there is no incentive to work hard. Slower workers may get paid overtime at higher rates.	Pay is related directly to output. There is a direct incentive to work as the amount of output determines the amount paid.	There is some incentive to work in order to earn a bonus as well as basic pay.
Quality Of Output	There is no pressure on time and so quality should be maintained.	The fact that pay is related to output means it is important that quality standards of output are met.	The link between pay and output means that the quality of output needs to be checked.
Control	It is important that the volume and quality of output is maintained.	It is important that the volume and quality of output is maintained.	It is important that the volume and quality of output is maintained.
Administration	There is no need to set time allowances for output.	There is a need to set time allowances for work done and to keep these up to date.	There is a need to set time allowances for work done and to keep these up to date.
Payment to Employees	A regular amount is earned by the employee.	The amount earned by the employee varies with the output the employee produces.	There is some regular income but pay can be increased by additional effort.
Alternative Systems	High day rate – employees are paid a higher than average rate per hour but agree to produce a given amount of output at a given quality.	Attendance allowance – to ensure employees turn up. Guaranteed day rate – to give employees a minimum payment. Differential piecework – to pay efficient workers more for output beyond a given level of output, ie an extra amount per unit.	Group bonus schemes – used where employees work as a group. This can include all workers, eg cleaners. This may create problems as the most efficient workers may be held back by the less efficient workers.

**Case
Study**

WESTMID MANUFACTURING: LABOUR PAYMENT

situation

Westmid Manufacturing Company has three factories in the West Midlands making parts for the car industry. Each factory was bought from the previous owners and, as a result, each has a different method for paying its direct labour workforce. The details of the labour payment methods in each factory, together with data on two employees from each factory, are as follows:

WALSALL FACTORY

In this factory, which is involved in heavy engineering, employees are paid on the basis of a time rate. Employees are required to 'clock in' and 'clock out' each day.

John Brown is a machine operator and his clock card for last week shows that he worked 39 hours; his basic pay is £10 per hour.

Stefan Wozniak is a skilled lathe operator and his clock card shows that he worked 42 hours; his basic pay is £12 per hour, with overtime for hours worked beyond 37 hours at 'time-and-a-half'.

DUDLEY FACTORY

This factory operates a number of light engineering production lines making car components such as windscreen wiper blades, headlamp surrounds, interior mirrors etc. The production line employees are all paid on a piecework basis; however, each employee receives a guaranteed time rate which is paid if the piecework earnings are less than the time rate. This may happen if, for example, there are machine breakdowns and the production line has to be halted.

Tracey Johnson works on the line making headlamp surrounds. For each one that passes through her part of the process, she is paid 40p; her guaranteed time rate is 35 hours each week at £10 per hour. Last week's production records show that she processed 910 units.

Pete Bronyah is on the line which makes interior mirrors. For his part of the process he receives £1.00 for each one, with a guaranteed time rate of 35 hours at £10 per hour. Last week there was a machine failure and he was only able to process 250 units.

WOLVERHAMPTON FACTORY

In this factory a number of engineering production lines are operated. The direct labour force is paid on a time rate basis, but a bonus is paid if work can be completed faster than the time allowed. The bonus is for the savings achieved to be shared equally between employer and employee. Wages are, therefore, paid on the following basis: time rate + 50% of (time saved x time rate). If no bonus is due, then the time rate applies.

Martin Lee worked a 38 hour work last week; his time rate is £10 per hour. He is allowed a time of 30 minutes to carry out his work on each unit of production; last week he completed 71 units.

Sara King has a time rate of £11 per hour; last week she worked 40 hours. She is allowed a time of 15 minutes to carry out her work on each unit of production; last week she completed 184 units.

What were the gross earnings of each employee?

solution

WALSALL FACTORY

John Brown 39 hours x £10.00 per hour = £390.00

Stefan Wozniak 37 hours x £12.00 per hour = £444

5 hours x £18.00 per hour = £90 = £534.00

DUDLEY FACTORY

Tracey Johnson Piecework rate, 910 units x 40p per unit = £364.00

Guaranteed time rate, 35 hours x £10.00 per hour = £350.00

Therefore piecework rate of £364.00 is paid.

Pete Bronyah Piecework rate, 250 units x £1.00 per unit = £250.00

Guaranteed time rate, 35 hours x £10.00 per hour = £350.00

Therefore guaranteed time rate of £350.00 is paid.

WOLVERHAMPTON FACTORY

Martin Lee Time rate, 38 hours x £10.00 per hour = £380.00

Bonus, time allowed 71 units x 30 minutes each
= 35 hours 30 minutes

Therefore no time saved, so no bonus payable.

Time rate of £380 paid.

Sara King Time rate, 40 hours x £11.00 per hour = £440.00

Bonus, time allowed 184 x 15 minutes each = 46 hours

Therefore time saved is 6 hours

Bonus is 50% of (6 hours x £11.00) = £33.00

Therefore wages are £440.00 + £33.00 = £473.00

The Case Study illustrates some of the direct labour payment methods in use, however it should be appreciated that there are many variations on these to be found.

OVERTIME, IDLE TIME AND EQUIVALENT UNITS

In Chapter 1 we divided labour costs between:

- **direct costs**, labour costs of production-line employees
- **indirect costs**, labour costs of other employees, such as supervisors, office staff, etc

Whilst this distinction appears clear enough, there are times when a proportion of the labour costs of production-line employees is classed as an indirect cost (rather than a direct cost) and is included amongst the overheads of the business. This is done if part of the cost of wages of the direct workers cannot be linked to specific work.

overtime payments and overtime premium

When production-line employees work overtime they are usually paid at a rate above the time rate. For example, overtime might be paid at ‘time-and-a-half’; thus an employee with a time rate of £12 an hour will receive **overtime payments** of £18 an hour. The additional £6 per hour is called **overtime premium**. For normal cost accounting purposes, any overtime worked is charged at £12 an hour to direct labour, and £6 an hour to indirect labour.

Example:

A group of employees on a production line have a working week consisting of 35 hours each. Anything over that time is paid at time-and-a-half. One employee has worked 40 hours during the week at a normal rate of £10.

- direct wages cost is 40 hours at £10 = £400
- overtime premium is 5 hours at £5 (half of £10) = £25, which is charged to indirect labour
- total wages cost £425 (35 hours at £10, plus 5 hours at £15)

The overtime premium is spread across all output and is not charged solely to the output being worked on during the overtime period. As another issue, management will wish to know why there was the need to work overtime, and will seek to control such an increase in labour costs.

However, where a customer requests overtime to be worked to get a rush job completed, then the full overtime rate (£15 an hour in the above example) is charged as direct labour, and passed on as a cost to the customer.

Other additional payments made to employees – such as a bonus – will be treated in a similar way to overtime premium and will normally be treated as an indirect labour cost.

idle time

Idle time occurs when production is stopped through no fault of the production-line employees – for example, a machine breakdown, or a shortage of materials. Employees paid under a piecework or a bonus system will receive time rate for the period of the stoppage. Such wages costs are normally charged to overheads as indirect labour.

Similarly, time spent by direct workers on non-productive work – eg attendance on a training course – would also usually be treated as an overhead.

equivalent units

When production employees are paid on the basis of output, a calculation of equivalent units may need to be made. This happens when part of the production at the end of the accounting period is work-in-progress for the labour content.

Example:

10,000 units have been completed during the month and, at the month-end, 2,000 units are work-in-progress and are 50 per cent complete for the labour content. The equivalent units completed for the month will be:

$$10,000 \text{ units} + (2,000 \times 50\%) = \underline{11,000} \text{ equivalent units}$$

USING A TIME SHEET

In order to calculate gross wages, as noted earlier (page 66), a business or organisation must obtain information about hours worked and/or work done.

A time sheet is used for each employee to record:

- hours worked each day, split between production and indirect work
- amount of basic pay each day (using the hourly rate paid to the employee)
- amount of overtime premium each day (using the hourly rate)
- total pay each day
- total hours worked for the week
- total basic pay, overtime premium and pay for the week

A time sheet, which includes overtime premium is shown in the Case Study which follows:

Case Study

CALCULATING THE PAY

situation

You are an accounts assistant at Onslow Limited and have been asked to help with calculating labour costs.

The cost accountant has given you the following time sheet for one of Onslow Limited's employees, P Cusack, who is paid as follows:

- For a basic seven-hour shift every day from Monday to Friday – basic pay at £12.00 per hour
- For any overtime in excess of the basic seven hours on any day from Monday to Friday – the extra hours are paid at time-and-a-half (basic pay plus an overtime premium equal to half of basic pay)
- For any hours worked on a Saturday or Sunday – double-time (basic pay plus an overtime premium equal to basic pay)

You are to complete the time sheet columns headed basic pay, overtime premium and total pay (enter a zero figure, '0', in the columns where nothing is to be paid).

Note: overtime premium is just the premium paid for the extra hours worked.

The employee's weekly time sheet for week ending 14 June 20-2 is shown below.

Employee: P Cusack			Profit Centre: Metal cutting			
Employee number: 260			Basic pay per hour: £12.00			
	Hours spent on production	Hours worked on indirect work	Notes	Basic pay £	Overtime premium £	Total pay £
Monday	7	0				
Tuesday	5	2	2pm-4 pm first aid course			
Wednesday	7	0				
Thursday	6	1	8 am-9 am cleaning			
Friday	8	0				
Saturday	3	0				
Sunday	0	0				
Total	36	3				

solution

P Cusack's time sheet is completed as follows:

Employee: P Cusack			Profit Centre: Metal cutting			
Employee number: 260			Basic pay per hour: £12.00			
	Hours spent on production	Hours worked on indirect work	Notes	Basic pay £	Overtime premium £	Total pay £
Monday	7	0		84	0	84
Tuesday	5	2	2pm-4 pm first aid course	84	0	84
Wednesday	7	0		84	0	84
Thursday	6	1	8 am-9 am cleaning	84	0	84
Friday	8	0		96	6	102
Saturday	3	0		36	36	72
Sunday	0	0		0	0	0
Total	36	3		468	42	510

BOOKKEEPING FOR LABOUR COSTS

In this section we look at the cost bookkeeping entries to record labour costs – the transfer of labour costs to production and to overheads. These entries form part of the bookkeeping system for costing.

A **wages control account** – which may also include salaries – links to the payroll accounting system. It is used to charge labour costs to the various cost, profit, or investment centres of a business or organisation. In this way:

- direct labour costs are charged to production
- indirect labour (eg factory supervisor) costs are charged to production overheads
- administration labour (eg office staff) costs are charged to non-production overheads

Note:

- production overheads are also referred to as operating overheads
- non-production overheads are also referred to as non-operating overheads

With labour costs the general ledger entries are:

■ **transfer of direct labour costs to production**

- debit production
- credit wages control

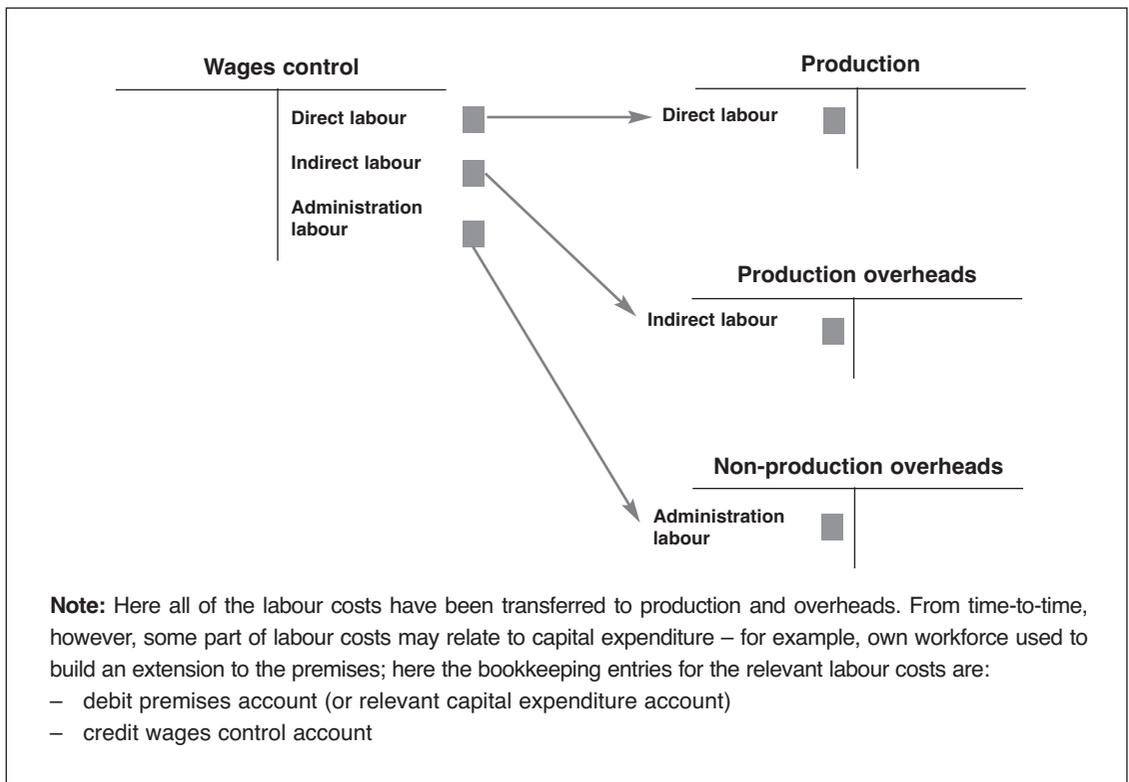
■ **transfer of indirect labour costs to production overheads**

- debit production overheads
- credit wages control

■ **transfer of administration labour costs to non-production overheads**

- debit non-production overheads, eg administration
- credit wages control

The cost bookkeeping entries for labour costs are shown diagrammatically below:



**Case
Study**

BLUE JEANS LIMITED: BOOKKEEPING FOR LABOUR COSTS

situation

Blue Jeans Limited manufactures and sells denim jeans and jackets. The payroll for the week ended 21 May 20-4 has been completed with the following amounts to pay:

• net wages to be paid to employees	£5,000
• Income Tax and National Insurance Contributions (NIC) to HMRC	£1,000
• pension contributions to be paid to the pension fund	£500
Total	<u>£6,500</u>

The payroll for the week has been analysed as:

• direct labour costs	£3,500
• indirect labour costs	£2,000
• administration labour costs	£1,000
Total	<u>£6,500</u>

All of the direct labour costs are for the manufacture of blue jeans. The following cost accounting codes are in use to record labour costs:

Code number	Description
2200	production – blue jeans
2400	production overheads
2600	non-production overheads – administration
4200	wages control

20-4	Code number	Debit £	Credit £
21 May	2200		
21 May	4200		
21 May	2400		
21 May	4200		
21 May	2600		
21 May	4200		

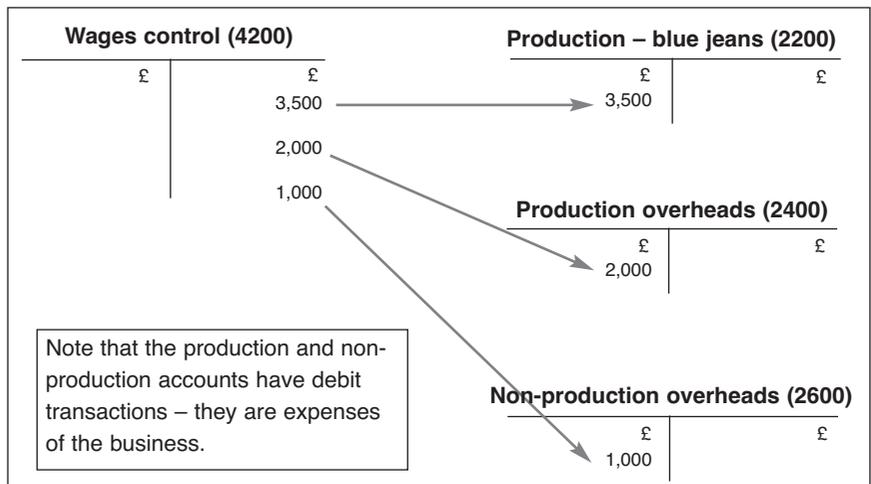
As an accounts assistant at Blue Jeans Limited, you are asked to prepare the wages control account and to fill in the table below to record the journal entries which show how the total cost of the payroll is split between the various cost centres of the business.

solution

Wages control account is prepared as follows:

Dr	Wages Control Account (4200)		Cr
	£		£
Cash/bank (net wages)	5,000	Production (direct labour)	3,500
HM Revenue & Customs (income tax and NIC)	1,000	Production overheads (indirect labour)	2,000
Pension contributions	500	Non-production overheads (administration)	1,000
	<u>6,500</u>		<u>6,500</u>

The cost bookkeeping entries are:



The cost bookkeeping transactions are recorded as journal entries in the following way:

20-4	Code number	Debit £	Credit £
21 May	2200	£3,500	
21 May	4200		£3,500
21 May	2400	£2,000	
21 May	4200		£2,000
21 May	2600	£1,000	
21 May	4200		£1,000

In this way, the total cost of the payroll is split between the various cost centres of the business.

Chapter Summary

- Labour costs – the costs of wages and salaries – are incurred in every kind of business.
- Levels of wage rates paid to employees are influenced by a number of factors including the rates paid by similar local businesses, national living wage rate and national averages.
- The main labour payment methods are based either on time or amounts of work done or on a combination of both.
- Certain wages costs of the direct workers may be classed as indirect labour costs: these include overtime premium and payment for idle or non-productive time.
- Cost bookkeeping entries are made to charge labour costs to the various cost centres of a business or organisation.

Key Terms

time rate	labour payment method based on the time worked by an employee, giving the formula: $\text{hours worked} \times \text{rate per hour}$
piecework rate	labour payment method based on the work done by an employee, giving the formula: $\text{number of items produced} \times \text{rate per unit}$
bonus system	labour payment method in which an employee is paid a time rate and then receives a bonus if output is better than expected when comparing the time allowed with the time taken – the bonus is calculated as an agreed percentage of the time saved multiplied by the time rate
time sheet	method by which employees record the hours they have worked
clock card	where employees 'clock in' at the start of work, and 'clock out' at the end
piecework ticket	documentation completed by employees who work on a batch of output
job card	documentation completed by employees which records the amount of time spent on each job



route card	documentation which follows a product through the production process – employees record the amount of time they spend working on the product
overtime payment	an overtime payment rate paid at more than time rate, for example, 'time-and-a-half'
overtime premium	the additional pay above normal rates which is paid to employees working overtime, for example, the premium part of 'time-and-a-half' is the extra 'half' of the hourly rate
idle time	time during which work is stopped, due to reasons such as machine breakdown or shortage of materials; employees usually receive time rate for idle time, and the cost is normally classified as an indirect cost
equivalent units	completed units plus work-in-progress at the percentage complete for labour
wages control account	used to charge labour costs to the various cost, profit or investment centres: <ul style="list-style-type: none">– direct labour to production– indirect labour to production overheads– administration labour to non-production overheads

Activities

- 3.1** A manufacturing business pays its production workers on a time rate basis. A bonus is paid where production is completed faster than the time allowed for a standard hour's production; the bonus is paid at half of the time rate for production time saved. How much will each of the following employees earn for the week?

Employee	Time rate	Hours worked	Time allowed (output per hour)	Actual production
N Ball	£11.00 per hour	35	30 units	1,010 units
T Smith	£9.00 per hour	37	40 units	1,560 units
L Lewis	£10.00 per hour	38	20 units	820 units
M Wilson	£12.00 per hour	36	25 units	950 units

- 3.2** A company pays its production-line employees on a piecework basis, but with a guaranteed time rate. How much will each of the following employees earn during the week?

Employee	Time rate	Hours worked	Production	Piecework rate
L Fry	£10.00 per hour	40	1,200 units	30p per unit
R Williams	£12.00 per hour	37	500 units	90p per unit
P Grant	£9.50 per hour	36	725 units	50p per unit

- 3.3** Print 'n Go is a print shop that specialises in printing headed notepaper for businesses. It employs two printers, Steve Kurtin and Pete Singh. Both are paid a basic rate per hour for a 35-hour week with two overtime rates: time-and-a-third for weekdays (rate 1), and time-and-a-half for week-ends (rate 2). In addition, a production bonus is paid of 50p per 1,000 copies printed.

Details for last week are as follows:

	Steve Kurtin	Pete Singh
Basic rate per hour	£10.50	£12.00
Total hours worked	39	42
Overtime hours: rate 1	4	3
rate 2	–	4
Number of copies printed	45,000	57,000

You are to

- calculate the gross wages earned by each employee for last week
- calculate the piecework rate per 1,000 copies printed that would be equal to the gross wages earned by Steve Kurtin for the week, assuming the same output level of 45,000 copies.

- 3.4** Wyvern Fabrication Company has two departments – moulding and finishing. Data relating to labour for a four-week period is given on the labour cost sheet below.

The company uses a bonus scheme whereby employees receive 50 per cent of the time saved in each department, paid at the actual labour rate per hour. This is not included in the actual wages cost, which shows actual hours multiplied by the actual wage rate.

LABOUR COST SHEET		
for the four weeks ended 26 February 20-7		
	MOULDING	FINISHING
Actual wages cost (£)	£41,160	£45,450
Time allowed	4,000 hours	5,000 hours
Time taken	4,100 hours	4,500 hours
Time saved		
Bonus (£)		
Total labour cost (£)		

You are to calculate the total labour cost for each department.

3.5 The direct workers of Haven Limited are paid a basic wage of £10.20 per hour. For time worked above 40 hours per week, they receive overtime pay at time-and-a-half. For two particular weeks, we have the following information for a team of 10 direct workers:

Week 1: Total hours worked = 450 hours, including 50 hours of overtime.

Week 2: Total hours worked = 400 hours, including 20 hours of non-production work, clearing up and re-organising a section of the factory during a machine breakdown.

For each of the two given weeks you are to:

- calculate the gross earnings in total for the team of 10 employees.
- state how much of the gross earnings would normally be treated as an indirect labour cost.

3.6 You are an accounts assistant at Durning Limited and have been asked to help with calculating labour costs.

The cost accountant has given you the following time sheet for one of Durning Limited's employees, T Mantle, who is paid as follows:

- For a basic six-hour shift every day from Monday to Friday – basic pay
- For any overtime in excess of the basic six hours on any day from Monday to Friday – the extra hours are paid at time-and-a-half (basic pay plus an overtime premium equal to half of basic pay)
- For three contracted hours each Saturday morning – basic pay
- For any hours worked in excess of three hours on a Saturday or any hours worked on a Sunday – double-time (basic pay plus an overtime premium equal to basic pay)

You are to complete the time sheet columns headed basic pay, overtime premium and total pay (enter a zero figure, '0', in the columns where nothing is to be paid).

Note: overtime premium is just the premium paid for the extra hours worked

Employee's weekly time sheet for week ending 15 April 20-6

Employee: T Mantle			Profit Centre: Finishing			
Employee number: 170			Basic pay per hour: £14.00			
	Hours spent on production	Hours worked on indirect work	Notes	Basic pay £	Overtime premium £	Total pay £
Monday	6	0				
Tuesday	5	2	8am-10am maintenance			
Wednesday	7	0				
Thursday	6	3	9am-12 noon training			
Friday	8	0				
Saturday	5	0				
Sunday	0	0				
Total	37	5				

- 3.7 Breeden Bakery Limited makes 'homestyle' cakes which are sold to supermarket chains. The payroll for the week ended 26 March 20-4 has been completed with the following amounts to pay:

	£
• net wages to be paid to employees	£7,500
• Income Tax and National Insurance Contributions (NIC) to HMRC	£1,450
• pension contributions to be paid to the pension fund	£750
Total	<u>£9,700</u>
• direct labour costs	6,500
• indirect labour costs	2,700
• administration labour costs	500
Total	<u>9,700</u>

As an accounts assistant at Breeden Bakery you have been given the following tasks:

Task 1

Prepare wages control account for the week ended 26 March 20-4:

Dr	Wages Control Account	Cr
	£	£

Task 2

All of the direct labour costs are for the manufacture of fruit cakes. The following cost accounting codes are in use to record labour costs:

Code number	Description
3300	production – fruit cakes
3500	production overheads
3700	non-production overheads – administration
5200	wages control

Complete the table on the next page to record the journal entries which show how the total cost of the payroll is split between the various cost centres of the business.

20-4	Code number	Debit £	Credit £
26 March			

- 3.8** Icod Limited manufactures golf clubs. The following data relates to the production of its 'Mulligan' brand of clubs for October 20-4:

Total direct labour hours worked	16,000 hours
Normal time hours	14,400 hours
Overtime hours	1,600 hours
Normal time rate per hour	£10 per hour
Overtime premium per hour	£5 per hour

In the company's cost bookkeeping system all direct labour overtime payments are included in direct costs.

The following cost accounting codes are in use to record labour costs:

Code number	Description
1500	production – 'Mulligan' clubs
5000	wages control

You are to:

- calculate the total cost of direct labour for October
- show the cost bookkeeping entries, together with account codes, in order to transfer the direct labour costs to production

- 3.9** Wyvern Manufacturing Limited pays some of its production employees on a piecework system, based on an agreed output per hour – standard hours produced – that they are allowed to manufacture components.

The following information relates to one of these employees last week:

Day	Actual hours worked	Standard hours produced
Monday	8	7
Tuesday	7	7
Wednesday	9	10
Thursday	10	11
Friday	10	8

The employee is paid £15 per standard hour produced.

You are to complete the sentences below by entering the correct figures:

- (a) The employee's total pay for the week was £

Now assume that the company offers a guaranteed minimum daily payment of £120.

- (b) The employee's total pay for the week would now be £

Now assume that, instead of a guaranteed minimum daily payment, the company offers a guaranteed minimum weekly payment of £650.

- (c) The employee's total pay for the week would now be £

Now assume that, instead of a guaranteed minimum weekly payment, the company pays for actual hours worked at the standard hour rate, together with a flat-rate bonus of £75 for the week.

- (d) The employee's total pay for the week would now be £

- 3.10** Excalibur Limited, a manufacturing business, has a Production Department where the employees work in teams. Their basic rate is £10.00 per hour and there are two rates of overtime as follows:

Overtime rate 1: basic pay + 25%

Overtime rate 2: basic pay + 50%

Excalibur sets a target for production of every component each month. A team bonus equal to 5% of basic hourly rate is payable for every equivalent unit of production in the month in excess of the target.

The target for March was 10,000 units.

In March the production was 12,000 equivalent units.

All overtime and bonuses are included as part of the direct labour cost.

- (a) Complete the gaps in the table below to calculate the total labour cost.

Labour cost	Hours	£
Basic pay	416	
Overtime rate 1	30	
Overtime rate 2	15	
Total cost before team bonus	461	
Bonus payment		
Total cost including team bonus		

- (b) Calculate the total labour cost per equivalent unit of the finished production for March. Give your answer in £s to **two** decimal places.

The direct labour cost per equivalent unit for March is £

- (c) Excalibur has forecast the following information for the Production Department for April:

The basic hourly rate will be increased to £10.60 per hour. The target for production is still 10,000 units and the bonus, equal to 5% of basic hourly rate, is still payable for equivalent units of production in excess of this.

9,800 units will be completed in April and the closing work in progress is expected to be 1,500 units which will be 80% complete with regard to labour. No opening work in progress was expected at the start of April.

Complete the following sentence by filling in the blanks.

The equivalent units of production with regard to labour for April will be and the bonus payable will be .