

Please see my previous lecture (L-1) wherein I discussed Halsey premium plan and bonus allowed for time saved was 50%.

There is one Halsey-Weir plan where this bonus rate is 33.33%. This is same as like as Halsey plan.

Rowan plan: It is similar to the Halsey plan where standard time is fixed and bonus is paid in respect of time saved.

$$\text{Bonus} = \frac{\text{Time taken}}{\text{Time allowed}} \times \text{Time saved} \times \text{Rate}$$

Example: Calculate bonus under Rowan plan.

Time allowed 6 hrs

Time taken 4 hrs

Hourly rate R.30

$$\text{Bonus} = \frac{\text{Time taken}}{\text{Time allowed}} \times \text{Time saved} \times \text{Rate}$$

$$= \frac{4}{6} \times 2 \times R.30$$

$$= R.40$$

Total Earnings: Time taken \times Rate + Bonus,

$$= 4 \times R.30 + R.40$$

$$= R.160$$

Example:

(1) Normal wages per hour Rs. 40

Units produced - 6000

Time allowed for 100 units 0.8 hrs.

Actual time taken 42 hrs.

Bonus calculated as in the proportion of
time taken to time allowed of the time saved.
Calculate total earnings.

Ans. Actual time taken 42 hrs.

Time allowed \rightarrow 0.80 hrs for 100 units

i.e. for 100 units \rightarrow 0.80 hrs.

$$1 \text{ " } \rightarrow \frac{0.80}{100} \text{ hrs.}$$

$$6000 \text{ " } \rightarrow \frac{0.80}{100 \text{ hrs.}} \times 6000 \text{ hrs.}$$

$$= 48 \text{ hrs.}$$

$$\text{Time saved} = 48 \text{ hrs} - 42 \text{ hrs} = 6 \text{ hrs.}$$

$$\text{Time wages} = 42 \text{ hrs} \times R. 40 = \underline{\underline{1680}}$$

$$\text{Bonus} \rightarrow 6 \text{ hrs.} \times \frac{42 \text{ hrs.}}{48 \text{ hrs.}} * R. 40$$

$$= R. 210$$

$$\begin{aligned}\text{Total earnings} &= R. 1680 + R. 210 \\ &= \underline{\underline{R. 1890 \text{ Ans.}}}\end{aligned}$$

Example: Say, an worker has taken 80 hours to complete a job and time was allowed for that 100 hrs. Daily rate is Rs. 2.50 per hour. Material Cost Rs. 120, Factory overhead is 125% of wages. Calculate total works cost if he is paid time rate.

Ans: Here Wages cost \rightarrow $Rs. 2.50 \times 80 \text{ hrs}$
 $= Rs. 200$

So, Material Cost = Rs. 120

Wages \rightarrow = Rs. 200

Factory overhead = Rs. 250

125% on wages. $\xrightarrow{125\% \text{ on wages}}$

works cost $\xrightarrow{5\%}$

Pl. note: In last sheet we have seen
 What is works cost.

Material Cost --,

+ Labour Cost --,

factory overhead $\xrightarrow{\text{xx}}$

+ Factory overhead $\xrightarrow{\text{xx}}$

works cost $\xrightarrow{\text{xx}}$

So, Please note wages cost of any method showned be added with material cost.

Now, suppose this problem is different one. Say, here Rowan plan is to follow. What should be total remuneration / wages here and what should be works cost.

Time taken 80 hrs.

Time allowed 100 hrs.

Time saved = 100 hrs - 80 hrs = 20 hrs.

Per hour rate R. 2.50.

For

$$\text{Normal wage} = 80 \text{ hrs} \times \text{R. } 2.50 = \text{R. } 200$$

$$\text{Bonus} \rightarrow \frac{\text{Time taken}}{\text{Time allowed}} \times \text{Time saved} \times \text{Rate per hour}$$

$$\rightarrow \frac{80 \text{ hrs.}}{100 \text{ hrs.}} \times 20 \text{ hrs} \times \text{R. } 2.50$$

$$\rightarrow \text{R. } 40$$

$$\text{Total wage} = \text{R. } 200 + \text{R. } 40 = \text{R. } 240.$$

Now, Mat case - R. 120

Wage \rightarrow R. 240

Rent of h \rightarrow R. 300

Value of $\frac{120 \text{ ft.} \times \text{R. } 240}{\text{Works Cost}} \underline{660}$

Mahan.

Ash