



Policies and Procedures

Section: FINANCE	Subject No: ACC-011	Page No: 1 of 6
Subject: STANDARD COSTING	Date Issued: 26/03/2021	Supersedes: N/A

POLICY/PURPOSE:

It is J&E Hall (the “Company’s”) policy to establish standards and procedures to ensure that inventory valuation is in accordance with US Generally Accepted Accounting Principles (“US GAAP”). The purpose of this policy is to provide guidelines for valuing using *standard costs*¹ under USGAAP. Any non-compliance to this policy requires written approval by notification to the J&E H Finance Director.

SCOPE:

This policy covers all of the Company’s subsidiaries and business units and applies to all Internal Labour costed against a service job or project:

POLICY AND PROCEDURES:

It is the Company’s policy to value Labour which is a direct input to any service or project work at standard costs. This will include but is not limited to, Service engineers, design engineers, project managers and draughtsman. Materials or services purchased directly from a vendor in order to fulfill a requirement on a specific customer order will use actual cost from the vendor.

Standard costs are to be established annually as close as possible to the beginning of the new fiscal year. The inputs used in developing the standard costs are to coincide with the information used in developing the business planning budget (BPB) for the same fiscal year. Alternatively if no major changes have occurred to the price of direct labour and overheads a inflationary percentage increase may be applied to the previous years standard cost. After the new fiscal year standard costs are established, they are **not** to be changed until the next annual cost setting cycle.

¹ Words in *Italic* are defined in Section 6.0 of this policy.

The standard cost is set on the basis of a fully absorbed cost of relevant overheads.

It is also important to note that a key purpose for using standard costs is to provide a simpler and more cost effective process for costing work. Care should be taken to avoid too many *cost centers*, overhead costing rates and *low cost items* that can be more effectively expensed.

The general procedures to be followed annually by cost type are as follows:

1. LABOR STANDARDS

1.1. Labor standards are to be established for employees classified as *direct* "productive" *employees* who work to produce saleable products to customers. Normally these employees are paid based on an hourly rate of pay and are required to account for their start and stop time for each day worked. Labor standards are to be developed for each significant cost center that is unique for purposes of controlling costs or measuring performance. The process of developing the new labor standard annually begins by using recent actual data from the current year for all of the direct employees included in the cost center and developing an average weighted pay rate for the group (see Example in 2.1.1. below). This weighted pay rate would include any allowance and overtime payments. It would not include any special bonuses or unusual compensation.

1.1.1. Example:

Cost Center 999:			Pay rate	Shift premium	Group leader	Total
John D	Supervisor	£10.00	0.45	0.60	£11.05	
Jim Z	Working Supervisor	£11.00	0.00	0.60	£11.60	
Harry O	Engineer	£ 9.50	0.00	0.00	£ 9.50	
Wanda P	Technician	£ 9.75	0.45	0.00	£10.20	
Norma B	Costing Administrator	<u>£ 8.50</u>	<u>0.00</u>	<u>0.00</u>	<u>£ 8.50</u>	
Total		<u>£48.75</u>	<u>0.90</u>	<u>1.20</u>	<u>£50.85</u>	
Weighted Rate (5 FT employees)		£ 9.75	0.18	0.24	£10.17	
		=====	=====	=====	=====	

1.2. The above rate information would be supported by recent actual payroll data prior to the start of the new fiscal year. Any rate changes effective prior to the start of the new fiscal year would be included in the calculation. Rate changes that are effective after the start of the new fiscal year should not be included in the labor standard but are to be considered in the plan as productivity *labor variance*.

1.3. Next, the *efficiency* of each cost center needs to be reviewed. The efficiency factor to be used to calculate the standard labor rate is to be based on actual performance of the cost center if that information exists. In cases where new cost centers are established, a conservative estimate is appropriate. This estimate should take into account reference information of similar cost centers.

Consider the following example for cost center 999:

Most recent week's efficiency was 79%
YTD efficiency is 78%
Planned efficiency for the year is 90%
Prior year average efficiency was 76%
Two years ago, average efficiency was 75%
Next year efficiency is expected to be 92%

Consider the actual performance of cost center 999 by looking at historical performance:

- (a) The average of the last three years. In this example, take the average of the last three years (78%+76%+75%=229 divide by the three years = 76.3%) (if the volume is significantly different between the three years then use a weighted average method)
- (b) Look at the trend of the last three years. In this case, the YTD number of 78% looks valid since the most recent week's efficiency of 79% supports the improvement trend.
- (c) The most recent week of 79% is higher than the YTD average and the previous year actual. A case for using the most recent weekly data would have some merit if this performance level had been achieved constantly over several of the most recent weeks.

1.4. After reviewing the actual historical data, select the most probable and reasonably conservative efficiency factor for developing the next year's standard labor rate. Calculate the standard labor rate for each cost center by dividing the weighted average labor rate by the efficiency factor.

In the example above, the current year's year-to-date efficiency of 78% is selected:

New standard labor rate = \$13.04 per standard hour (\$10.17 / 78% efficiency)

1.5. The development of labor standards should be consistently applied from previous years.

2. OVERHEAD STANDARDS

- 2.1. Overhead standards or overhead rates are usually based directly on the relationship of the labor standard being applied. Other methods may be used (e.g., fixed overhead amount per unit produced), but whatever method that is selected should be consistently applied from previous years
- 2.2. Overhead expense includes direct expenses (sometimes called *variable* expenses) of departments engaged directly in the provision of the service or fulfillment of the contract. Overhead expense also includes the cost of support functions such as cost accounting, safety, information technology supporting the operations, etc. Support costs would exclude general accounting, financial planning, human resources support for management, and corporate or top-level management costs with responsibility beyond the operation.
- 2.3. The total budgeted overhead for each cost center determines the total amount of overhead for each cost center which will be used in the calculation of the overhead rate (see examples below in 3.5).
- 2.4. The overhead rate or rates may be developed at various levels of detail. The following simple example is for a separate overhead rate for each cost center. However, a more likely scenario would include several cost centers being combined and an overhead rate(s) developed for a group of cost centers that produce a similar group of products.

Two simple examples of one overhead rate or overhead percentage for a cost center:

Overhead rate applied as a calculated dollar amount per direct labor hour:

The total overhead for each cost center would be divided by the *budgeted direct labor hours* for each cost center in order to determine the overhead rate, as shown in the following example:

Total budgeted spending for cost center 999	£100,000
Estimated human resources support costs for cost center 999	2,000
Estimated cost accounting support costs for cost center 999	20,000
Estimated IT support costs for cost center 999	<u>3,000</u>
Total Overhead for cost center 999	£155,000

Budgeted direct labor hours for cost center 999 = 10,000 hours

Overhead rate = £15.50 (£155,000 overhead / 10,000 hours)

This overhead rate should be applied to each corresponding labor hour incurred for cost center 999.

Overhead rate applied as a percent of direct labor costs:

The total overhead for each cost center is the numerator in the calculation, and the budgeted direct labor hours multiplied by the standard direct labor rate is the denominator in the calculation for each cost center to determine the overhead rate:

Total budgeted spending for cost center 999	\$100,000
Estimated human resources support costs for cost center 999	2,000
Estimated cost accounting support costs for cost center 999	20,000
Estimated IT support costs for cost center 999	<u>3,000</u>
Total Overhead for cost center 999	\$155,000

Budgeted direct labor hours for Department 999 = 10,000 hours
 Standard direct labor rate for Department 999 = \$20

Overhead rate = 77.5% ($\$155,000 \text{ overhead} / [10,000 \text{ hours} * \$20]$)

This standard overhead rate should be applied to the standard direct labor costs incurred for cost center 999.

4.0 APPROVAL OF ANNUAL STANDARDS

During the annual cost setting cycle, the BU Accountant is responsible for facilitating the preparation and initial review of the standard costs.

6.0 DEFINITIONS:

6.1 Budgeted direct labor hours: the number of hours budgeted for direct “productive” employees for the year; number of hours to produce 1 unit multiplied by the number of units to be produced during the year (e.g., 1 unit takes .75 hours to produce and 50,000 units will be produced during the year; $.75 * 50,000 = 37,500$)

6.2 Cost center: groups developed by local management which are driven by the flow of work in the plant as well as how management intends to measure the performance of the groups

6.3 Direct employees: employees who are assigned to work directly on the product being manufactured

6.4 Efficiency: the measure of standard hour output versus the elapsed hours that a direct “productive” employee actually worked (i.e., standard hours for the production of a product equals 6 hours while employee X took 8 hours to produce the product; efficiency = $6/8$ or 75%)

6.5 Finished goods: goods completed and ready for sale or shipment to a customer

- 6.6 Fixed cost:** a cost constant in total but varies on a per unit basis depending upon the output or quantity produced (e.g., rent, depreciation); fixed costs do not vary directly with volume
- 6.7 Freight standard:** established annually during the re-evaluation of the standards in order to include freight in the inventory standards; standard amount of the in-bound freight
- 6.8 In-bound freight:** costs paid by the Company for freight related to inventory purchases
- 6.9 In-bound freight account:** account included in the Material Variance line of the income statement which is used to capture the actual in-bound freight costs paid by the Company
- 6.10 Labor variance:** the difference between the actual cost and standard cost of direct “productive” employees
- 6.11 Low cost items:** material with an extended cost of less than \$1
- 6.17 Standard cost:** a predetermined value fixed for a period of time (12 months) that is used for inventory valuation and to measure cost changes
- 6.20 Variable cost:** a cost constant on a per unit basis but varies in total depending upon the output or quantity produced (i.e., utilities, supplies); variable costs do vary directly with volume
- 6.21 Work in process:** goods in the manufacturing process but not yet completed

/s/ G Burnett
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