

Standard Costing & Variance Analysis

Prepared by Alexandra R. Sansan, CPA, CMA

Standard Costs

Realistic estimates of costs based on analyses of both past and projected operating costs and conditions.

Standards

Norms and Benchmarks for measuring performance.

• QUANTITY STANDARDS

- COST (PRICE) STANDARDS
- ✓ Management By Exception

Purpose of Standard Costing

- Establishing budgets
- Controlling costs and measuring efficiencies
- Promoting possible cost reduction
- Simplify costing procedures and expediting cost reports
- Assigning costs to inventories
- Basis for establishing bids & contracts, and Selling prices

Components of Standard Costing

- Standard costs, which provide a standard , or predetermined, performance level
- A measure of actual performance
- A measure of variance between standard and actual performance



Materials Variances

MATERIALS VARIANCE

		Standard
Actual Quantity(AQ)	Actual Quantity(AQ)	Quantity(SQ)
х	Х	х
Actual price(AP)	Standard Price(SP)	Standard Price(SP)

PRICE VARIANCE

QUANTITY VARIANCE

Material Price Variance (MPV) = AQ (AP - SP) Material Quantity Variance (MQV) = SP(AQ - SQ)

Labor Variances

DIRECT LABOR VARIANCE



Labor Rate Variance (LRV) = AH (AR - SR) Labor Efficiency Variance (LEV) = SR (AH - SH)

Overhead Variance

Actual Var OH (AVOH)	Budg Var	OH (BVOH)	Standard Var OH (SVOH)	
Act VOH Rate (AR) X ACt Hour (AH)	Std VOH Rate (SR) X	Act Hour (AH)	Std VOH Rate (SR) X Std Hour (SH)	
AH (SI	R-AR)	SR (AF	H-SH)	
Var OH Spending Variance		Var. OH Effici	ency Variance	
Actual Fxd OH (AFOH)	Budg Fxd	OH (BFOH)	Standard Fxd OH (SFOH)	
Act FOH Rate (AR) X ACt Hour (AH)	Std FOH Rate (SR) X	Act Hour (AH)		
AH (SI	R-AR)	SR (AB	I-SH)	
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Fxd. OH Spending Variance

Fxd Volume Variance

OVERHEAD VARIANCE 4-WAY APPROACH

Variable OH Spending Variance Variable OH Efficiency Variance Fixed OH Spending Variance Fixed OH efficiency Variance

3-WAY APPROACH

Spending Variance Efficiency Variance Volume/Capacity Variance

2-WAY APPROACH

Controllable Variance Volume Variance

1-WAY APPROACH Total Variance

ONE VARIANCE APPROACH:

AFOH – SFOH

TWO-WAY VARIANCE APPROACH:

CONTROLLABLE VARIANCE = AFOH – BASH VOLUME/CAPACITY/NONCONTROLLABLE VARIANCE = BASH – SFOH

THREE-WAY VARIACNE APPROACH:

SPENDING VARIANCE = AFOH - BAAH

EFFICIENCY VARIANCE = BAAH - BASH

VOLUME VARIANCE = BASH – SFOH

FOUR-WAY VARIANCE APPROACH:

VARIANCE SPENDING VARIANCE = AVOH - BVOH

VARIABLE EFFICIENCY VARIANCE = BVOH - SVOH

FIXED SPENDING VARIANCE = AfOH - BfOH

FIXED VOLUME/CAPACITY VARIANCE = BfOH – SfOH

LEGEND:

AFOH = Actual Factory Overhead SFOH = Standard Factory Overhead BAAH = Budget Allowed on Actual Hours BASH = Budget Allowed on Standard Hours

AfOH = Actual fixed Overhead SfOH = Standard fixed Overhead BfOH = Budgeted fixed Overhead (this is a constant amount) AVOH = Actual Variable Overhead BVOH = Budgeted Variable Overhead

SVOH = Standard Variable Overhead

COMPUTATIONS:

AFOH = Actual variable OH Cost + Actual Fixed OH Cost SFOH = AQ X SH X SR -> standard rate for both var. plus fixed

BAAH = For variable = AH x SR -> this is also your budgeted variable overhead For fixed = Budg Fxd OH

BASH = For variable = AQ x SH x SR -> this is also your standard variable OH For fixed = Budg Fxd OH

 $BVOH = AH \times SR$ SVOH or SfOH = AQ x SH x SR