

## F.O.H. Cost Variances Analyses

Ex1: The Sourdough Bread Company bakes baguettes for distribution to upscale grocery stores. The company has two direct-cost categories: direct materials and direct manufacturing labor. Variable manufacturing overhead is allocated to products on the basis of standard direct manufacturing labor-hours. Following is some budget data for the Sourdough Bread Company:

Direct manufacturing labor use 0.02 hours per baguette

Variable manufacturing overhead \$10.00 per direct manufacturing labor-hour

The Sourdough Bread Company provides the following additional data for the year ended December 31, 2017:

Planned (budgeted) output 3,100,000 baguettes

Actual production 2,600,000 baguettes

Direct manufacturing labor 46,800 hours

Actual variable manufacturing overhead \$617,760

Required:

1. What is the denominator level used for allocating variable manufacturing overhead? (That is, for how many direct manufacturing labor-hours is Sourdough Bread budgeting?)
2. Prepare a variance analysis of variable manufacturing overhead.
3. Discuss the variances you have calculated and give possible explanations for them.

4. The Sourdough Bread Company also allocates fixed manufacturing overhead to products on the basis of standard direct manufacturing labor-hours. For 2017, fixed manufacturing overhead was budgeted at \$3.00 per direct manufacturing labor-hour. Actual fixed manufacturing overhead incurred during the year was \$294,000.

1. Prepare a variance analysis of fixed manufacturing overhead cost.

2. Is fixed overhead underallocated or overallocated? By what amount?

3. Comment on your results. Discuss the variances and explain what may be driving them.

Ex2: The Lopez Company uses standard costing in its manufacturing plant for auto parts. The standard cost of a particular auto part, based on a denominator level of 4,000 output units per year, included 6 machine-hours of variable manufacturing overhead at \$8 per hour and 6 machine-hours of fixed manufacturing overhead at \$15 per hour. Actual output produced was 4,400 units. Variable manufacturing overhead incurred was \$245,000. Fixed manufacturing overhead incurred was \$373,000. Actual machine-hours were 28,400.

Required:

1. Prepare an analysis of all variable manufacturing overhead and fixed manufacturing overhead variances,
2. Prepare journal entries using the 4-variance analysis.
3. Describe how individual fixed manufacturing overhead items are controlled from day to day.
4. Discuss possible causes of the fixed manufacturing overhead variances.

**EX3: Total overhead, 3-variance analysis.** Pampered Pets, Inc., makes embellished accessories primarily for dogs. For 2017, budgeted variable overhead is \$70,000 for 10,000 direct labor-hours. Budgeted total overhead is \$100,000 at 8,000 direct labor-hours. The standard costs allocated to the production of these accessories included a total overhead rate of 80% of standard direct labor costs.

In May 2017, Pampered Pets incurred total overhead of \$133,000 and direct labor costs of \$178,125. The direct labor efficiency variance was \$7,500 unfavorable. The direct labor flexible-budget variance was \$1,875 favorable. The standard labor price was \$15 per hour. The production-volume variance was \$16,000 favorable.

**Required:**

1. Compute the direct labor rate variance.
2. Compute the denominator level and the spending and efficiency variances for total overhead.
3. Describe how individual variable overhead items are controlled from day to day. Also, describe how individual fixed overhead items are controlled