

1

Budgeted production and sales	5,000			
Budgeted laser cutting hours per unit	1.50			
Budgeted laser cutting hours per period	7,500			
Budgeted fixed manufacturing overhead	\$ 1,800.0	in 000's		
Budgeted fixed manufacturing overhead per unit	\$ 1,800.0	/	5,000 = \$ 360	
Budgeted fixed manufacturing overhead per hour	\$ 1,800.0	/	7,500 = \$ 240	
Variable manufacturing overhead costs	\$ 1,478.4	in 000's		
Laser cutting hours used	8,400			
Wing parts produced and sold	4,800			

Budgeted inputs allowed for actual outputs achieved  
 4,800 x 1.50 hours per unit = 7,200 hours

Actual costs Incured: Actual Inputs x Actual Price	Flexible Budget: Budgeted inputs allowed for actual outputs achieved x Standard Price	Static Budget
<b>Variable Overhead</b>		
	4,800 x \$ 200 x 1.50	5,000 x 200 x 1.50
in 000's	\$ 1,478.4	\$ 1,440.0
	\$ (38.4)	\$ 60.0
	Flexible budget variance	Sales volume variance
	\$ 21.6	
	Static-budget variance	

Actual Costs incurred	Actual Inputs x Budgeted Rate	Flexible Budget: Standard inputs allowed for actual outputs x Budgeted Rate	Applied Standard inputs allowed for actual outputs x Budgeted Rate
<b>Variable Overhead</b> in 000's	8,400 x \$ 200 \$ 1,478.4	7,200 x \$ 200 \$ 1,440.0	7,200 x \$ 200 \$ 1,440.0
	\$ 201.6 Spending Variance	\$ (240.0) Efficiency variance	\$ - Never a variance
<b>Fixed Overhead</b> in 000's	Lump sum \$ 1,832.2	Lump sum \$ 1,800.0	Lump sum 7,200 x \$ 240 \$ 1,728.0
	\$ (32.2) Spending Variance	\$ - Never a variance	\$ (72.0) Production volume variance

<b>3 - Variance Analysis</b>		
\$ 3,310.6	3,480	[ 7,200 x \$ 440 \$ 3,168.0
\$ 169.4 Spending Variance	\$ (240.0) Efficiency variance	\$ (72.0) Production volume variance

**2**

**Budget**

Depreciation on machines	\$ 825	in 000's	
Depreciation on machines per hour	\$ 825 / 7,500	=	\$ 110
Variable manufacturing overhead costs per hour			\$ 200
New Variable manufacturing overhead costs per hour			\$ 310
Budgeted fixed manufacturing overhead Original	\$ 1,800	in 000's	
Depreciation on machines	\$ 825	in 000's	
New fixed manufacturing overhead costs	\$ 975	in 000's	
New fixed manufacturing overhead costs per hour	\$ 975 / 7,500	=	\$ 130

**Actual**

	in 000's		in 000's
Variable manufacturing overhead costs	\$ 1,478.4	Actual fixed manufacturing overhead - Original	\$ 1,832.2
Depreciation on machines	\$ 882.0	Depreciation on machines	\$ 882.0
Total variable overhead	\$ 2,360.4	Actual fixed manufacturing overhead - revised	\$ 950.2

<b>Actual costs Incurred:</b> Actual Inputs x Actual Price	<b>Flexible Budget:</b> Budgeted inputs allowed for actual outputs achieved x Standard Price	<b>Static Budget</b>
<b>Variable Overhead</b>		
	4,800 x \$ 310	5,000 x 310
	x 1.50	x 1.50
in 000's	\$ 2,360.4	\$ 2,232.0
	\$ (128.4)	\$ 93.0
	Flexible budget variance	Sales volume variance
	\$ (35.4)	
	Static-budget variance	

Actual Costs incurred	Actual Inputs x Budgeted Rate	Flexible Budget: Standard inputs allowed for actual outputs x Budgeted Rate	Applied Standard inputs allowed for actual outputs x Budgeted Rate
<b>Variable Overhead</b>	8,400 x \$ 310	7,200 x \$ 310	7,200 x \$ 310
in 000's	\$ 2,360.4	\$ 2,604.0	\$ 2,232.0
	\$ 243.6	\$ (372.0)	\$ -
	Spending Variance	Efficiency variance	Never a variance
<b>Fixed Overhead</b>		Lump sum	Lump sum
in 000's	\$ 950.2	\$ 975.0	7,200 x \$ 130
	\$ 24.8	\$ -	\$ 936.0
	Spending Variance	Never a variance	Production volume variance

<b>3 - Variance Analysis</b>			
in 000's	\$ 3,310.6	3,579	[ 7,200 x \$ 440
	\$ 268.4	3,207	\$ 3,168.0
	Spending Variance	Efficiency variance	Production volume variance