

Manufacturing Responsiveness Report

2018 MikesBikes Advanced - John Smith - John Smith Inc - Period 2020

	2020	2019	2018
Capacity			
Number of Employees	80	80	80
Administration Staff	5	6	5
Marketing & Sales Staff	4	4	4
Production Admin Staff	3	3	3
Factory Workforce	68	67	68
Factory Workforce Capacity (SCU)	26,020	24,724	23,960
Effective Plant (SCU)	25,000	25,000	25,000
TOTAL CAPACITY (SCU)	25,505	24,862	24,475

Capacity was allocated to:

Training (%)	2.1%	2.1%	2.2%
Rework (%)	1.0%	1.1%	1.4%
Setup (%)	8.0%	8.8%	10.8%
Breakdowns (%)	8.0%	7.4%	7.7%
Raw Materials Stockout (%)	10.6%	11.8%	14.5%
Production (%)	47.0%	52.0%	63.5%
Idle Time (%)	23.2%	16.7%	0.0%
	100%	100%	100%

Production Efficiency (%)*	70.3%	68.7%	63.5%
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Plant for next Period

Effective Plant (SCU)	25,000	25,000	25,000
Newly purchased/installed Plant (SCU)	0	0	0
Plant for next period (SCU)	25,000	25,000	25,000

Production Process

Supplier Relations Expenditure	\$30,000	\$30,000	\$30,000
Supplier Relations Index	0.51	0.51	0.51
Setup Time Reduction Expenditure	\$20,000	\$20,000	\$20,000
Current Setup Time Reduction Index (as a proportion of industry standard)	0.06	0.05	0.05
Batch Size	200	200	200
Setup Time : Run Time Ratio	0.17 : 1	0.17 : 1	0.17 : 1
Manufacturing Cycle Time (days)	4.0	5.0	5.0

* Production Efficiency = Production Utilization + Idle Time