

Productivity and Downtime Data of a Soda Manufacturing Line

Production Output:

38 Batches

Operator Efficiency:

Operators Efficiency rate is 64% with Charlie having the highest and Mac as the lowest rate.

Manufacturing Time Analysis:

All products shows inefficiency with CO-2L and OR-600 having the large gaps.

Operator Error vs Machine Error:

Operator Error is slightly more suggesting improvement through trainings.

Downtime Analysis:

Total downtime of 1,388 minutes with Machine Adjustment and Inventory Shortage being the top issues.

Efficiency Rate of Operators

64%

Efficiency Rate (%)

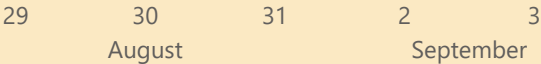
Operator Total Batches

| | |
|---------|----|
| Charlie | 11 |
| Dee | 11 |
| Dennis | 8 |
| Mac | 8 |

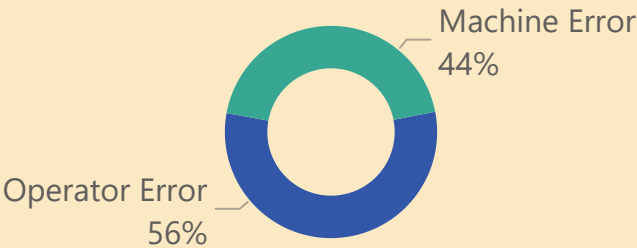


Total Number of Batches

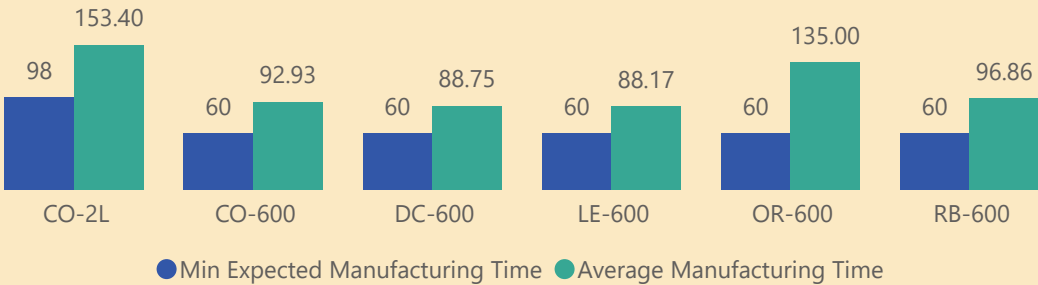
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Percentage of Operator Error vs Machine Error



Average Manufacturing Time vs Min Expected Manufacturing Time



Breakdown of Downtime Factors Experienced by Operators

| Operator | Batch change | Batch coding error | Calibration error | Conveyor belt jam | Inventory shortage | Label switch | Labeling error | Machine adjustment | Machine failure | Other | Product spill | Total |
|----------|--------------|--------------------|-------------------|-------------------|--------------------|--------------|----------------|--------------------|-----------------|-------|---------------|-------|
| Charlie | 10 | 44 | 24 | | 17 | 10 | 22 | 118 | 85 | 32 | 22 | 384 |
| Dee | 20 | 30 | 25 | 17 | 85 | 23 | 20 | 79 | 36 | 20 | 15 | 370 |
| Dennis | | 24 | | | 43 | | | 120 | 88 | 7 | 20 | 302 |
| Mac | 130 | 47 | | | 80 | | | 15 | 45 | 15 | | 332 |
| Total | 160 | 145 | 49 | 17 | 225 | 33 | 42 | 332 | 254 | 74 | 57 | 1388 |