

# OPERATIONAL INEFFICIENCY AND DOWNTIME ANALYSIS

All time calculations are done in mins



Operators	Products	Batches	Inefficient Batch	Downtime Factors	Downtime	Major Downtime Factor	Inefficient Operator
4	6	38	66%	12	36%	Machine adjustment	Mac

## Batch wise Downtime

Batch with more than 50% downtime are most problematic batch

Batch	Total Product Time	Total Downtime	Downtime(%)
422111	135	75.00	56%
422123	133	73.00	55%
422147	205	107.00	52%
422140	123	63.00	51%
422118	120	60.00	50%

## Operator wise Inefficiency

Mac and Charlie have most of issues among operators

Operator	Total Batch	Inefficient Batch	Inefficiency
Mac	8	6	75%
Charlie	11	8	73%
Dee	11	7	64%
Dennis	8	4	50%

## Most Problematic Batch

Downtime, Product and Operator Info

422111	56%
OR-600	Mac

## Most Problematic Product

Min Time, Total Time, Extra Production Time

OR-600	135
60	225%

## Batch wise Production Time

Batches production time are more than average production tim...

422147	205
422146	160
422144	152
422111	135
422123	133
422148	130
422140	123
422118	120
422145	120
422143	118
422120	112
422128	112
422113	110
422134	110
422135	105
422137	105
422126	104

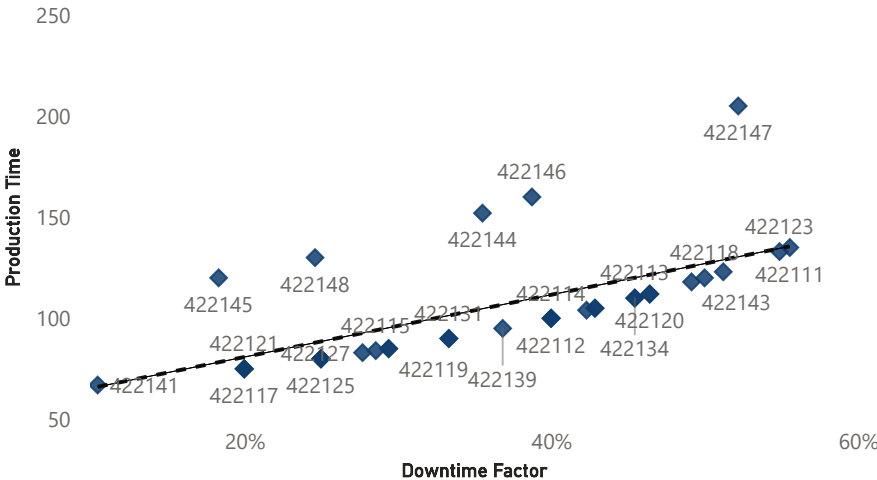
## Top 3 Factors with Highest % of Downtime

Downtime is measured as total downtime by total production time

Machine adjustment	9%
Machine failure	7%
Inventory shortage	6%

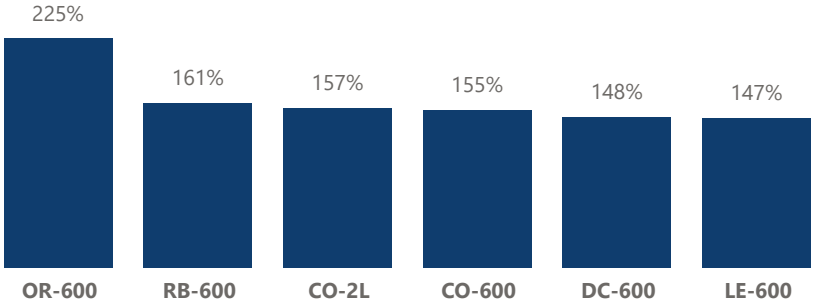
## Batch wise Downtime and Production Time

As downtime factor increases, production time increases



## Product wise Average Production Time and Min Batch Time to Produce

OR-600 requires more than double production time than it allots (min batch time)



## Overview and Recommendation

More than 65% batches are inefficient, but batch no 422111, 422123, 422147 have serious issues, which leads to higher downtime. Product OR-600 takes a lot of extra time to produce, which needs some careful attention. Mac and Charlie need proper training. Their inefficiency become very high. There are several factors which are causing to increase the production time, out of these machine adjustment is prominent. It needs some re-check.

Proper training of operators, rechecking of problematic products and batches, addressing issue of serious downtime factor may increase manufacturing productivity.