

# Process Sequence with average time and standard deviation



## PRODUCT 1

| Part No | Work Center No | Sequence No | Avg. Hours | Std. Dev. |
|---------|----------------|-------------|------------|-----------|
| 124672  | REC            | 1           | 3.18       | 1         |
| 124672  | QA INSPECT     | 2           | 5.79       | 2         |
| 124672  | CNC HORIZ      | 3           | 4.56       | 0.4       |
| 124672  | CNC HORIZ      | 4           | 4.18       | 0.4       |
| 124672  | CNC HORIZ      | 5           | 4.24       | 0.4       |
| 124672  | MAN SFTLTH     | 6           | 4.19       | 1.7       |
| 124672  | CNC HORIZ      | 7           | 3.62       | 0.4       |
| 124672  | CNC HORIZ      | 8           | 3.58       | 0.4       |
| 124672  | CNC HORIZ      | 9           | 4.52       | 0.4       |
| 124672  | MAN MILL       | 10          | 4.75       | 1.5       |
| 124672  | MAN KEY        | 11          | 0.97       | 0.1       |
| 124672  | QA INSPECT     | 12          | 9.00       | 2         |
| 124672  | DRESS          | 13          | 1.84       | 0.2       |
| 124672  | QA INSPECT     | 14          | 2.88       | 2         |
| 124672  | ASSEMBLY       | 15          | 4.44       | 0.5       |
| 124672  | DRESS BAL      | 16          | 2.10       | 0.2       |
| 124672  | DRESS BAL      | 17          | 2.14       | 0.2       |
| 124672  | QA INSPECT     | 18          | 4.54       | 2         |
| 124672  | SHIP           | 19          | 2.37       | 0.75      |

## PRODUCT 2

| Part No | Work Center No | Sequence No | Avg. Hours | Std. Dev. |
|---------|----------------|-------------|------------|-----------|
| 126054  | REC            | 1           | 2.48       | 1         |
| 126054  | QA INSPECT     | 2           | 7.13       | 2         |
| 126054  | CNC HORIZ      | 3           | 1.72       | 0.3       |
| 126054  | CNC HORIZ      | 4           | 1.66       | 0.3       |
| 126054  | MAN SFTLTH     | 5           | 1.62       | 1.7       |
| 126054  | CNC HORIZ      | 6           | 2.54       | 0.3       |
| 126054  | MAN MILL       | 7           | 3.09       | 1.5       |
| 126054  | OSP            | 8           | 0.91       | 0.1       |
| 126054  | QA INSPECT     | 9           | 5.67       | 2         |
| 126054  | DRESS          | 10          | 2.08       | 0.2       |
| 126054  | QA INSPECT     | 11          | 3.51       | 2         |
| 126054  | CNC HORIZ      | 12          | 2.09       | 0.3       |
| 126054  | DRESS BAL      | 13          | 1.92       | 0.2       |
| 126054  | CNC HORIZ      | 14          | 1.84       | 0.3       |
| 126054  | QA INSPECT     | 15          | 5.88       | 2         |
| 126054  | SHIP           | 16          | 3.19       | 0.75      |

# Process Sequence with average time and standard deviation



## PRODUCT 3

| Part No | Work Center No | Sequence No | Avg. Hours | Std. Dev. |
|---------|----------------|-------------|------------|-----------|
| 126293  | REC            | 1           | 2.01       | 1         |
| 126293  | QA INSPECT     | 2           | 5.63       | 1.5       |
| 126293  | CNC HORIZ      | 3           | 1.98       | 0.3       |
| 126293  | CNC HORIZ      | 4           | 1.73       | 0.3       |
| 126293  | MAN MILL       | 5           | 1.84       | 1         |
| 126293  | MAN KEY        | 6           | 0.99       | 0.1       |
| 126293  | DRESS          | 7           | 1.83       | 0.2       |
| 126293  | DRESS BAL      | 8           | 1.89       | 0.2       |
| 126293  | TESTING        | 9           | 4.14       | 1         |
| 126293  | QA INSPECT     | 10          | 4.21       | 1.5       |
| 126293  | SHIP           | 11          | 1.66       | 0.75      |

## PRODUCT 4

| Part No | Work Center | Sequence No | Avg. Hours | Std. Dev. |
|---------|-------------|-------------|------------|-----------|
| 121757  | REC         | 1           | 3.96       | 1         |
| 121757  | QA INSPECT  | 2           | 6.34       | 1.5       |
| 121757  | CNC HORIZ   | 3           | 1.75       | 0.3       |
| 121757  | CNC HORIZ   | 4           | 1.64       | 0.3       |
| 121757  | MAN MILL    | 5           | 2.67       | 1         |
| 121757  | MAN KEY     | 6           | 1.07       | 0.1       |
| 121757  | DRESS       | 7           | 2.14       | 0.2       |
| 121757  | DRESS BAL   | 8           | 2.02       | 0.2       |
| 121757  | TESTING     | 9           | 5.16       | 1         |
| 121757  | QA INSPECT  | 10          | 4.44       | 1.5       |
| 121757  | SHIP        | 11          | 1.79       | 0.75      |

## Cost of workcenters with their respective set-up times MTTF and standard deviation

| Work Center No | Description | Cost of WC    | Setup Time | Avg. Run Hrs (no breakdown) | Std. Dev for Breakdown |
|----------------|-------------|---------------|------------|-----------------------------|------------------------|
| ASSEMBLY       | ASSEMBLY    | \$ 10,000.00  | 2          | N/A                         | N/A                    |
| CNC HORIZ      | CNC HORIZ   | \$ 50,000.00  | 0.5        | 24                          | 3                      |
| DRESS          | DRESS       | \$ 8,000.00   | 0.5        | 48                          | 4                      |
| DRESS BAL      | DRESS BAL   | \$ 2,000.00   | 0.1        | 100                         | 1                      |
| ENG LATHE      | ENG LATHE   | \$ 20,000.00  | 0.5        | 200                         | 5                      |
| MAN KEY        | MAN KEY     | \$ 7,000.00   | 0.5        | 72                          | 3                      |
| MAN MILL       | MAN MILL    | \$ 10,000.00  | 0.5        | 36                          | 2                      |
| MAN SFTLTH     | MAN SFTLTH  | \$ 25,000.00  | 0.5        | 300                         | 10                     |
| OSP            | OSP         | \$ 9,000.00   | 0.1        |                             |                        |
| QA INSPECT     | QA INSPECT  | \$ 5,000.00   | 0.5        |                             |                        |
| REC            | RECEIVING   | \$ 100,000.00 | N/A        | N/A                         | N/A                    |
| SHIP           | SHIPPING    | \$ 100,000.00 | N/A        | N/A                         | N/A                    |
| TESTING        | TESTING     | \$ 8,500.00   | 0.5        | 200                         | 3                      |