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## LAMPIRAN

### Lampiran 1 Perhitungan *Availability Ratio* Mesin *Overdeck*

a. Produksi: Jumat, 31 Maret 2023

$$\begin{aligned} \text{Availability Ratio} &= \frac{\text{operating time}}{\text{loading time}} \times 100\% \\ &= \frac{\text{loading time} - \text{downtime}}{\text{loading time}} \times 100\% \\ &= \frac{420 \text{ menit} - 53 \text{ menit}}{420 \text{ menit}} \times 100\% \\ &= \frac{367 \text{ menit}}{420 \text{ menit}} \times 100\% \\ &= 87,4\% \end{aligned}$$

b. Produksi: Sabtu, 1 April 2023

$$\begin{aligned} \text{Availability Ratio} &= \frac{\text{operating time}}{\text{loading time}} \times 100\% \\ &= \frac{\text{loading time} - \text{downtime}}{\text{loading time}} \times 100\% \\ &= \frac{300 \text{ menit} - 30 \text{ menit}}{300 \text{ menit}} \times 100\% \\ &= \frac{270 \text{ menit}}{300 \text{ menit}} \times 100\% \\ &= 90\% \end{aligned}$$

c. Produksi: Senin, 3 April 2023

$$\begin{aligned} \text{Availability Ratio} &= \frac{\text{operating time}}{\text{loading time}} \times 100\% \\ &= \frac{\text{loading time} - \text{downtime}}{\text{loading time}} \times 100\% \\ &= \frac{420 \text{ menit} - 51 \text{ menit}}{420 \text{ menit}} \times 100\% \\ &= \frac{369 \text{ menit}}{420 \text{ menit}} \times 100\% \\ &= 87,9\% \end{aligned}$$

## Lampiran 2 Perhitungan *Availability Ratio* Mesin Obras

a. Produksi: Jumat, 31 Maret 2023

$$\begin{aligned} \text{Availability Ratio} &= \frac{\text{operating time}}{\text{loading time}} \times 100\% \\ &= \frac{\text{loading time} - \text{downtime}}{\text{loading time}} \times 100\% \\ &= \frac{420 \text{ menit} - 41 \text{ menit}}{420 \text{ menit}} \times 100\% \\ &= \frac{379 \text{ menit}}{420 \text{ menit}} \times 100\% \\ &= 90,2\% \end{aligned}$$

b. Produksi: Sabtu, 1 April 2023

$$\begin{aligned} \text{Availability Ratio} &= \frac{\text{operating time}}{\text{loading time}} \times 100\% \\ &= \frac{\text{loading time} - \text{downtime}}{\text{loading time}} \times 100\% \\ &= \frac{300 \text{ menit} - 32 \text{ menit}}{300 \text{ menit}} \times 100\% \\ &= \frac{268 \text{ menit}}{420 \text{ menit}} \times 100\% \\ &= 89,3\% \end{aligned}$$

c. Produksi: Senin, 3 April 2023

$$\begin{aligned} \text{Availability Ratio} &= \frac{\text{operating time}}{\text{loading time}} \times 100\% \\ &= \frac{\text{loading time} - \text{downtime}}{\text{loading time}} \times 100\% \\ &= \frac{420 \text{ menit} - 45 \text{ menit}}{420 \text{ menit}} \times 100\% \\ &= \frac{375 \text{ menit}}{420 \text{ menit}} \times 100\% \\ &= 89,3\% \end{aligned}$$

### Lampiran 3 Perhitungan *Performance Efficiency* Mesin Overdeck

a. Produksi: Jumat, 31 Maret 2023

$$\begin{aligned} \text{Performance Efficiency} &= \frac{\text{processed amount} \times \text{ideal cycle time}}{\text{operating time}} \times 100\% \\ &= \frac{580 \text{ pcs} \times 0,53 \text{ menit}}{367 \text{ menit}} \times 100\% \\ &= \frac{307,4 \text{ menit}}{367 \text{ menit}} \times 100\% \\ &= 83,8\% \end{aligned}$$

b. Produksi: Sabtu, 1 April 2023

$$\begin{aligned} \text{Performance Efficiency} &= \frac{\text{processed amount} \times \text{ideal cycle time}}{\text{operating time}} \times 100\% \\ &= \frac{450 \text{ pcs} \times 0,53 \text{ menit}}{270 \text{ menit}} \times 100\% \\ &= \frac{238,5 \text{ menit}}{270 \text{ menit}} \times 100\% \\ &= 88\% \end{aligned}$$

c. Produksi: Senin, 3 April 2023

$$\begin{aligned} \text{Performance Efficiency} &= \frac{\text{processed amount} \times \text{ideal cycle time}}{\text{operating time}} \times 100\% \\ &= \frac{600 \text{ pcs} \times 0,53 \text{ menit}}{369 \text{ menit}} \times 100\% \\ &= \frac{318 \text{ menit}}{369 \text{ menit}} \times 100\% \\ &= 86,2\% \end{aligned}$$

#### Lampiran 4 Perhitungan *Performance Efficiency* Mesin Obras

a. Produksi: Jumat, 31 Maret 2023

$$\begin{aligned} \text{Performance Efficiency} &= \frac{\text{processed amount} \times \text{ideal cycle time}}{\text{operating time}} \times 100\% \\ &= \frac{460 \text{ pcs} \times 0,7 \text{ menit}}{379 \text{ menit}} \times 100\% \\ &= \frac{322 \text{ menit}}{379 \text{ menit}} \times 100\% \\ &= 85\% \end{aligned}$$

b. Produksi: Sabtu, 1 April 2023

$$\begin{aligned} \text{Performance Efficiency} &= \frac{\text{processed amount} \times \text{ideal cycle time}}{\text{operating time}} \times 100\% \\ &= \frac{314 \text{ pcs} \times 0,7 \text{ menit}}{268 \text{ menit}} \times 100\% \\ &= \frac{219,8 \text{ menit}}{268 \text{ menit}} \times 100\% \\ &= 82\% \end{aligned}$$

c. Produksi: Senin, 3 April 2023

$$\begin{aligned} \text{Performance Efficiency} &= \frac{\text{processed amount} \times \text{ideal cycle time}}{\text{operating time}} \times 100\% \\ &= \frac{400 \text{ pcs} \times 0,7 \text{ menit}}{375 \text{ menit}} \times 100\% \\ &= \frac{280 \text{ menit}}{375 \text{ menit}} \times 100\% \\ &= 74,7\% \end{aligned}$$

## Lampiran 5 Perhitungan *Rate of Quality Product Mesin Overdeck*

a. Produksi: Jumat, 31 Maret 2023

$$\begin{aligned} \text{Rate of} \\ \text{Quality} \\ \text{Product} &= \frac{\text{processed amount} - \text{defect amount}}{\text{processed amount}} \times 100\% \\ &= \frac{580 \text{ pcs} - 28 \text{ pcs}}{580 \text{ pcs}} \times 100\% \\ &= \frac{552 \text{ pcs}}{580 \text{ pcs}} \times 100\% \\ &= 95,2\% \end{aligned}$$

b. Produksi: Sabtu, 1 April 2023

$$\begin{aligned} \text{Rate of} \\ \text{Quality} \\ \text{Product} &= \frac{\text{processed amount} - \text{defect amount}}{\text{processed amount}} \times 100\% \\ &= \frac{450 \text{ pcs} - 14 \text{ pcs}}{450 \text{ pcs}} \times 100\% \\ &= \frac{436 \text{ pcs}}{450 \text{ pcs}} \times 100\% \\ &= 96,9\% \end{aligned}$$

c. Produksi: Senin, 3 April 2023

$$\begin{aligned} \text{Rate of} \\ \text{Quality} \\ \text{Product} &= \frac{\text{processed amount} - \text{defect amount}}{\text{processed amount}} \times 100\% \\ &= \frac{600 \text{ pcs} - 25 \text{ pcs}}{600 \text{ pcs}} \times 100\% \\ &= \frac{575 \text{ pcs}}{600 \text{ pcs}} \times 100\% \\ &= 95,8\% \end{aligned}$$

## Lampiran 6 Perhitungan *Rate of Quality Product* Mesin Obras

a. Produksi: Jumat, 31 Maret 2023

$$\begin{aligned} \text{Rate of} \\ \text{Quality} \\ \text{Product} &= \frac{\text{processed amount} - \text{defect amount}}{\text{processed amount}} \times 100\% \\ &= \frac{460 \text{ pcs} - 7 \text{ pcs}}{460 \text{ pcs}} \times 100\% \\ &= \frac{453 \text{ pcs}}{460 \text{ pcs}} \times 100\% \\ &= 98,5\% \end{aligned}$$

b. Produksi: Sabtu, 1 April 2023

$$\begin{aligned} \text{Rate of} \\ \text{Quality} \\ \text{Product} &= \frac{\text{processed amount} - \text{defect amount}}{\text{processed amount}} \times 100\% \\ &= \frac{314 \text{ pcs} - 12 \text{ pcs}}{314 \text{ pcs}} \times 100\% \\ &= \frac{302 \text{ pcs}}{314 \text{ pcs}} \times 100\% \\ &= 96\% \end{aligned}$$

c. Produksi: Senin, 3 April 2023

$$\begin{aligned} \text{Rate of} \\ \text{Quality} \\ \text{Product} &= \frac{\text{processed amount} - \text{defect amount}}{\text{processed amount}} \times 100\% \\ &= \frac{400 \text{ pcs} - 11 \text{ pcs}}{400 \text{ pcs}} \times 100\% \\ &= \frac{389 \text{ pcs}}{400 \text{ pcs}} \times 100\% \\ &= 97,3\% \end{aligned}$$



## Lampiran 7 Perhitungan *Overall Equipment Effectiveness* Mesin *Overdeck*

a. Jumat, 31 Maret 2023

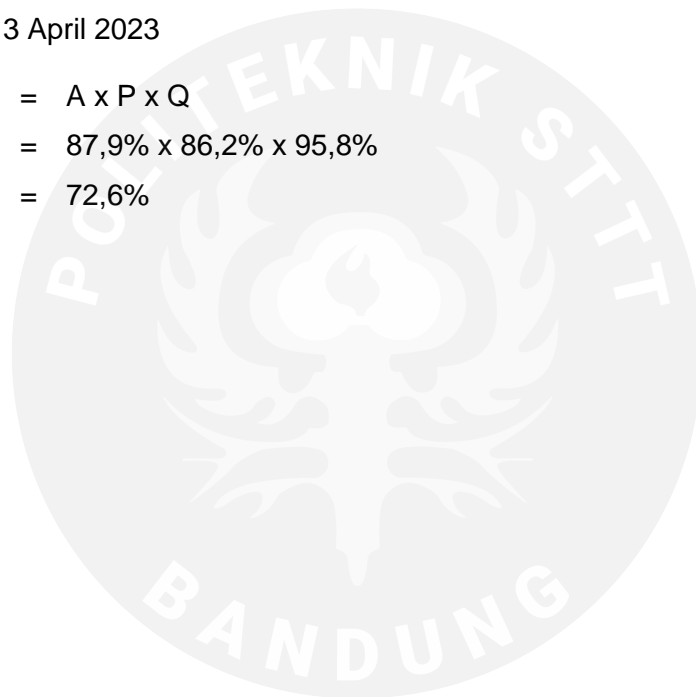
$$\begin{aligned} \text{OEE} &= A \times P \times Q \\ &= 87,4\% \times 83,8\% \times 95,2\% \\ &= 69,7\% \end{aligned}$$

a. Sabtu, 1 April 2023

$$\begin{aligned} \text{OEE} &= A \times P \times Q \\ &= 85\% \times 91\% \times 96,9\% \\ &= 76,7\% \end{aligned}$$

b. Senin, 3 April 2023

$$\begin{aligned} \text{OEE} &= A \times P \times Q \\ &= 87,9\% \times 86,2\% \times 95,8\% \\ &= 72,6\% \end{aligned}$$



## Lampiran 8 Perhitungan *Overall Equipment Effectiveness* Mesin Obras

a. Jumat, 31 Maret 2023

$$\begin{aligned} \text{OEE} &= A \times P \times Q \\ &= 89,6\% \times 85,5\% \times 98,5\% \\ &= 75,5\% \end{aligned}$$

a. Sabtu, 1 April 2023

$$\begin{aligned} \text{OEE} &= A \times P \times Q \\ &= 86,3\% \times 84,9\% \times 96\% \\ &= 70,3\% \end{aligned}$$

b. Senin, 3 April 2023

$$\begin{aligned} \text{OEE} &= A \times P \times Q \\ &= 88,7\% \times 75,2\% \times 97,3\% \\ &= 64,9\% \end{aligned}$$

