

LAMPIRAN II PERHITUNGAN

1. Penurunan Kadar Besi (Fe) dan Warna (PtCo) dalam % Penyisihan (Removal)

a. Perhitungan % Penyisihan Kadar Besi (Fe)

Rumus :

$$\frac{\text{Fe awal} - \text{Fe akhir}}{\text{Fe awal}} \times 100\% = \% \text{ removal}$$

1) 5 menit

$$\begin{aligned} \% \text{ removal} &= \frac{\text{Fe awal} - \text{Fe akhir}}{\text{Fe awal}} \times 100\% \\ &= \frac{3,42 - 1,9457}{3,42} \times 100\% \\ &= 43,1082 \% \end{aligned}$$

2) 10 menit

$$\begin{aligned} \% \text{ removal} &= \frac{\text{Fe awal} - \text{Fe akhir}}{\text{Fe awal}} \times 100\% \\ &= \frac{3,42 - 2,3015}{3,42} \times 100\% \\ &= 32,7047 \% \end{aligned}$$

3) 15 menit

$$\begin{aligned} \% \text{ removal} &= \frac{\text{Fe awal} - \text{Fe akhir}}{\text{Fe awal}} \times 100\% \\ &= \frac{3,42 - 2,6756}{3,42} \times 100\% \\ &= 21,7661 \% \end{aligned}$$

4) 20 menit

$$\begin{aligned} \% \text{ removal} &= \frac{\text{Fe awal} - \text{Fe akhir}}{\text{Fe awal}} \times 100\% \\ &= \frac{3,42 - 2,5570}{3,42} \times 100\% \\ &= 25,2339 \% \end{aligned}$$

5) 5 menit

$$\begin{aligned}\% \text{ removal} &= \frac{\text{Fe awal} - \text{Fe akhir}}{\text{Fe awal}} \times 100\% \\ &= \frac{3,42 - 2,3120}{3,42} \times 100\% \\ &= 32,3977 \%\end{aligned}$$

b. Perhitungan % Penyisihan Kadar Warna (PtCo)

Rumus :

$$\frac{\text{Warna awal} - \text{Warna akhir}}{\text{Warna awal}} \times 100\% = \% \text{ removal}$$

1) 5 menit

$$\begin{aligned}\% \text{ removal} &= \frac{\text{Warna awal} - \text{Warna akhir}}{\text{Warna awal}} \times 100\% \\ &= \frac{339,73 - 28,40}{339,73} \times 100\% \\ &= 91,6404 \%\end{aligned}$$

2) 10 menit

$$\begin{aligned}\% \text{ removal} &= \frac{\text{Warna awal} - \text{Warna akhir}}{\text{Warna awal}} \times 100\% \\ &= \frac{339,73 - 31,78}{339,73} \times 100\% \\ &= 90,6455 \%\end{aligned}$$

3) 15 menit

$$\begin{aligned}\% \text{ removal} &= \frac{\text{Warna awal} - \text{Warna akhir}}{\text{Warna awal}} \times 100\% \\ &= \frac{339,73 - 34,64}{339,73} \times 100\% \\ &= 89,8037 \%\end{aligned}$$

4) 20 menit

$$\begin{aligned}\% \text{ removal} &= \frac{\text{Warna awal} - \text{Warna akhir}}{\text{Warna awal}} \times 100\% \\ &= \frac{339,73 - 36,64}{339,73} \times 100\% \\ &= 89,2150 \%\end{aligned}$$

5) 25 menit

% removal

$$\begin{aligned} &= \frac{\text{Warna awal} - \text{Warna akhir}}{\text{Warna awal}} \times 100\% \\ &= \frac{339,73 - 40,08}{339,73} \times 100\% \\ &= 88,2024 \% \end{aligned}$$