

**LAMPIRAN E**  
**PERHITUNGAN JAM KERJA DAN KETERSEDIAAN ALAT GALI**  
**MUAT SAAT INI**

**1. Excavator Hitachi 1200**

Waktu tersedia	= Waktu efektif, Jam/bulan
<i>Operating standby</i> (S1)	= Waktu tidak dapat dihindari, Jam/bulan
<i>Operating delay</i> (S2)	= Waktu dapat dihindari, Jam/bulan
<i>Operating idle</i> (S3)	= Waktu dapat dihindari, Jam/bulan
<i>Standby</i>	= waktu kesiapan alat mekanis (operasi) yaitu waktu tidak dapat dihindari dan dapat dihindari, Jam/bulan.

Diketahui :

Waktu tersedia	= 20 Jam/hari = 600 Jam/bulan
S1	= 295 menit/hari = $\frac{(15 \text{ menit} \times 4 \text{ kali perbulan}) + (280 \text{ menit/hari} \times 30 \text{ hari/bulan})}{60 \text{ menit}}$ = 141 jam/bulan
S2	= 161 menit/hari = 80,5 Jam/bulan
S3	= 29 menit/hari = 14,5 Jam/bulan
<i>Standby</i>	= S1 + S2 + S3 = 236 Jam/bulan
<i>Repair</i>	= 35 Jam/bulan
<i>Working Hours</i>	= 600 – (141+ 80,5 + 14,5 + 35) = 329 Jam/bulan

$$PA = \frac{329+236}{329+35+236} \times 100 \%$$

$$= 94 \%$$

$$MA = \frac{329}{329+35} \times 100 \%$$

$$= 90,4 \%$$

$$EU = \frac{329}{329+35+236} \times 100\%$$

$$= 54,8 \%$$

$$UA = \frac{329}{329+236} \times 100 \%$$

$$= 58,2 \%$$

## 2. Excavator Doosan 800

Diketahui :

$$\text{Waktu tersedia} = 20 \text{ Jam/hari} = 600 \text{ Jam/bulan}$$

$$S1 = 295 \text{ menit/hari}$$

$$= \frac{(15 \text{ menit} \times 4 \text{ kali perbulan}) + (280 \text{ menit/hari} \times 30 \text{ hari/bulan})}{60 \text{ menit}}$$

$$= 141 \text{ jam/bulan}$$

$$S2 = 144 \text{ menit/hari} = 72 \text{ Jam/bulan}$$

$$S3 = 24 \text{ menit/hari} = 12 \text{ Jam/bulan}$$

$$\text{Standby} = S1 + S2 + S3 = 225 \text{ Jam/bulan}$$

$$\text{Repair} = 20 \text{ Jam/bulan}$$

$$\text{Working Hours} = 600 - (141 + 72 + 12 + 20)$$

$$= 355 \text{ Jam/bulan}$$

$$PA = \frac{355 + 225}{355 + 20 + 225} \times 100 \%$$

$$= 96,7 \%$$

$$MA = \frac{355}{355 + 20} \times 100 \%$$

$$= 94,7 \%$$

$$EU = \frac{355}{355 + 20 + 225} \times 100\%$$

$$= 59,2 \%$$

$$UA = \frac{355}{355 + 225} \times 100 \%$$

$$= 61,2 \%$$