

Lean Six Sigma Yellow Belt Formula Sheet

$$\mathbf{Takt\ Time} = \frac{\text{Available time}}{\text{Demand}}$$

$$\mathbf{Capacity} = \frac{\text{Available time}}{\text{Longest cycle time (bottleneck)}}$$

$$\mathbf{Balance\ Efficiency} = \frac{\text{Sum of "n" cycle times}}{\text{Slowest cycle time * "n"}}$$

$$\mathbf{\#\ of\ operators} = \frac{\text{Sum of all cycle times}}{\text{Takt Time}}$$

$$\mathbf{Availability} = \frac{\text{Operating Time}}{\text{Available Time}}$$

$$\mathbf{Performance\ (Eff.)} = \frac{\text{Actual Production}}{(\text{Capacity} * \text{Operating Time})}$$

$$\mathbf{Quality} = \frac{\text{Good units on the first pass}}{\text{Total units produce}}$$

$$\mathbf{OEE} = \text{Availability} \times \text{Efficiency} \times \text{Quality}$$

$$\mathbf{Product\ unit\ cost} = \text{material cost/unit} + \text{conversion cost/unit}$$

$$\mathbf{Kanban} = \text{Weekly Demand} * \text{Lead time} * \text{locations} * (1 + \%DV)$$

$$\mathbf{\%DV} = \frac{\text{Standard deviation of demand}}{\text{Average demand}}$$