

Supplementary 4. Formulas to calculate the costs per OR

In this analysis the formulas used to calculate the OR costs for both the hybrid and conventional OR were as follows:

Costs of the OR per hour =

$$\frac{\text{Annual construction costs} + \text{annual inventory costs} + \text{annual overhead costs}}{\text{Utilization rate} * \text{available production hours of OR}}$$

+hourly personnel costs

Costs of the OR per minute =

$$\frac{\text{Costs of the OR per hour}}{60}$$