

Capacity

Business & Management

Design, effective and actual capacity — and the two ratios between them.

Three capacity measures and the ratios they produce.

Measure	Means
Design capacity	Maximum theoretical output
Effective capacity	Realistic maximum, allowing for changeovers and maintenance
Actual output	What was produced
Utilisation	$\text{Actual} \div \text{design}$
Efficiency	$\text{Actual} \div \text{effective}$
Bottleneck capacity	The system's real ceiling

Running above about 85% utilisation makes queues grow sharply. High utilisation and short lead times are incompatible.