

	OVERALL EQUIPMENT EFFECTIVENESS (OEE)	BRASI Sample Forms & Procedures
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Overall Equipment Effectiveness is a combination of the operating equipment's performance and the amount of up-time. Equipment's performance is represented by its output speed and product quality, whereas the amount of up-time depends on the administrative and maintenance aspects.

The OEE formula is as follows:

OEE = % Available Time x % Performance x Quality

Example:

% Availability

Standard Hours = 8

Start-up, Breaks and Shut-down – 1 hour

Net Available Time = 8 – 1 = 7 hours = $7/8 = 87.5\%$

% Performance

Standard Production Rate = 100 units per minute

Actual production Rate = 95 units per minute

Performance = $95/100 = 95\%$

% Quality

Standard Scrap Rate = 0.5% or Quality Output = 99.5%

Actual Scrap Rate = 0.8% or Quality Output = 99.2%

Quality = $99.2/99.5 = 99.7\%$

OEE = 87.5% x 95% x 99.2% = 82.5%

Equipment manufacturers commit to a certain level of performance of their equipment to standard conditions and inputs. The remaining factors are managed by the user.

OEE is used in developing capacity profiles of manufacturing equipment as well as budgets and production plans, therefore, it should be reviewed and updated on a regular basis.