



## ***Update on OEE Measurement Learnings***

We continue to have a lot of discussions regarding the value and limitations of the OEE measure application as a driver for improvement.

### **Is OEE the most appropriate measure?**

If a production line's performance depends predominantly on the performance of the equipment, then OEE can be a very relevant driver for improvement, if however the performance is predominately dependent on **people** performance (especially if numbers can change and output rate can change as in the manual assembly of a product), then OEE may not be the relevant driver for improvement.

If people performance is the dominant factor then a relative productivity measure eg output per man-hour may be more appropriate to prioritise improvement activities. If output rate can vary due to different products being produced on the same line, then an equivalent output per man-hour measure may be required.

### **A Company Example**

An example of this was seen at a site that produced a range of garage doors. The metal for each door was stamped out and folded by the equipment then the door was assembled by a group of operators. Depending on the type and size of door, the assembly time would vary. As such to get a realistic indication of the capacity of the line they developed an 'equivalent' door rating for each range of doors so that they could monitor good output per man-hour performance of each door line. Provided the required output was on track they could progress their allocated Area Based Team improvement activity time for weekly Work Area Management / Operator Equipment Management activities.

### **Key Learning**

***OEE should be seen as a 'driver' for improvement rather than a comparison performance measure between lines or plants.***

This is why CTPM has developed the **OEE Improvement Matrix** as an effective tool to determine the Baseline (current performance), and what the 3 year Vision for OEE should be based on agreed 'business needs' assumptions such as number of changeovers required each week etc. This allows the Gap from the Baseline to the Vision to be monitored so that the % Gap Closure can become a realistic comparative between other lines and plants.



## OEE and Loss Definitions

Another challenge we have come across is the use of various definitions for OEE and its Losses by different sites within a company as well across various CTPM clients.

***Definitions of OEE and its Losses need to be consistent within the company.***

***The OEE and Loss definitions need to help identify opportunities for improvement, not hide them.***

## Creating Time for Continuous Improvement activity

***We have learnt that OEE should have a 100% correlation to Good Output.*** This way Leadership Team decisions can be made about allocating time for On-going Area Based Team Improvement activities for Operators, especially if the line is required to stop for the activities. For Example, if OEE target is being met (based on at least 5% more than the Production Plan requires), then 5% of On-going Area Based Team Formal Continuous Improvement Time per week can be locked into the Production Schedule to develop Operator and Team Leader Mastery Skills and Team Skills.

If OEE targets are not met, then everyone (shopfloor and management) knows that the customer comes first, and Area Based Team Formal Continuous Improvement Time may have to be deferred. Obviously there should also be a Root Cause Analysis conducted to determine why this has happened so that appropriate corrections can be taken to ensure it doesn't happen again and improvement time can be allocated on a regular basis.

***For more information about CTPM's OEE Improvement Matrix along with brief instructions on how to develop one for a line, please contact your CTPM Navigator or CTPM Head Office on +61 4226 6184 or email to [ctpm@ctpm.org.au](mailto:ctpm@ctpm.org.au).***