



Stop Cause Classification Guide

OEE 1: Loss during operation (red)

The OEE 1 measure is associated with the time that the production line is scheduled to be running. In an ideal world, the OEE 1 measure would be equal to 100%, meaning that the line would simply be running at its validated speed. Several circumstances can, however, cause the line to stop or run slower than expected. These stops are unplanned and redundant in nature. Below are some examples of circumstance categories and specific stop causes:

| Category | Stop Cause | Description/Comment |
|------------------|-------------------------------|---------------------|
| Machine Defects* | Malfunction of Machine-Part X | |
| | Re-set of Machine X | |
| Process Defects* | PO Missing | |
| | Material Missing | |
| | Jam at Machine X | |
| | Breakage of Material X | |
| Waiting | Print Fault | |
| | Consulting Expert | |
| | Waiting for Operator | |
| | Waiting for Material | |
| | Waiting for Maintenance | |
| Utilities | Maintenance in-progress | |
| IT | Power Cut | |
| IT | Computer Down | |
| | Network Issue | |
| Cleaning | Cleaning after Breakage | |

**Note: If there are many stop causes related to the specific machines/processes, it makes sense to define categories for each of those machines/processes!*

OEE 2: Loss during batch changeover (yellow)

The OEE 2 measure is associated with the time that the production line is not running due to batch changeovers. These stops are planned in nature, meaning that it is anticipated that the line will regularly stop for changeover activities between batches. Below are some examples of activity categories and specific stop causes:

| Category | Stop Cause | Description/Comment |
|------------------|--------------------------|---------------------|
| Batch Changeover | Preparation of Machine X | |
| | Retooling of Machine X | |
| | Quality Check | |
| | Start-up Time | |
| Resupply | Resupply of Product X | |
| | Resupply of Label X | |
| | Resupply of Packaging X | |
| Cleaning | Cleaning at End of Shift | |
| | Weekly Cleaning | |



OEE 3: Loss due to non-production activities (grey)

The OEE 3 measure is associated with the time that the production line is not running due to other activities. These stops are planned in nature, meaning that it is anticipated that the line will regularly stop for these activities to be performed. Below are some examples of activity categories and specific stop causes:

| Category | Stop Cause | Description/Comment |
|----------------------|------------------------|---------------------|
| Planned Maintenance | Preventive Maintenance | |
| | Auto-Maintenance | |
| Validation | Validation Test | |
| Personnel Activities | Break | |
| | Team Meeting | |
| | New Operator Training | |
| | Other Training | |

TCU: No activity at line (blue)

The TCU measure is associated with the time that the production line is not running because there is no activity at the line. These stops are planned in nature, meaning that it is anticipated that the line will not run during these periods of time. Below are some examples of specific stop causes:

| Category | Stop Cause | Description/Comment |
|---------------------|---------------------|---------------------|
| No activity at line | Weekend | |
| | Holiday | |
| | Non-Production Time | |