

# PLC300 Project

You need to extend the features of the OEE project. The previous calculation needs to be verified by re-writing the C++ code. There has also been a request to set a target value for OEE and create an alarm associated with it. This is set through Node-Red. A report also needs to be generated from logging the OEE value.

## [1.5] eHMI

On the HMI, you need to add:

- [0.5] Add text with background to indicate whether the actual value </> than target
- [1] Add remote (Node-RED) and local (AI) control for giving target value

## [3] C++ Integration

Create an OEE library in C++ to calculate the OEE from the availability, performance and quality metrics

## [1] Datalogger

Manual XML creation for logging the target OEE value on change

## [2] Python

Generate a report from the target OEE value database. This should be downloadable

## [0.5] REST

Use browser or other to show values using a HTTP request

## [3.5] Node-Red

- [1.5] Show OEE value
- [2] Change target value from UI

## [10] Data mapping

- [5] MODBUS
- [5] PNIO

## [0.5] OPC UA Historical Access

OEE value available for historical data access

## [1] Library

Release a library that is used in the project (e.g. Datatypes/FB/FU/HMI)

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## Units

- Time – minutes
- Quantity – PC
- OEE – Percentage

**Minimum mark 15/23**