



@rgemas MES

Production Management System

Industry 4.0 applications

www.argebilisim.com



OEE Measurement

It is a Lean Production tool that measures the effective utilization rate of machines. It is a module developed for the effective use of machines.



Machine Stop Measurement

It is a module that can automatically measure the planned and unplanned downtime of the machines together with their causes.



Real-Time Data Sharing for the Supply Chain

It is a real-time data sharing module with the focal company of the supply chain, other suppliers and customers.



Traceability

This module provides traceability for each product in terms of material, labor, quality and energy.



Work Plan Preparation (Rotation)

A planning module with an operations bank, work plan (routing) and calculations needed for pricing, scheduling, OEE measurement, productivity measurement and performance measurement.



Real-Time Production Tracking

Each order is tracked in real time on the basis of its specifications, line entry-exit quantities. In external production, it is the software module that collects and reports the quantity and quality data of the manufacturer over the internet.



Time & Action

With the Time & Action module, the time planning of the order project is made and the realization of the plan is recorded and reported.



Production Scheduling

@rgSchedule has been developed for easy scheduling of even very complex production processes. With this module of @rgemas, you can create as many scheduling scenarios as desired and the best one can be assigned as the actual schedule. This is the module where the scheduling process is realized.



Productivity Measurement

In assembly lines, productivity is the metric of the ratio of labor converted into intermediate product or product to labor expended. With @rgemas MES, productivity is measured in real time to improve productivity.



Lost Time Measurement

In assembly lines, the time wasted due to factory-related reasons is called lost time. In order to improve productivity, lost time is measured and minimized.



Performance Measurement

In assembly lines, performance is the measurement that gives the metric of the labor force that could have been converted into work if there were no lost time. To improve performance, @rgemas MES measures performance in real time.



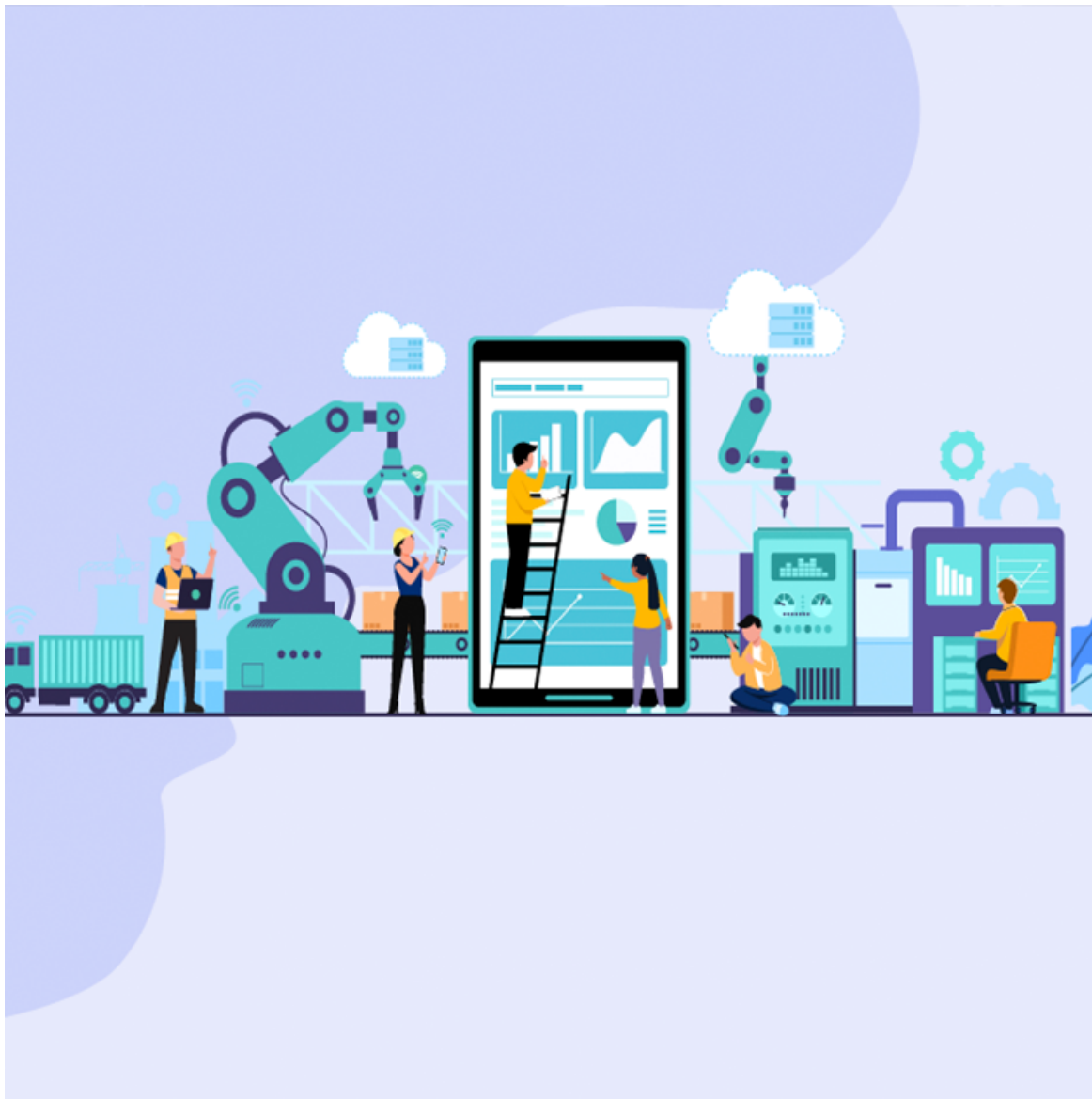
Standard Time Measurement

It is the module used for accurate measurement of operation standard times.



Method Analysis and Standard Time Measurement with MTM

It is the module used for the measurement, optimization and standardization of operation standard times with universal accuracy. With the MTM module, not only time analysis but also method analysis can be performed.



Line Balancing & Automatic Assignment

Sophisticated planning tool developed using data sciences (artificial intelligence) to improve productivity and quality. It establishes the most optimum bands and prevents the dramatic decrease in the efficiency of the band in case of absenteeism.



Internal Non-Conformity Entry Module

This is a quality control module where data entry is performed during in-process and/or post-process quality checks, and if there are any discrepancies, it initiates Non-Conformance Reports (NCRs).



Raw Material Quality Measurement

Material Quality Control Module for Conducting Quality Checks Before Processes, Particularly to Prevent Bottlenecks from Occurring and Causing Waste by Occupying the Process



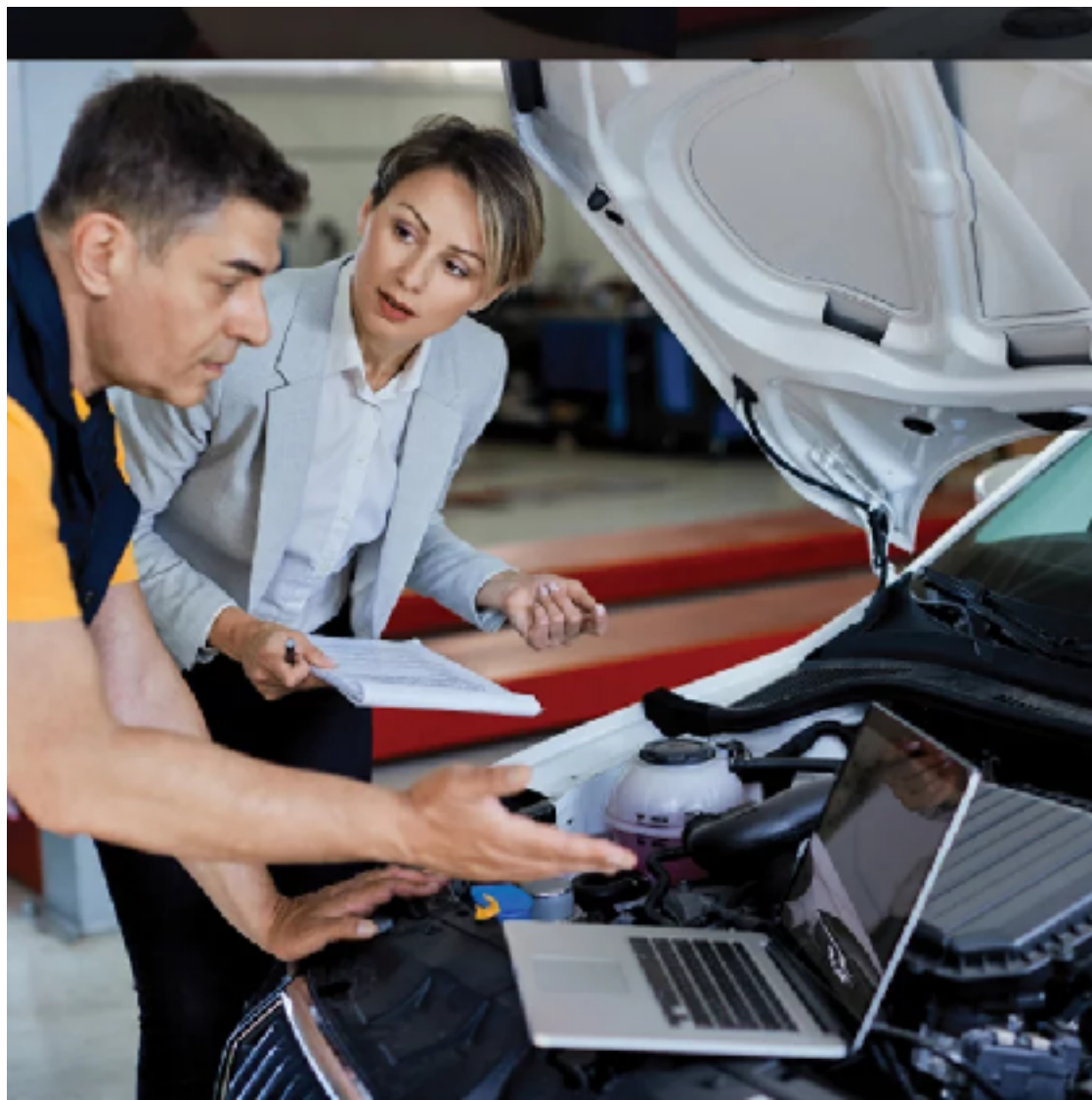
Statistical Process Control (SPC)

This is a type of quality control conducted over randomly selected samples within the process to prevent the continuation of systematic errors, if any. Its aim is to prevent defective products or semi-finished goods from reaching the end of the line. This is the quality control module where the quality is measured.



End-of-Line Process Control

This is 100% quality control conducted at the end of the process. Its aim is to prevent defective products from proceeding to the next process. This is the quality control module where the quality is measured



Final Quality Control

This is 100% quality control conducted at the end of production. It aims to prevent defective products from being packaged. This is the quality control module where the quality is measured.



Inspection

This is quality control conducted by opening selected boxes in a directed probabilistic sampling manner after production and after the products are packaged and boxed. It is aimed at preventing defective products from reaching the customer. This module is used for conducting this type of quality control. Additionally, this module can also be used for raw material quality control.



Short Follow-Up, Long Follow-Up, and Bottleneck Management Modules

These modules are used for activities aimed at improving productivity and quality, such as reaching the source of inefficiency and/or quality issues, collecting data from the source, analyzing it, and implementing improvements



Machine Maintenance & Repair

The machine breakdown tracking module aims to minimize machine downtime due to faults. The machine maintenance module is where machine maintenance is planned and its implementation is monitored.



Predictive Maintenance

Predictive maintenance is the automatic notification of relevant personnel when maintenance needs arise, even if the scheduled maintenance time has not yet arrived. The purpose of predictive maintenance is to prevent a decrease in quality, minimize machine downtime, and consequently prevent efficiency loss. Arge Bilişim has developed software and IoT (data collection terminal) hardware modules for predictive maintenance.



Bonus System

The distribution of a portion of the profit earned above the target profit to employees is called "giving bonuses." Bonuses are used to incentivize and improve productivity and quality. This module calculates and applies bonuses for each employee.



Fair Wage System

It can be defined as a module that categorizes each operator according to their skills and gives equal pay for equal skills and work. It is aimed that the wages of the employees are fair. It is the module where salaries are calculated and applied.



Template Module

It is the module used especially by the sales department to create fast and accurate prices. It is the module where work plan routes are created quickly.



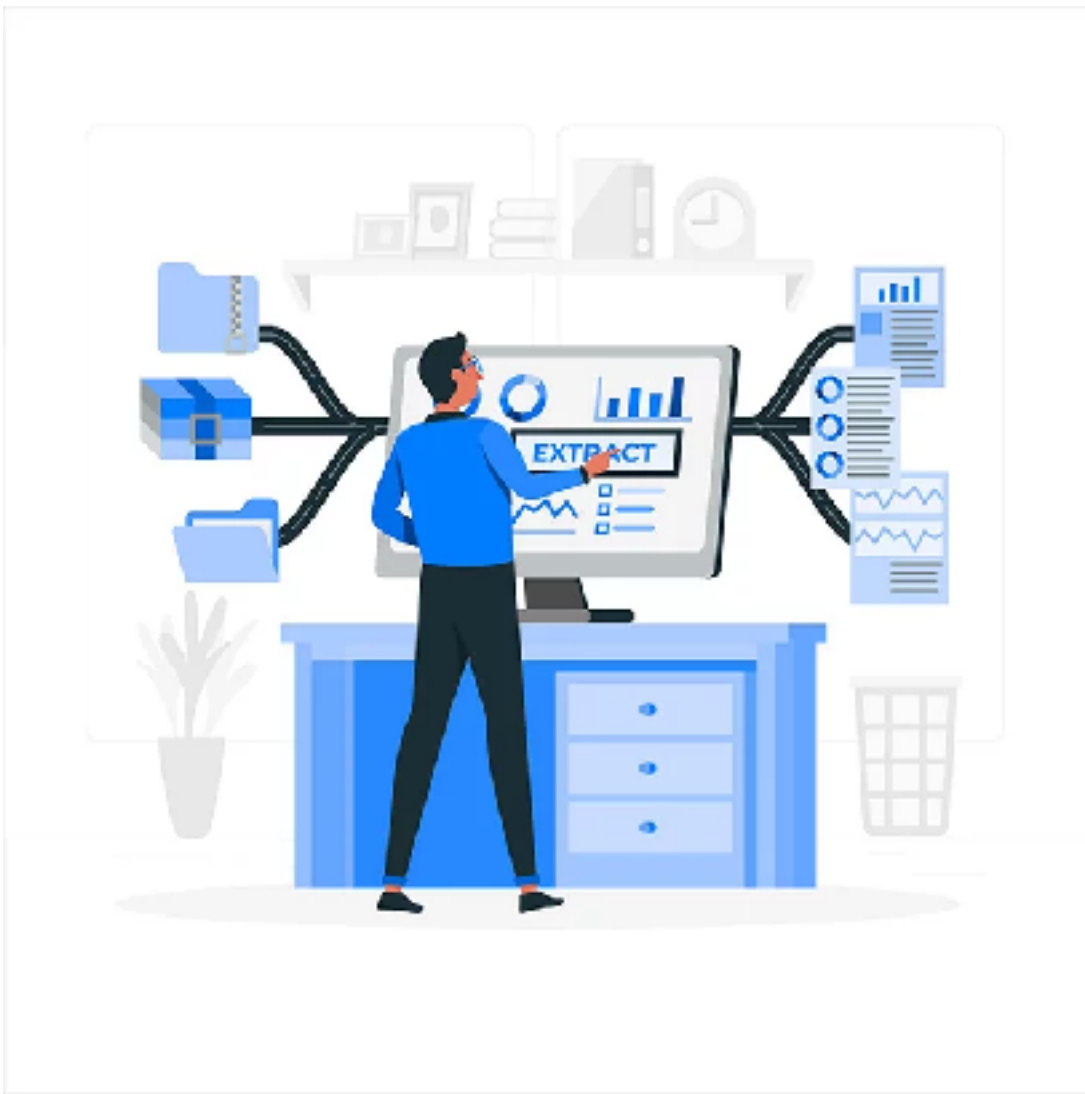
Personnel attendance control system (PACS)

It is the module used to perform personnel attendance control and payroll transactions.



Mobile Reports

OEE, production quantity, productivity, efficiency, performance, quality, premium, etc. reports are obtained using web and mobile hardware.



Software Integration

Software service for the integration of @rgemas with other software used by the company. More than 30 @rgemas integrations with other ERP and/or accounting software have been realized.