

MOX IT

SYSTEM OEE
(Overall Equipment Effectiveness)

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SCHEDULE

- General description.
- System architecture.
- Benefits.
- Main functionalities and characteristics.

GENERAL DESCRIPTION

- WHAT IS IT?
- The OEE is an indicator that **measures the efficiency** of industrial machinery and is used as a key tool within the culture of continuous improvement.

GENERAL DESCRIPTION

- WHAT IS IT FOR?
- Quantify the productivity and efficiency of production processes.
- What is measured can be managed and improved.
- Indicate by means of a percentage, the real efficiency of any production process.
- Identify and eliminate possible inefficiencies that originate during the manufacturing process.

GENERAL DESCRIPTION

- % AVAILABILITY

Quotient of Productive Time, between Available Time, for a given production period. It is affected by the stops that occur in the manufacturing process such as: machine starts, changes, breakdowns and waiting.

- % PERFORMANCE

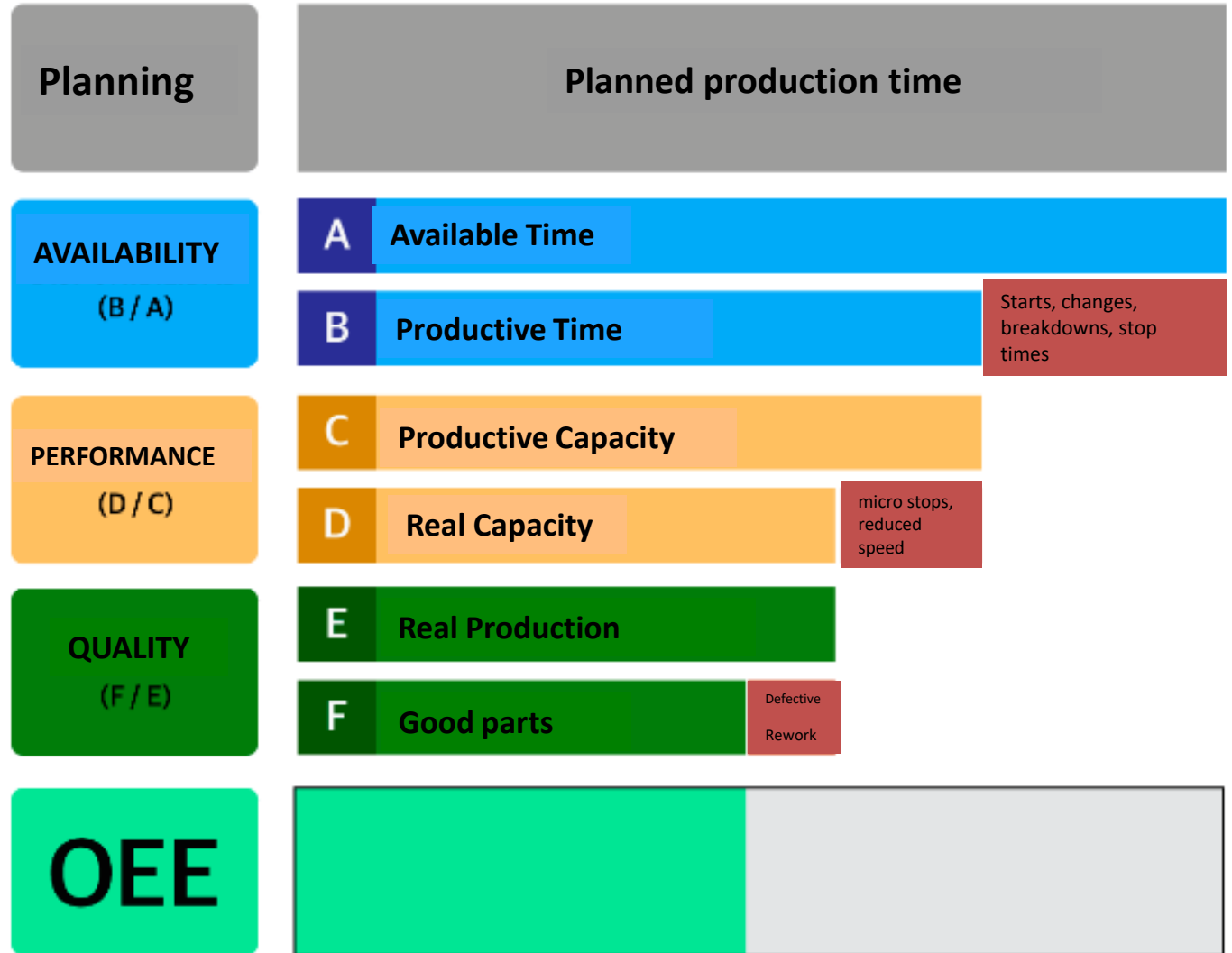
Quotient of Real Production, between Productive Capacity, for a given production period. Performance is affected by production speed.

- % QUALITY

Quotient of Good Production, between Real Production. The quality percentage is hampered by rework or defective parts.

- OEE: (% Availability) x (% Performance) x (% Quality)

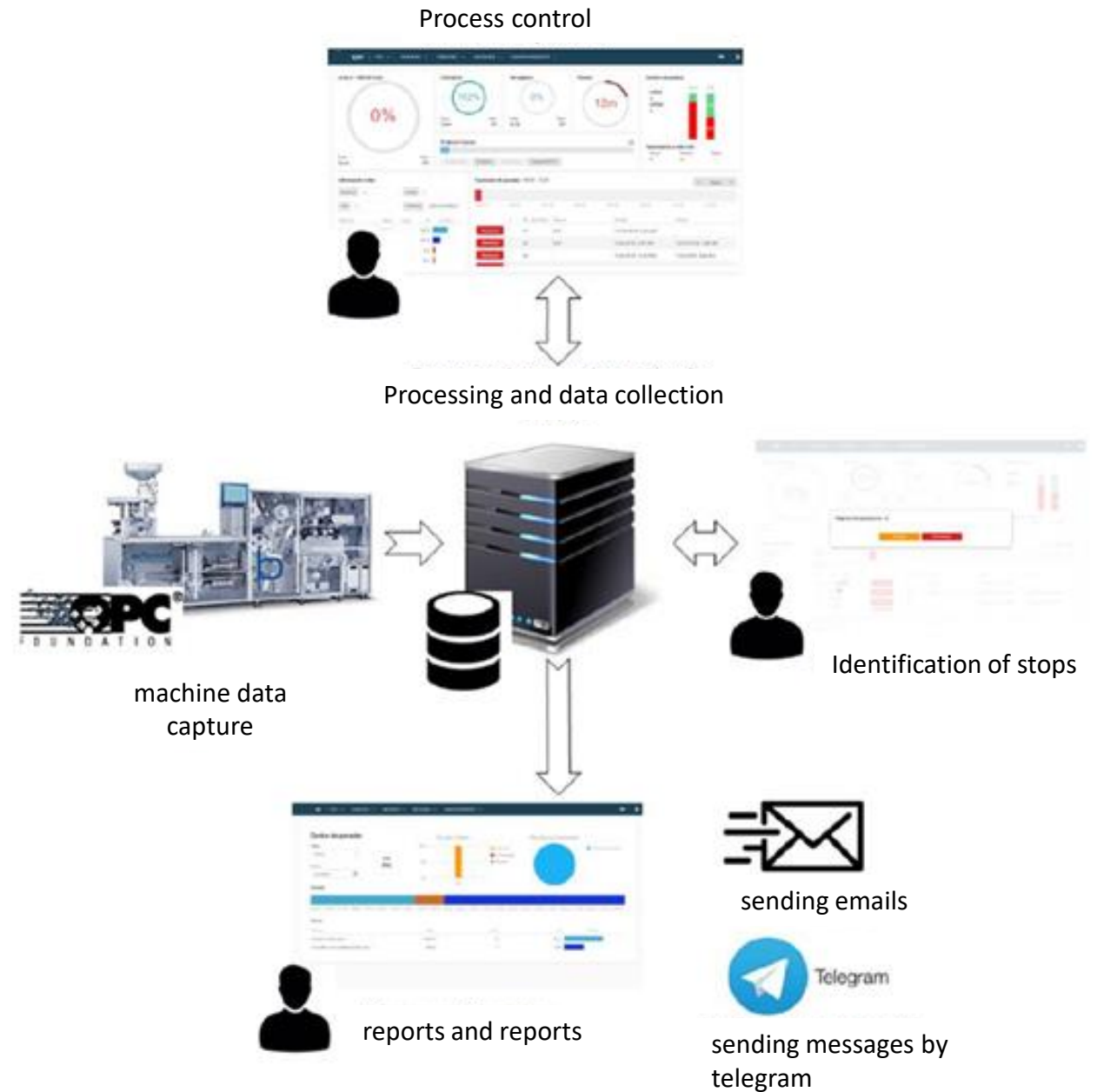
GENERAL DESCRIPTION



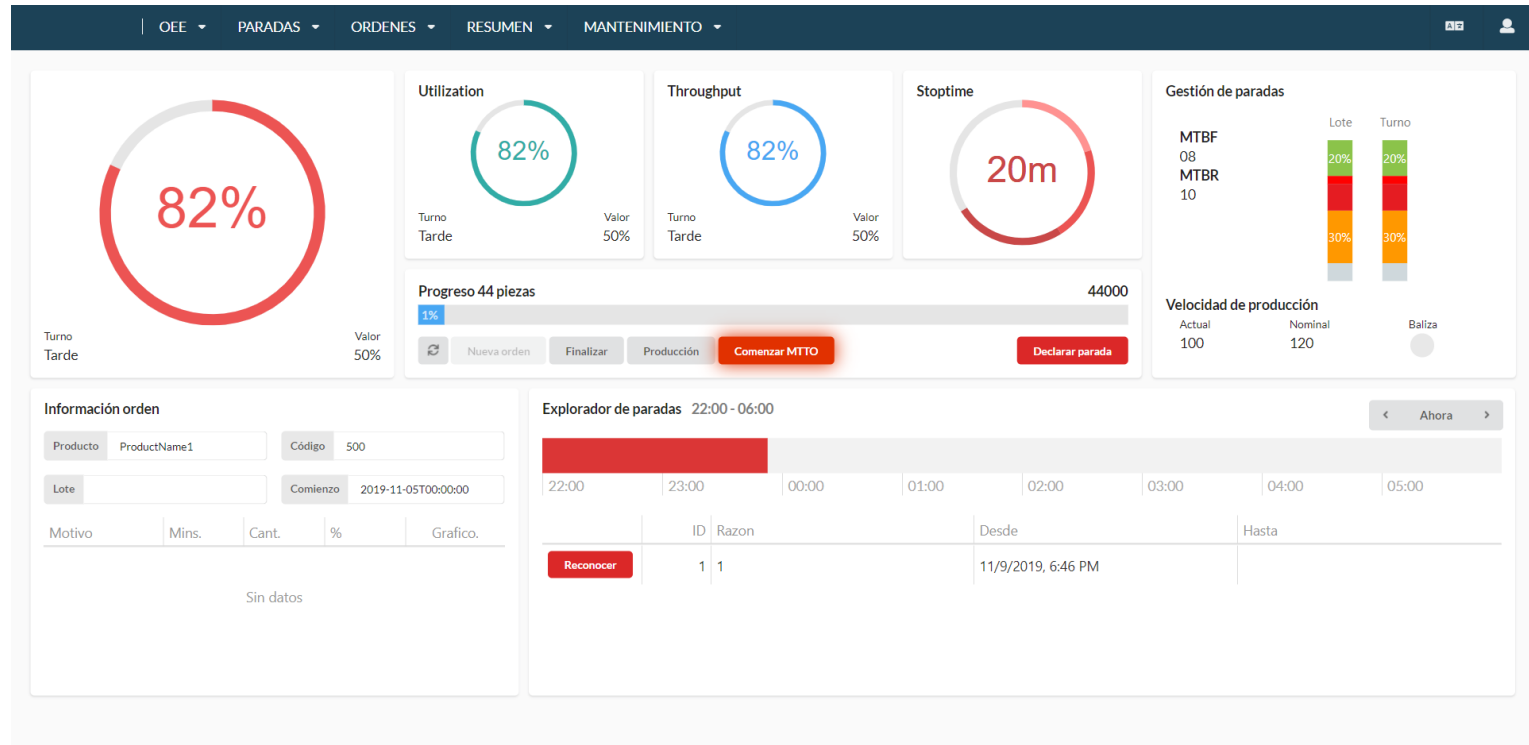
GENERAL DESCRIPTION

- The OEE System is a web-type software that **allows to measure the efficiency of the equipment in real time**, mainly to know the stops of the machines and their causes.
- The system can be connected to the machines (supports different technologies) and, in this way, **know if it is stopped or running immediately and its production status**.
- The system accumulates the periods when the machine is not working and asks the operator to declare the reasons why it was stopped. This **allows a better evaluation of why the machine is not productive** (it may be due to a machine failure, maintenance, personnel training, etc.)

SYSTEM ARCHITECTURE



MAIN SCREEN



BENEFITS

- Quantify the productivity and efficiency of production processes.
- What is measured can be managed and improved.
- Indicate by means of a percentage, the real efficiency of any production process.
- Identify and eliminate potential inefficiencies that originate during the manufacturing process
- Identify hidden costs.

BENEFITS

- THE SYSTEM ALSO ALLOWS TO KNOW:
 - Number of stops and time of each one.
 - Causes of each of the stops.
 - Production speed with respect to nominal speed.
 - Efficiency of each shift.

FUNCTIONALITIES AND MAIN FEATURES

- Visualization of the indicators by operation terminal (Dashboard).
- Custom screens design.
- Monitoring of machine stops.
- Recognition operations of a stop.
- Call for maintenance.
- Visualization of summaries of stops.
- Viewing the status of orders.
- Reports generation.
- Viewing the status of all the integrated machines on a single screen.
- Viewing the OPC connection status.
- System administration.
- Configurable notifications by email and / or by Telegram.
- Electronic signature.

AUTOMATION

- The system needs to be connected to the machines, for this we can connect to the PLCs of the machines, or do the automation task that is required.
- Simple automation :
 - For the **usage indicator**, it is only required to know if the machine is on or off (beacon signal).
 - For the **Performance indicator**, it is required to know the quantity of pieces produced.
 - For the **quality indicator**, it is required to know the quantity of discarded pieces.
- **NOTE:** For each indicator there is always the possibility of entering the data manually.

MOX IT



Thanks!

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