


PROCESS CONTROL
& Engineering

A decorative graphic consisting of three parallel white lines that resemble a circuit board trace. Each line starts with a small circle on the left and has several right-angle turns as it extends to the right.

SCADA MONITORING SYSTEM

SCADA Monitoring System

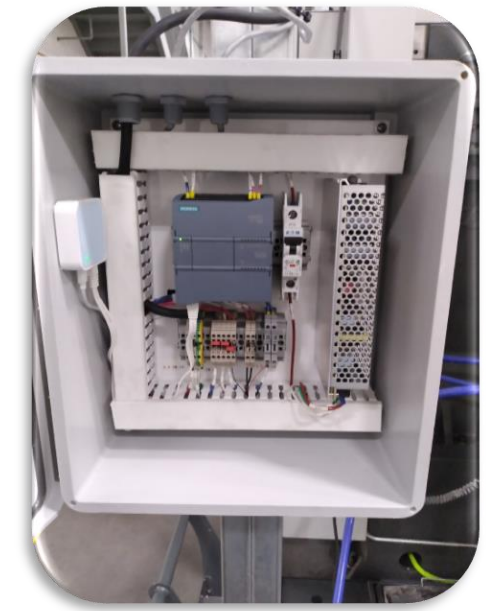
Our SCADA Monitoring System is designed and developed to bring you a better control in the manufacturing process and visualization of working cycles, helping you to improve the efficiency by processing data for smarter decisions, and communicating system issues to help mitigate downtime.

- Reports, graphs, and data customized to the customer's unique needs
- Control industrial processes locally or at remote locations
- Data access via web-based HMI, optimized for computers, smartphones, and tablets
- Monitor, gather, and process real-time data
- Highly flexible, customized alarm scheduling

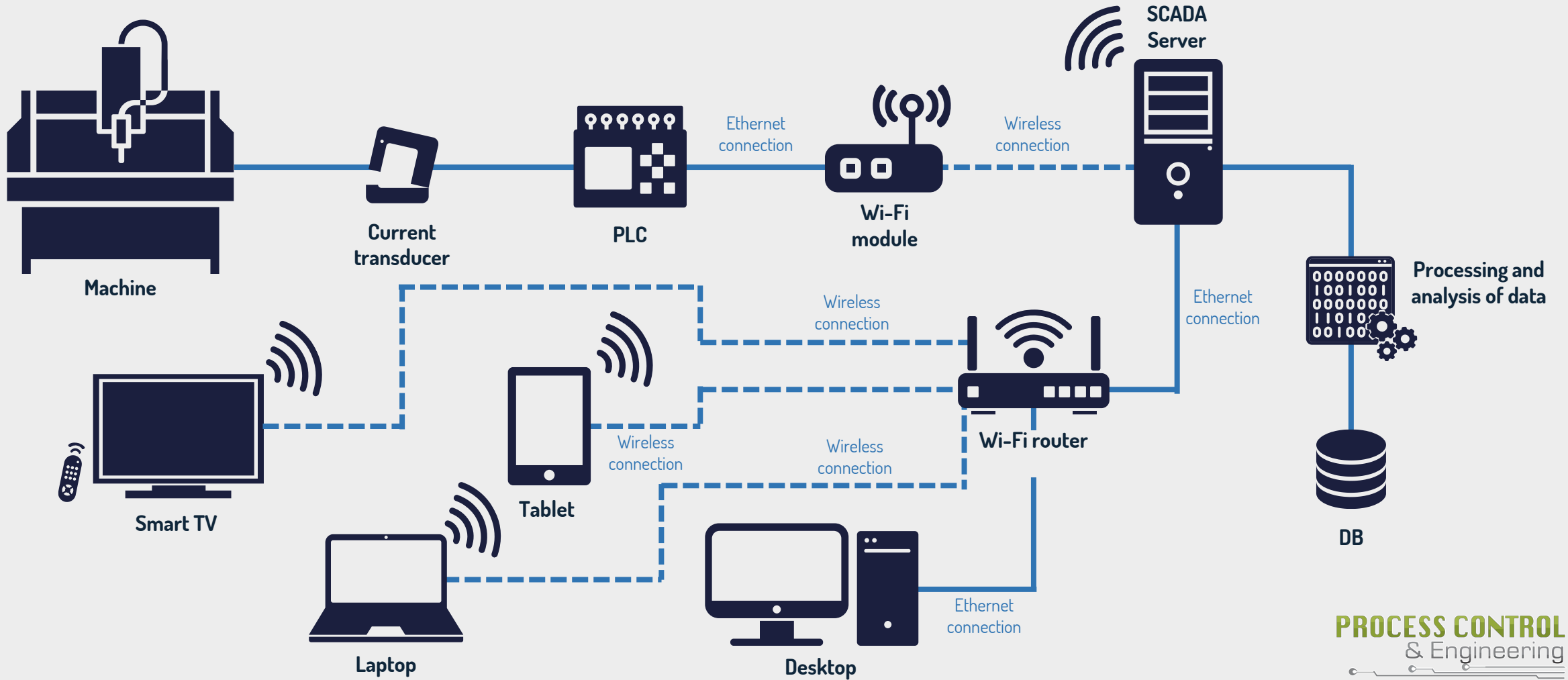
Control System (PLC)

The system uses a PLC to obtain the status of the machine through current transducers, which are strategically installed at different points on the machine.

- Control Cabinet
- PLC Programming
- Wireless connection with server



SCADA Monitoring System



Home

Home screen, is made up of a dynamic left side menu that shows the different options to access the screens according to the user level.



Settings

- Register of contacts to send emails and warnings of machines that have presented a stoppage
- Machine configuration, name and description.
- Configuration of specific parameters from the controller (PLC).

PLC SETUP

TIME SELECT REASON

MINUTES

TIME TOOL CHANGE

SECONDS

Notification setup

Contact List

Contact #

Contact Information:

Name

Area

Email

Phone number email

Phone number

NEW REGISTER DELETED USER Exit

Exit

MACHINE SETUP

Actual Name: 3026 HAAS VF2

New Name:

Description: #####

New Description:

SAVE

Machine status:

Exit

Access levels

For greater control of the system, access levels are designated that allow personnel to access or restrict the different screens of the system.

The screenshot displays a web-based interface for reporting reasons. At the top, the date and time are 04/19/2021 06:35:38. The main title is 'Report Reasons'. A left sidebar contains a 'MENU' with categories: Reasons, Reports, Alarms, Notification Setup, Machine Setup, and Previous. The main content area is divided into several sections: a grid of 'Reasons' (including SETUP, No Job, Waiting FAI, Waiting on Material, Waiting on Repairs, Waiting on Tools, Break Time, Lunch Time, No operator, and others), 'MACHINE: 3026 HAAS VF2' with a small image, 'MACHINE STATUS' with two gauges for CT MAIN and CT SPINDLE, and 'Operation Time' showing 1% (red) and 99% (green). A 'Load' button is at the bottom. A 'Log On' dialog box is overlaid, showing 'Current user: Guest', 'User Name:' and 'Password:' input fields, and 'OK', 'Cancel', and 'Log Off' buttons.

- Machine operators
- Supervisors
- Managers

Dashboard

The desing of dashboard is complete costumizable, and oriented to the client needs. It includes real time visualization of machine statuses and use percentages based on operationg times.



Event report

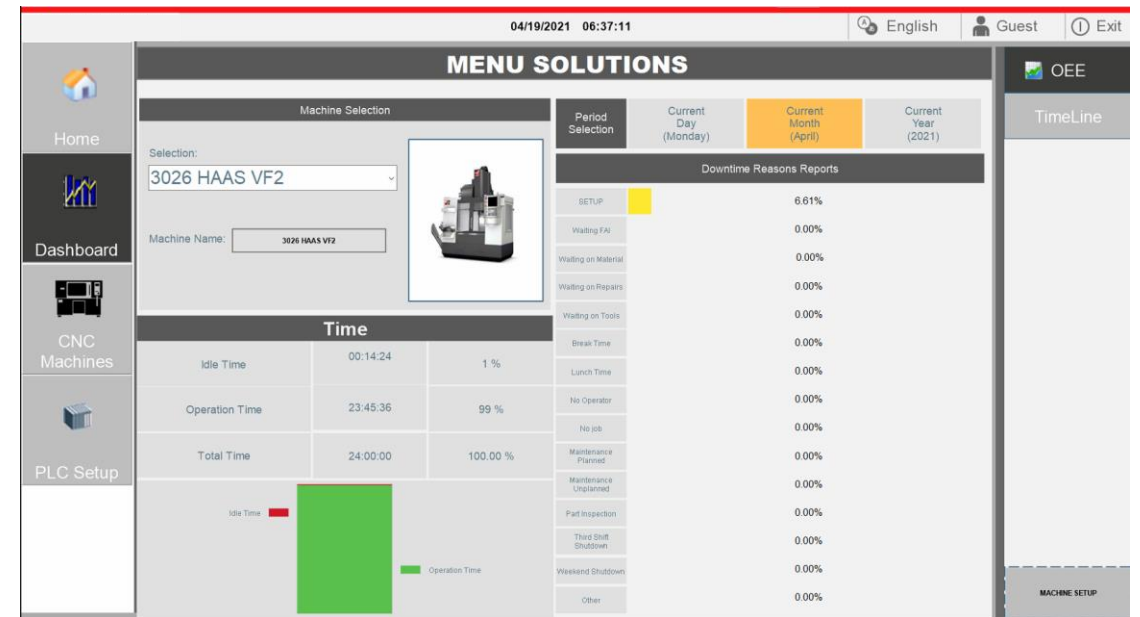
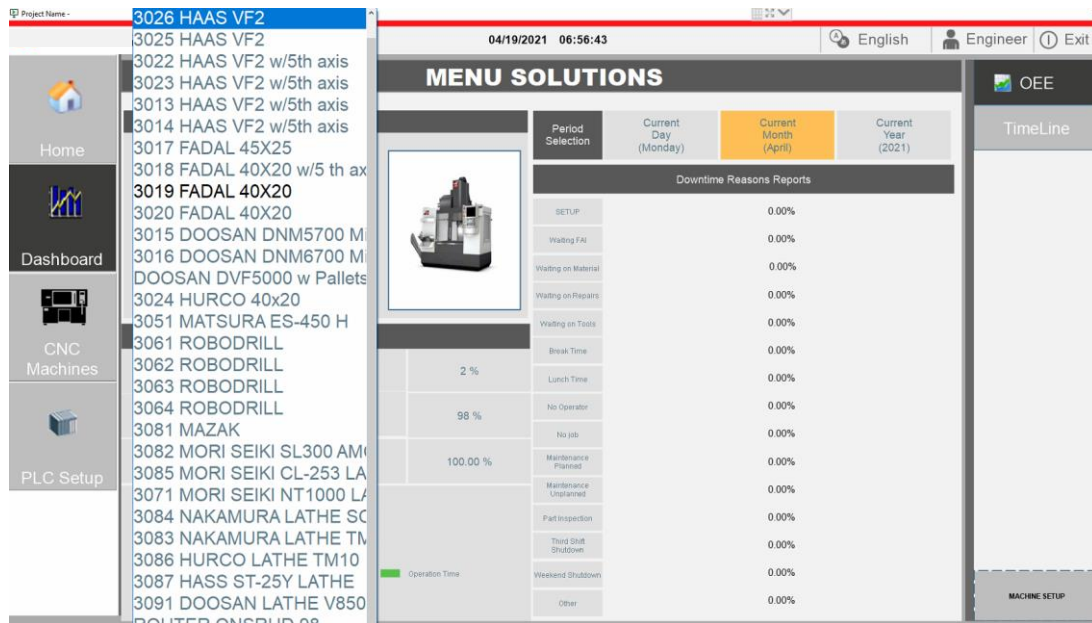
Report screen, allows to report an event for the selected machine.

The screenshot displays the 'Report Reasons' interface for machine 3026 HAAS VF2. The top bar shows the date and time (04/19/2021 06:35:13) and navigation options (HOME, Log On, Exit). The left sidebar contains a 'MENU' with options: Reasons, Reports, Alarms, Notification Setup, Machine Setup, and Previous. The main area is titled 'Report Reasons' and features a grid of reason categories: SETUP, No Job, Waiting FAI, Maintenance Planned, Waiting on Material, Maintenance Unplanned, Waiting on Repairs, Part Inspection, Waiting on Tools, Third Shift Shutdown, Break Time, Weekend Shutdown, Lunch Time, and Other. Below the grid, there is a 'No operator' button and a text input field. To the right, the 'MACHINE STATUS' section includes a photo of the machine, two current gauges (CT MAIN and CT SPINDLE), and two large performance indicators: 'Idle Time' at 1% (red background) and 'Operation Time' at 99% (green background). A 'Load' button is positioned at the bottom center.

- The data is obtained from the machine and you can just add a small comment with specific information of the event.
- The data is stored in a data base.
- Operation times are calculated in real time.

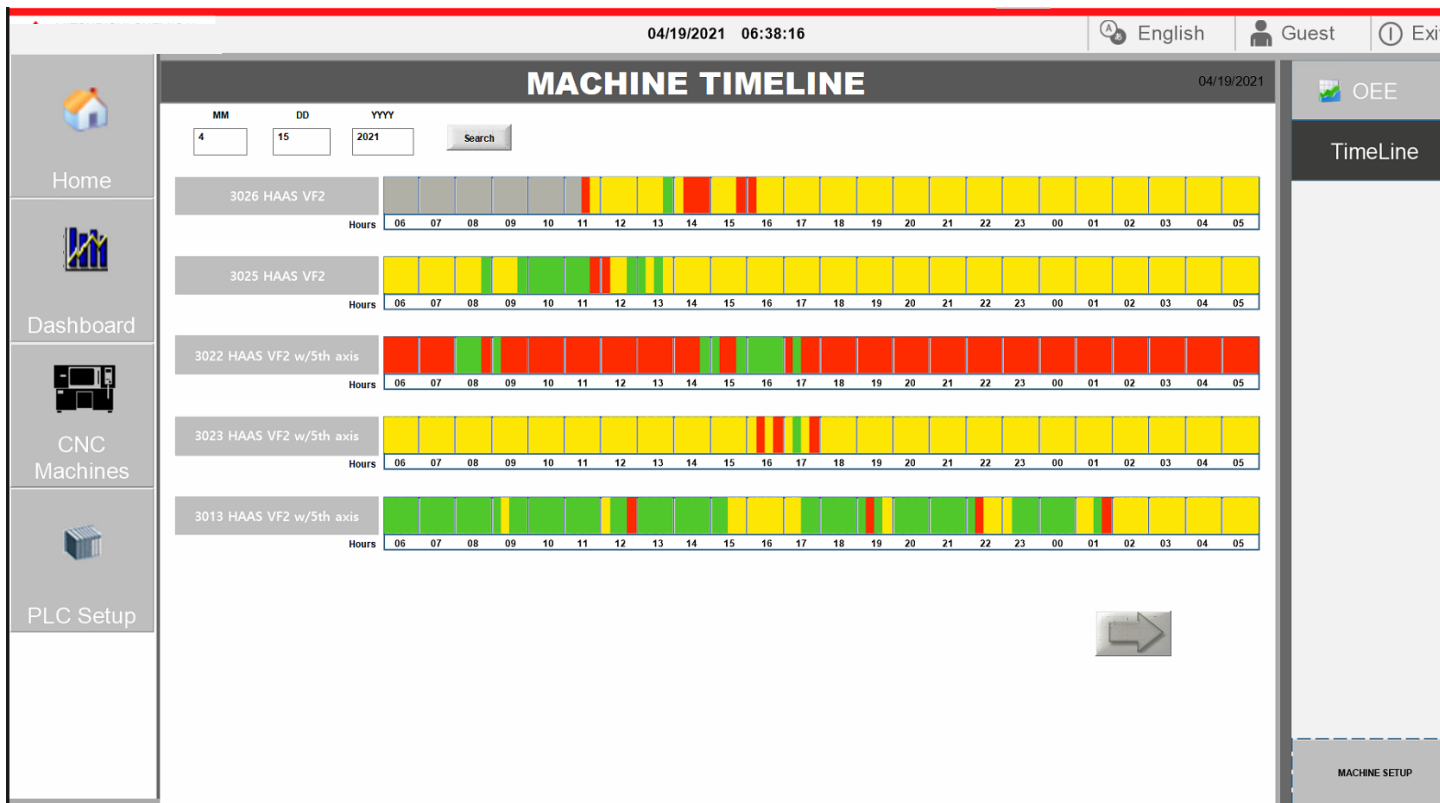
Engineering Dashboard

- The engineering dashboard shows the details of each machine in the system,
- shows a list with all the machines,
- shows the operation time and the idle time that has been obtained so far throughout the day,
- shows the reasons of the machine stoppage, presented in percentages of time (daily, monthly and yearly).



Timeline

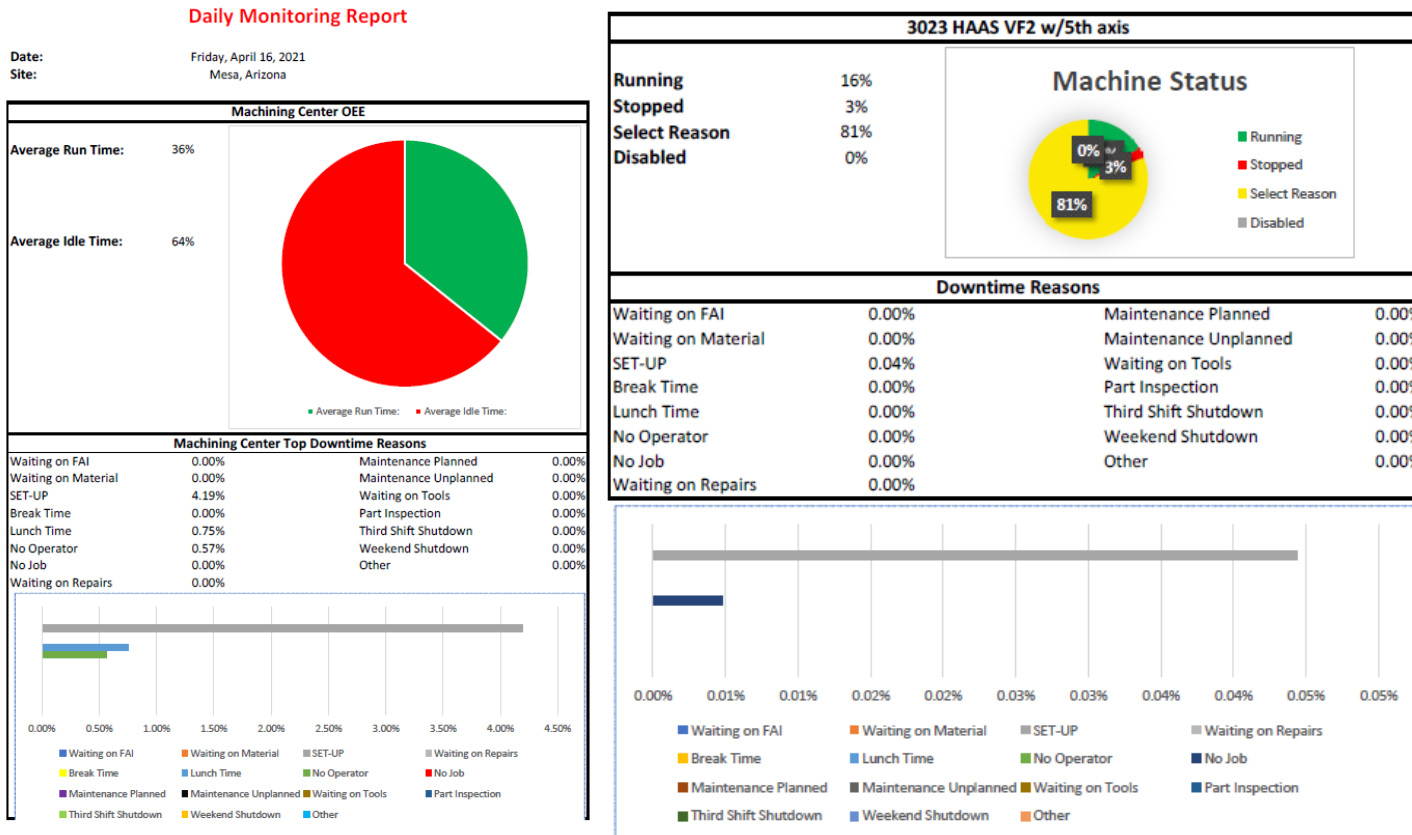
This screen shows the different states that were obtained from the machines during the day in a timeline.



- A history of each machine is stored.
- Work time (green), stop time (red), idle time (gray) and reason selection (yellow).
- It allows you to consult any date registered in the system.

Automatic reports

The system allows the creation of automatic reports that are generated according to the data collected from the machines and stored in the database.




Sending reports via e-mail:

- Daily reports
- Monthly reports
- Annual reports

You are in good hands

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