



Digital Way Group

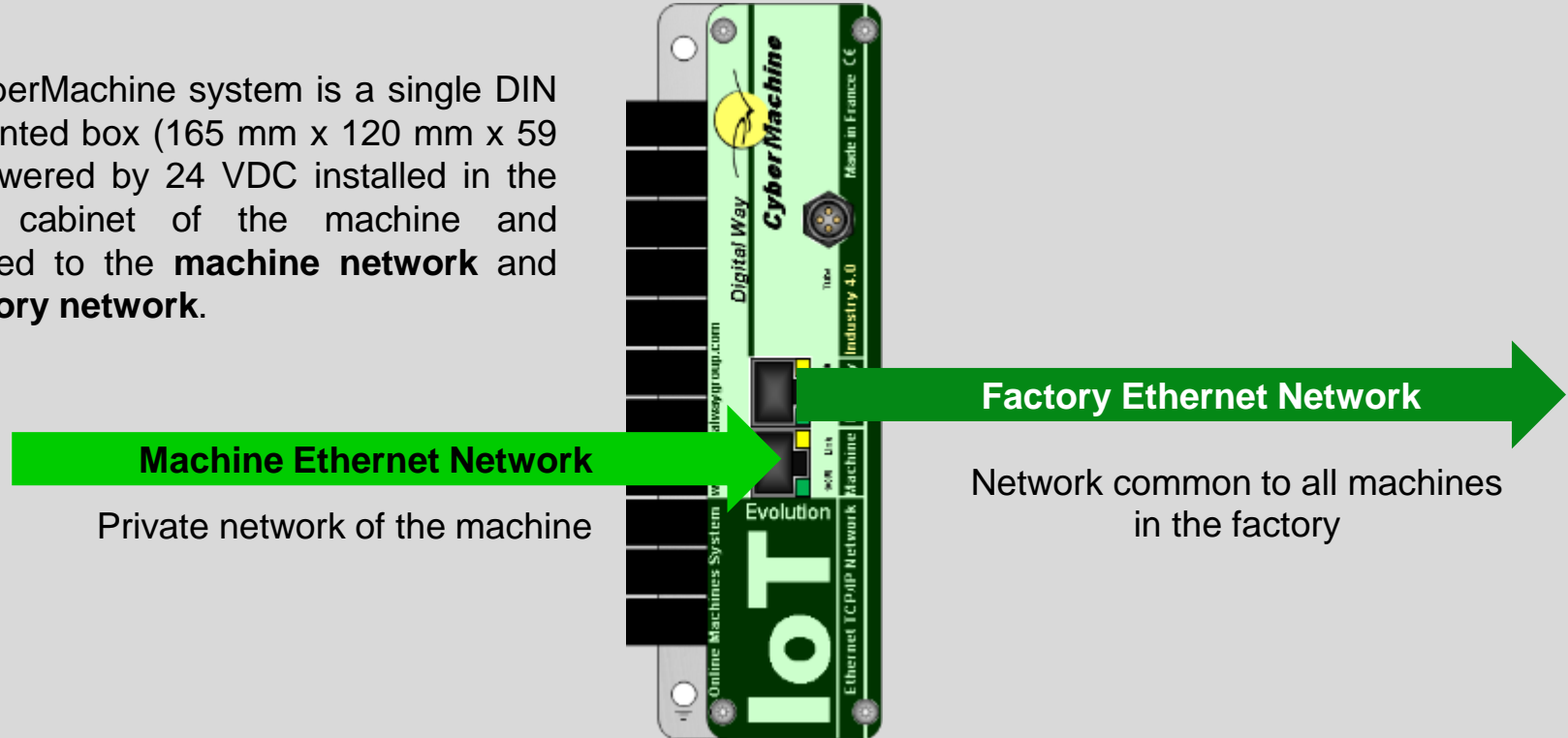
WORLDWIDE LEADER IN POWER MONITORING

Industrie 4.0

CyberMachine – Waht is it ?

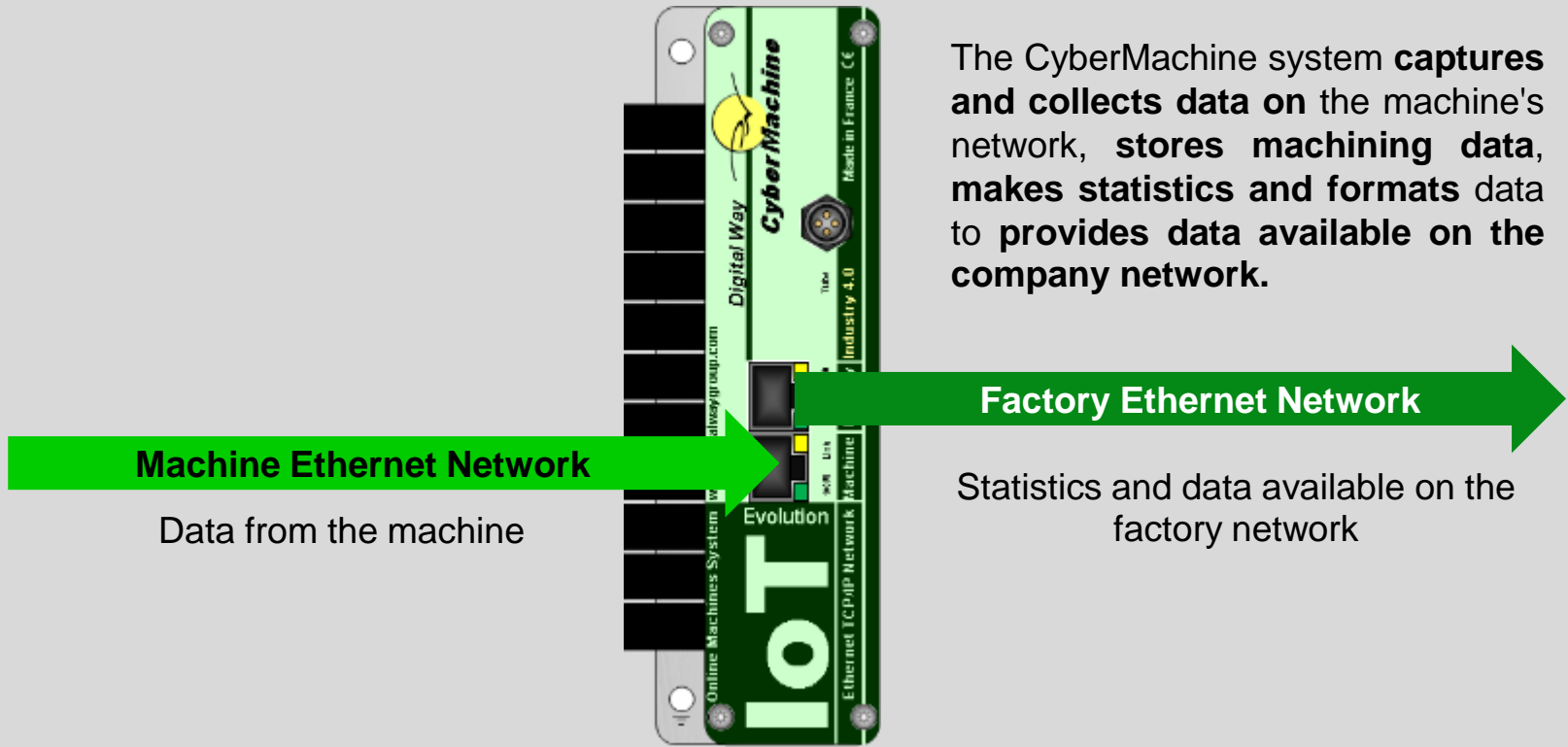


The CyberMachine system is a single DIN rail-mounted box (165 mm x 120 mm x 59 mm) powered by 24 VDC installed in the electric cabinet of the machine and connected to the **machine network** and the **factory network**.



Industrie 4.0

CyberMachine – For what ?



The CyberMachine system **captures and collects data** on the machine's network, **stores machining data**, **makes statistics and formats data** to **provides data available on the company network**.

Machine Ethernet Network

Data from the machine

Factory Ethernet Network

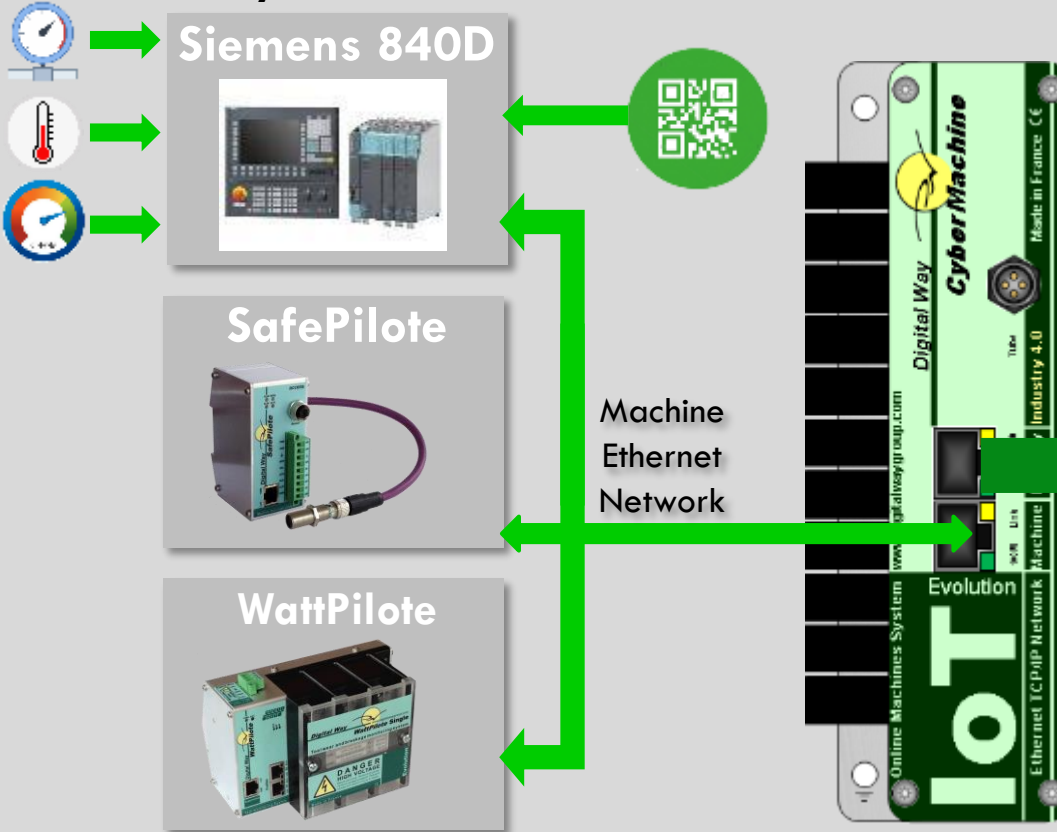
Statistics and data available on the factory network

Industrie 4.0

CyberMachine – How can do ?



TOOL WEAR & BREAKAGE MONITORING SYSTEM

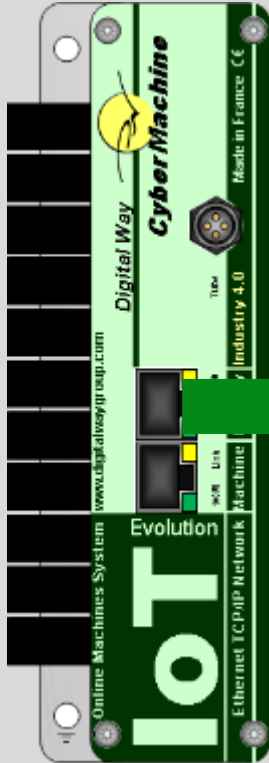


The CyberMachine system is connected to NC Siemens, WattPilote and SafePilote and receive **power** and **vibration data** during machining but also **QR Code** of the workpiece and values from each sensor connected on the Siemens system (temperature and coolant pressure, spindle speed and federate ...).

Factory Ethernet Network

Industrie 4.0

CyberMachine – Mass Storage



The first action is to read data from machine network and stores – **mass storage** – the **machining process data** of the WattPilote, SafePilote, QR Code of the workpiece and sensors connected to the PLC in order to provide a **complete traceability** of the machining.

The huge memory inside Cyber Machine can provide **machining traceability for more than 6 months** without loss of data.

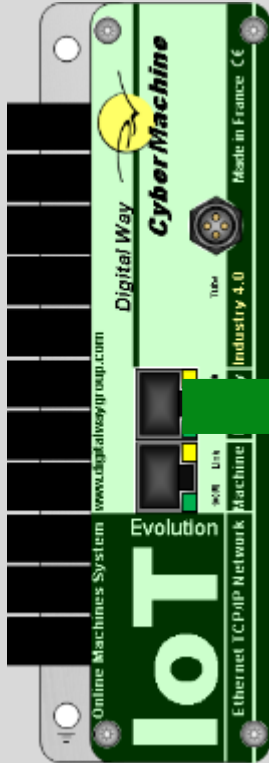
Factory Ethernet Network

For each machining the file (xml format) contains at least:

- Date and time of the machining
- QR code of the workpiece
- Tool number
- Power and vibration curves

Industrie 4.0

CyberMachine – CyberFactory



On the Factory network, the **CyberFactory software** allows to visualize all **management data** provided by the CyberMachine.

Factory Ethernet Network

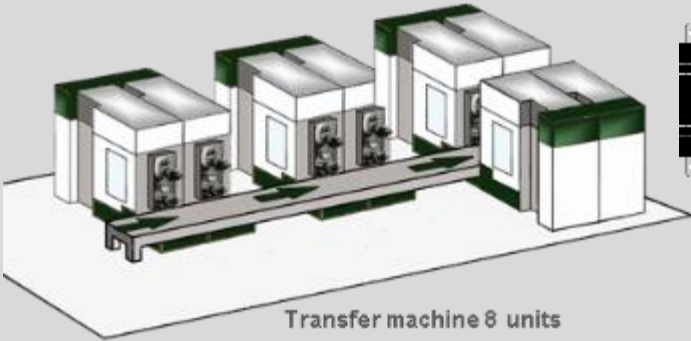


Industrie 4.0

CyberMachine – CyberFactory



TOOL WEAR & BREAKAGE MONITORING SYSTEM



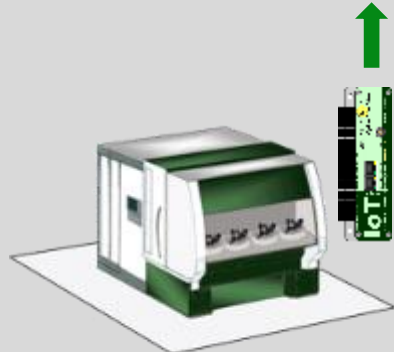
Transfer machine 8 units



On the Factory network, the **CyberFactory software** allows to visualize all **management data** provided by the **CyberMachine boxes**.



Flexible unit



Machining center with 4 spindles



CyberFactory SoftWare



CyberFactory SoftWare

Industrie 4.0

CyberMachine – Data management visualization

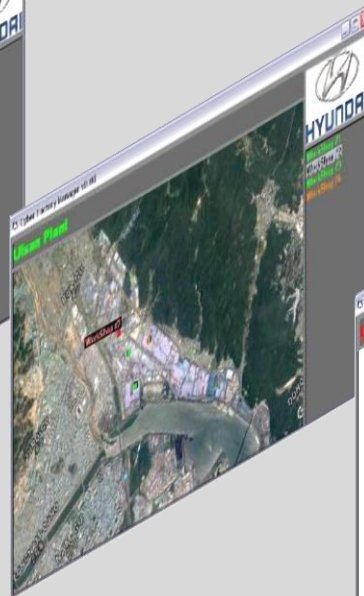


Three levels are available:

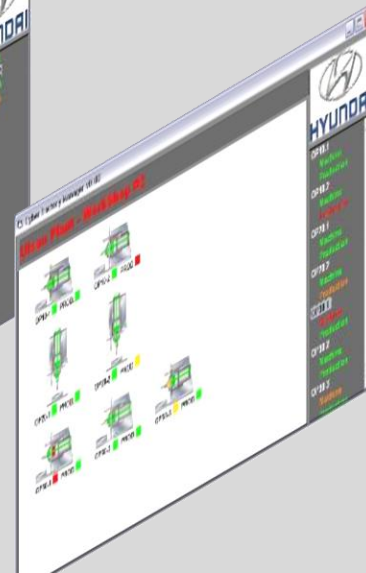
Global Management



Plant Management

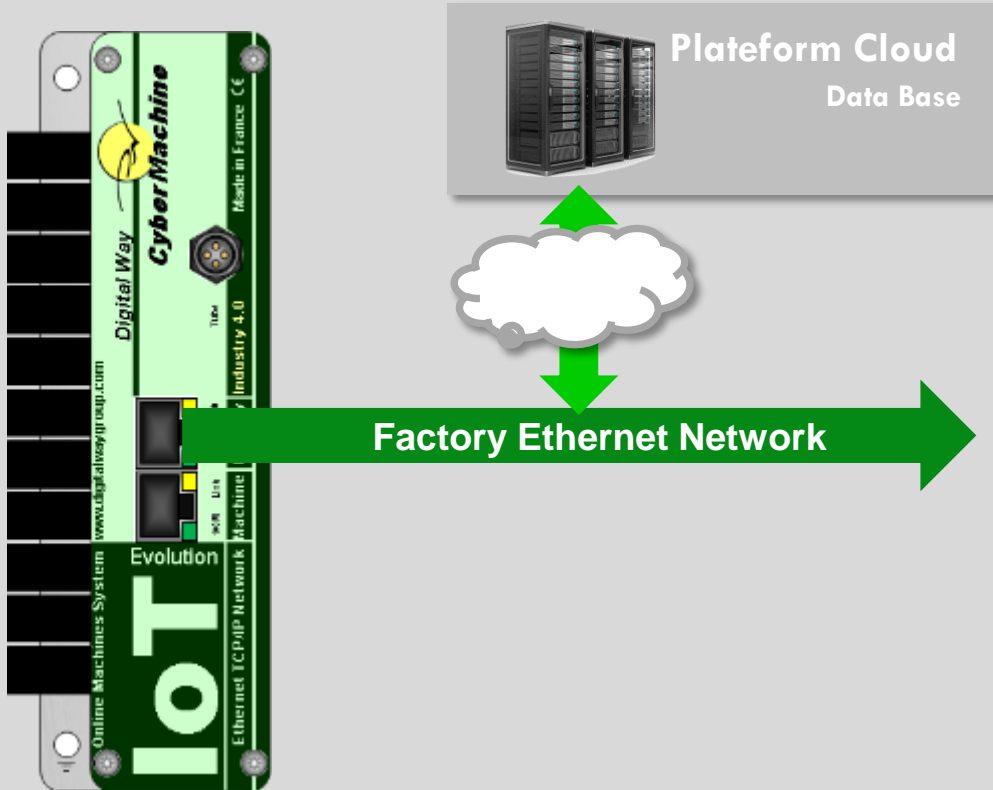


WorkShop Management



Industrie 4.0

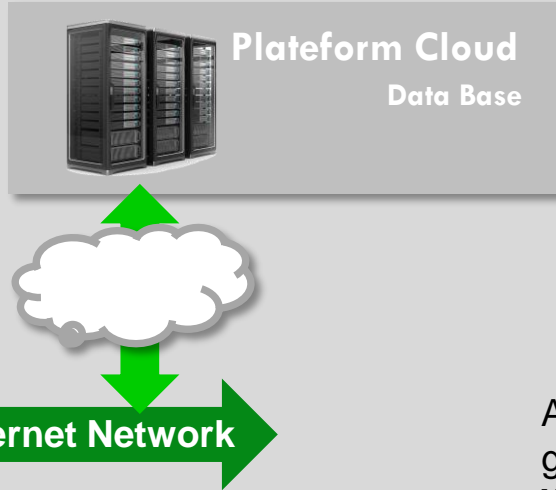
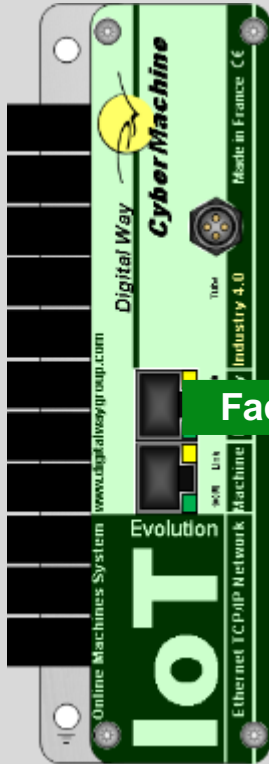
CyberMachine – Cloud DataBase



The Cybermachine can also be programmed to **transmit all machining data to a cloud or global server.**

Industrie 4.0

CyberMachine – DataBase



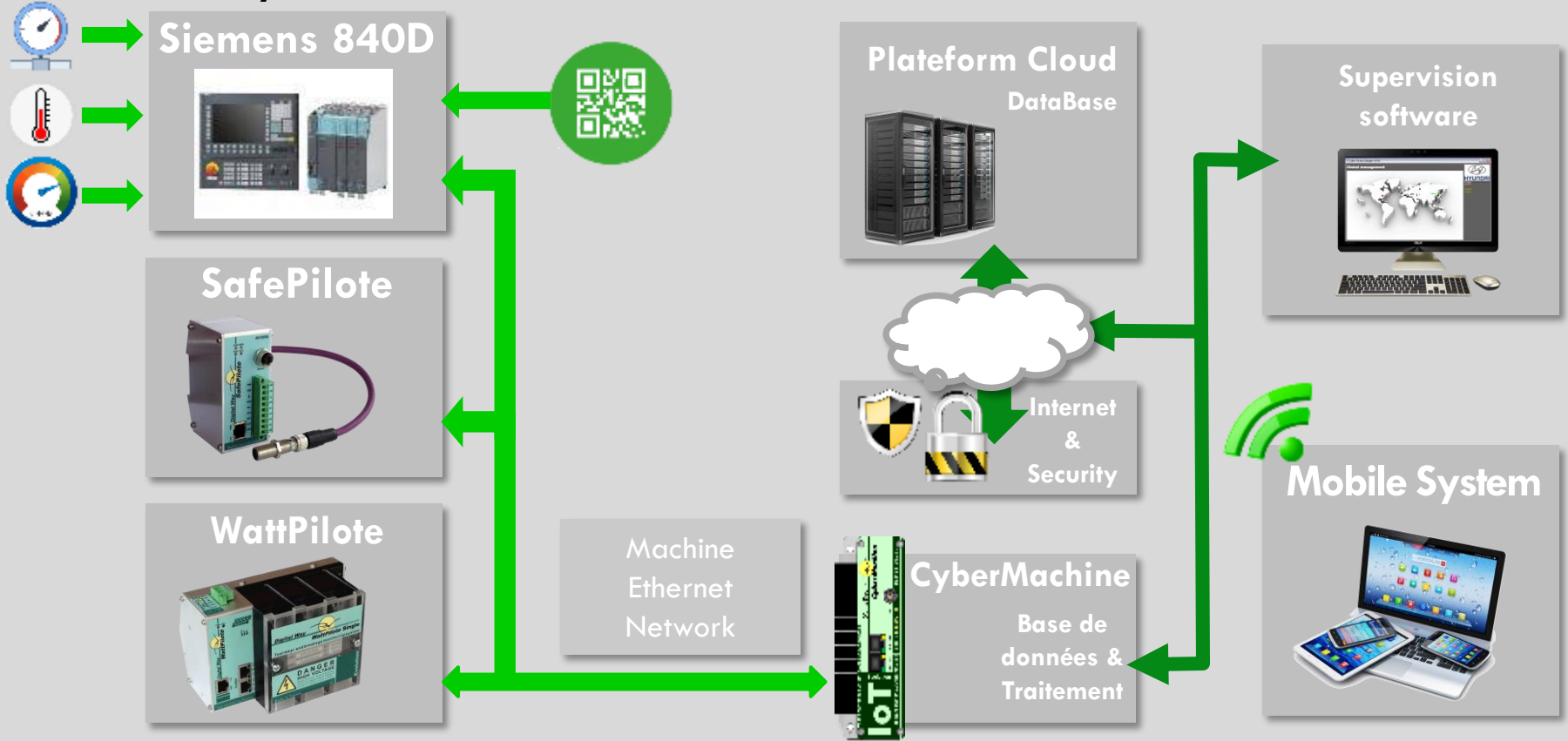
A user connected to the cloud or on the global server can view the data with a **Web application of CyberFactory Software.**

Industrie 4.0

CyberMachine – Architecture

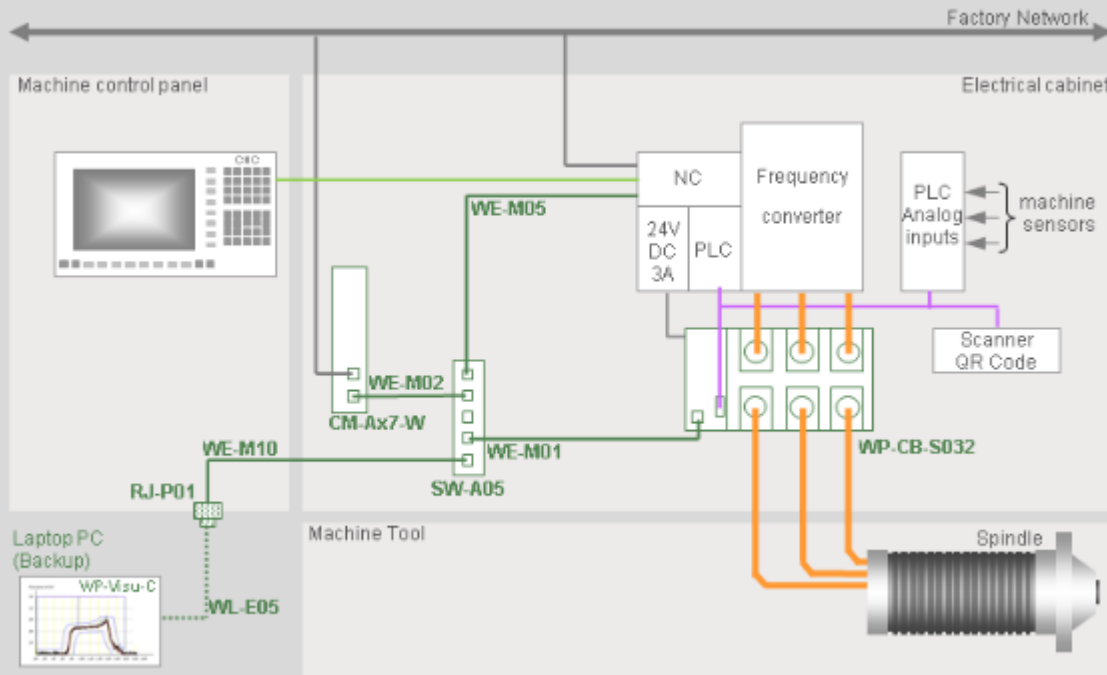


TOOL WEAR & BREAKAGE MONITORING SYSTEM



Industrie 4.0

CyberMachine – Machining center application
Connection with WattPilote

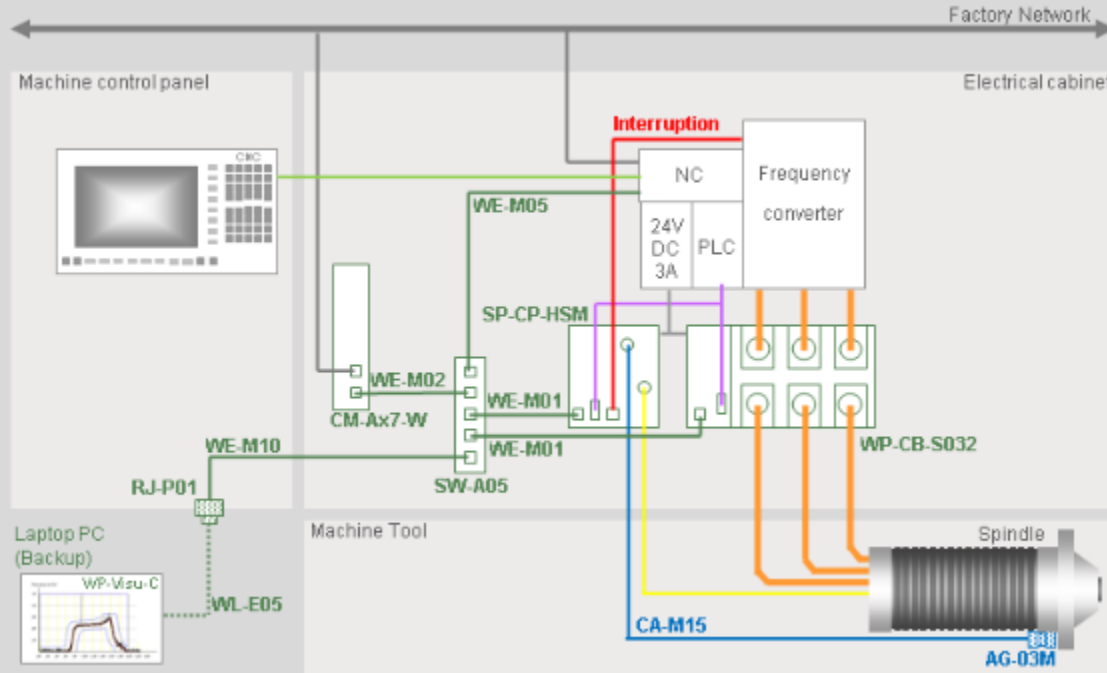


Industrie 4.0

CyberMachine – Machining center application
Connection with WattPilote and SafePilote



TOOL WEAR & BREAKAGE MONITORING SYSTEM





Digital Way Group

1 chemin des Chaux – 42000 Saint-Etienne – www.digitalwaygroup.com