



Smart Factory Together

MARPOSS




1 The Industrial Internet of Things

The maturity of the IIoT

The **Industrial Manufacturing** sector is showing the most comfortable level of awareness and maturity in addressing some key expectations from the **Digital Industry**:

- ✓ Sharing essential information
- ✓ Support for remote configuration and operation
- ✓ Strategies to improve productivity and the quality of service

It is not unusual for an industrial CEO to wonder why a kit of already available technologies is repeatedly portrayed as an **epochal game disruptor**.



2 Re-thinking the business

A network of information and cooperation

The **market** behavior has changed. It is **volatile**, **differentiated** and **geographically sparse**

BUT

Quality expectation has never been **higher** and even more so for single-lot products.



The **manufacturing** process must be **reconfigurable** and **traceable** to different users along the chain value



3 Transforming the factory production systems

The Digital Factory

Digital Technologies → integration of **data** and **functions** of ability and delivery

Digitization

must be **vertical** to connect sensors and actuators embedded in the depth of the process with the many decision rooms

must be **horizontal** to add collaborative paradigms to the chain value from material procurement down to after sales service and equipment decommissioning

There is a growing need for virtual entities – **the digital avatars of the physical process** and of its many product realizations – to provide continuous and reliable **information** to all stakeholders.

The Big Data Analysis

In driving **complex processes**

- **conflict management**
- optimized **compromise** and
- **fine adjustments**

are the essential ingredients of a **successful understanding and control** of the many possible **scenarios** and of their consequences.

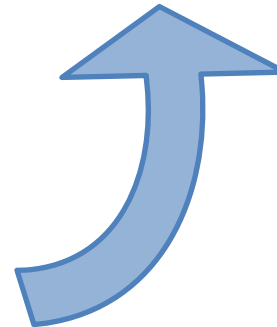
The Big Data Analysis

Data Collection alone does not lead to



Smart Factory


Actually, you want to elaborate the acquired data through a multi-level strategy and create **powerful instructions** that control your process



A concept central to the Smart Factory: the Cyber Physical System

The manufacturing process relies on **production equipment** that must be constantly monitored, controlled, corrected and configured. Product-related data and process-related data need to be collected and elaborated.

A **Cyber Physical System – CPS** – defines the embedded ability to collect timely and useful data and to interpret and actuate automatic instructions.



A concept central to the Smart Factory: the Cyber Physical System

Cyber Physical Systems represent the **operational nodes** of the new **Smart Factory**.

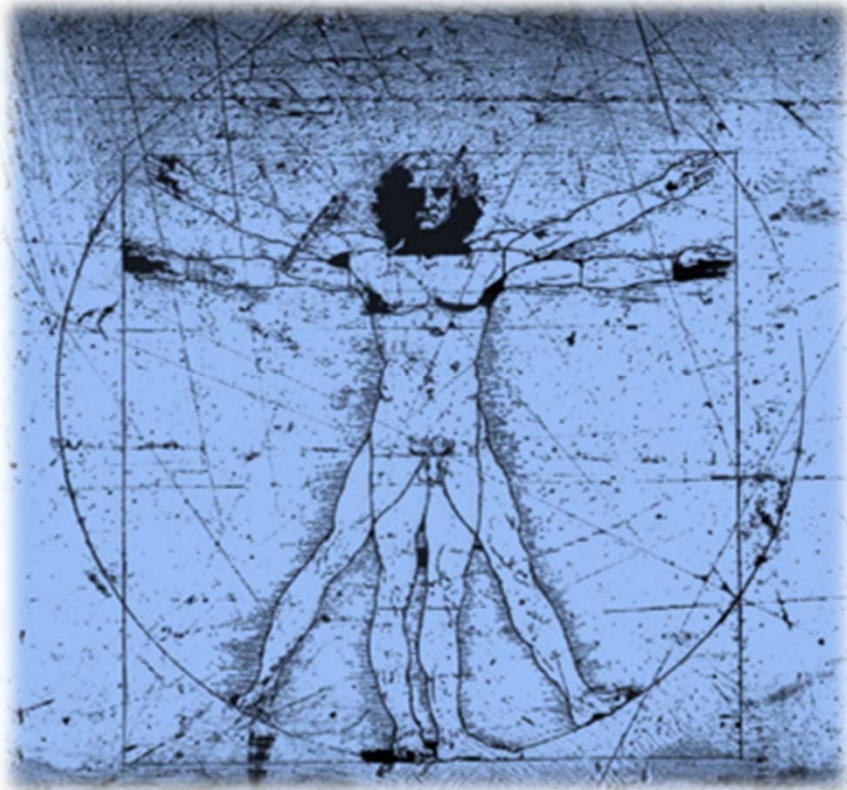
Marposs Smart Solutions for manufacturing monitoring and control are originally conceived to be **Cyber Physical Systems** that can help you turn your production equipment into **Smart Factory** equipment.

The cooperative interaction between Man and machine

Cooperative interaction: mutual recognition of the partner's maturity level and an inherent ability to support the weakest side. It allows specific skills to be transferred for improvement from one side to the other.

Human-Machine Interfaces must be **easy** to use, highly **interactive** and **customizable**. Operators are facilitated to do their job with no compromise on safety and productivity.

The cooperative interaction between Man and machine



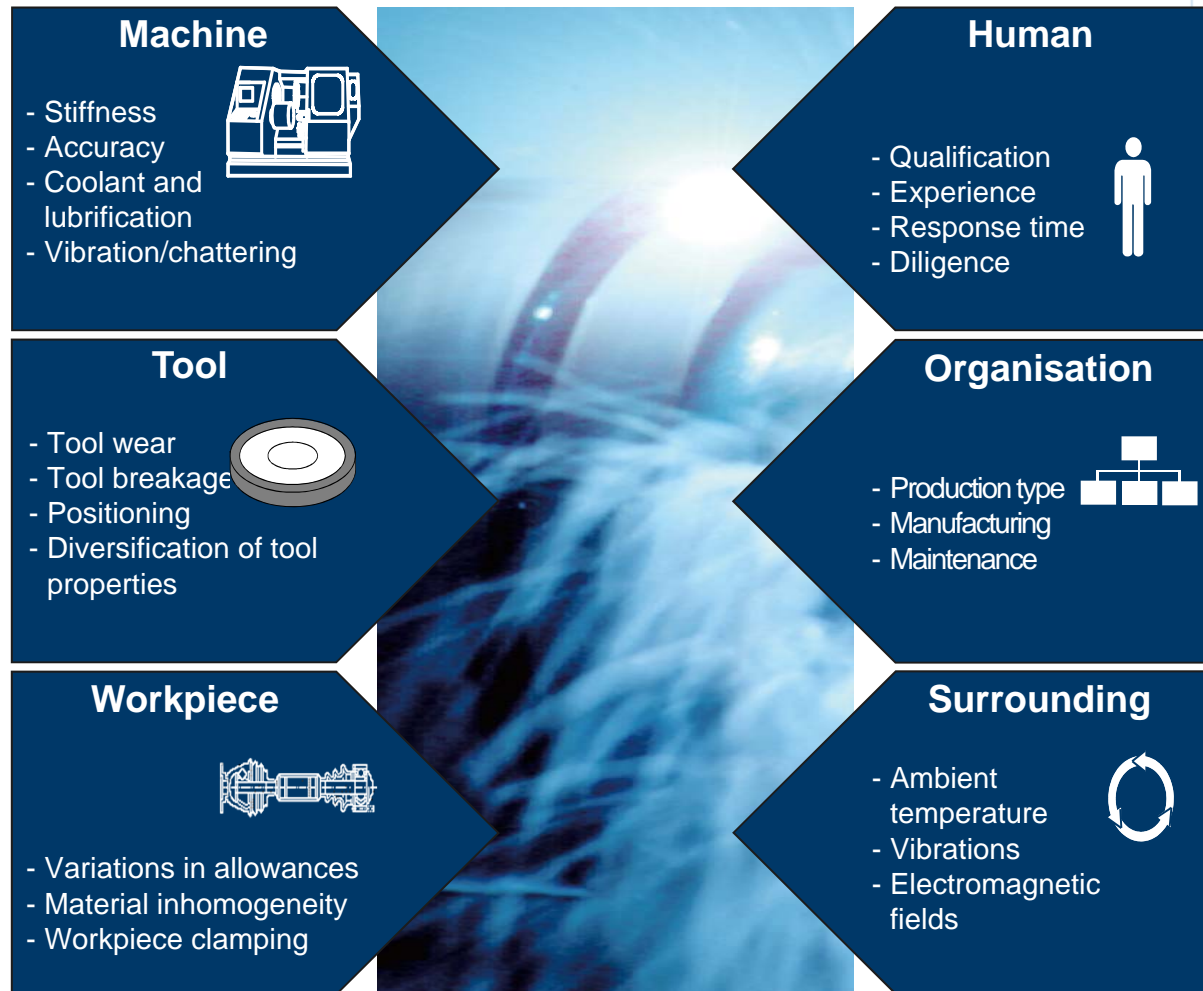
Humanism 4.0: the change of paradigm of the innovative HMI

Man – not the computer – stands at
the center

People should be where they can
work better, not where they can
find a terminal

People should receive all and only
the information they need, where
they need it and when they need it

Smart Factory

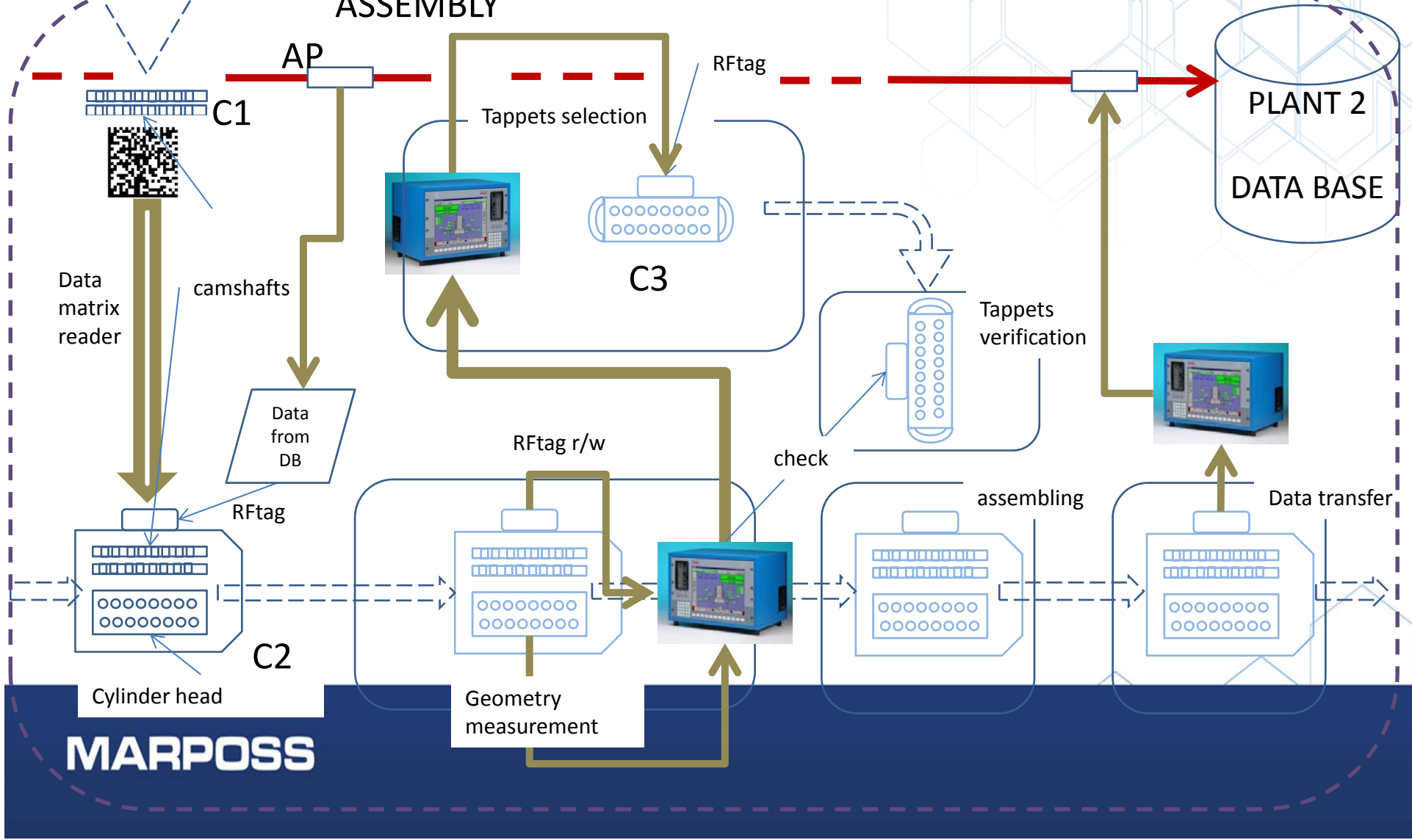


Factors influencing
the manufacturing
process



PLANT 1

3-COMPONENT ASSEMBLY



Marposs Solutions for the Smart Factory

Strategy

Completely
Networked Working
Environment

Objective

Service
Orientation

Innovative
Management
of Events

Flexibility
&
Agility

Collaborative
Interaction

Increased
Efficiency
Productivity

Data
Security

Inform
Decision
Making

Technology

Cloud

I- IOT

Field Bus
Universal
Connectivity

Big- Data
Analysis

Cyber
Physical
Systems

Augmented
Reality

Secure
Local
Networking

Four steps into the Smart Factory

1. **Integrate** Marposs Smart Solutions into your manufacturing line to increase your ability to monitor, control and flexibly configure the production process
2. **Upgrade** your existing equipment with Marposs Smart Solutions and experience how your access to necessary production data can be easy and fast
3. **Adopt** the Marposs approach to Human-Machine Interface that allows differentiated technical skills, physical abilities and cultural backgrounds without compromise on productivity and safety
4. **Trust** Marposs Smart Solutions that guarantee the security of your production data, no matter if you want it stored locally or in the cloud

Opportunità per le imprese

Gli investimenti in **tecnologie 4.0** sostenuti nel 2017 potranno essere iper-ammortizzati al 250%, unendo ai vantaggi derivanti dalle nuove tecnologie, condizioni fiscali particolarmente vantaggiose.

[LEGGI LA GUIDA](#)

[SCARICA ALLEGATO](#)

Marposs per Industria 4.0

Sin dalle origini Marposs propone soluzioni in grado di soddisfare i requisiti fondamentali della **4° rivoluzione industriale**: controllo in tempo reale del pezzo e della lavorazione, feed-back alla macchina utensile per l'ottimizzazione del processo, condivisione ed elaborazione dei dati rilevati.

Insieme a Marposs, Industria 4.0 diventa realtà!

BLÙ



Rete di controllo integrata su unico cavo per rettifiche.

Genior



Sistema di monitoraggio utensile e processo per centri di lavoro.

Optoquick



Stazione di misura flessibile per alberi.

I-Wave2



Misuratore manuale riattrezzabile con trasferimento dati wireless.



MARPOSS Smart Factory

4.0

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