



# Company Lean Industry 4.0 transformation

I-CENTER - 07/05/2019

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# Agenda

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- The Vitec Group & Vitec Imaging Solutions Division
- Operations Vision & Strategy
- Lean Manufacturing to Lean Industry 4.0 roadmap
- Takeaways





## The Vitec Group : our Divisions



*Broadcasters, film and video  
production companies*

Anton/Bauer  
Autocue & Autoscript  
Camera Corps  
Litepanels  
OConnor  
Sachtler  
Vinten



*Professional and enthusiast  
Photographers and  
Videographers*

Avenger  
Colorama  
Gitzo  
JOBY  
Lastolite  
Lowepro  
Manfrotto



*Independent Content  
Creators, Filmmakers*

Paralinx  
RT Motion  
SmallHD  
Teradek  
VitecEV  
Wooden Camera



## The Vitec Group : Three-divisional structure

### Vitec Production Solutions

Revenue 3.9%

**£118.7m** 

Adjusted operating profit 32.2%

**£20.1m** 

### Vitec Imaging Solutions

Revenue 14.6%

**£201.6m** 

Adjusted operating profit 4.0%

**£31.1m** 

### Vitec Creative Solutions

Revenue 3.0%

**£65.1m** 

Adjusted operating profit 20.8%

**£15.7m** 





## What do we do – premium imaging accessories



\* Clockwise from top left: **Lowepro**: Flipside Trek BP 450 AW; **Manfrotto**: Noreg; **National Geographic**: Australia Collection; **Gitzo**: Adventury; **Syrp**: Magic Carpet Pro 3 Axis Kit; **Lastolite**: Skylite Rapid Kit; **Manfrotto**: Lykos; **JOBY**: GripTight Pro Telepod; GorillaPod Mobile Rig; **Manfrotto**: Befree advanced and PIXI Evo; **Gitzo**: Traveler a tripod; **Avenger**: Wind Up stand; **Manfrotto**: Xume filters.



## Vision & Strategy

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The **VISION** is to **BE THE OPERATIONAL EXCELLENCE MANUFACTURING UNIT IN THE PHOTO/VIDEO SUPPORTS and LIGHTING CONTROL INDUSTRY**, delivering the **GOAL of BEST CUSTOMER SATISFACTION**

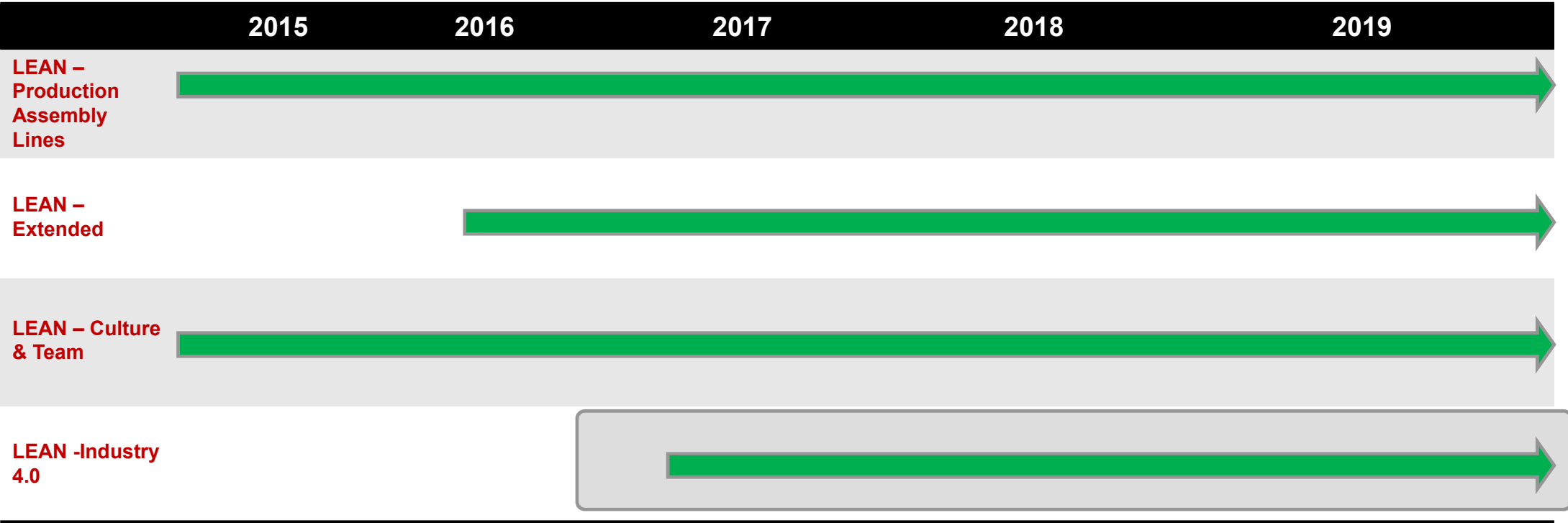
The **STRATEGY** is to continue and develop further **LEAN MANUFACTURING in CULTURE, ORGANIZATION and PROCESS, EMPOWERING the CORE BUSINESS COMPETENCES**

### Strategy Pillars:

- “*Made in Italy*” platform best in Service and Quality
- ***Lean Industry 4.0*** and continuous improvement
- Key industrial *process insourcing* and *Innovation through the “Pioneering Lab”*



# From Lean Manufacturing to Lean Industry 4.0

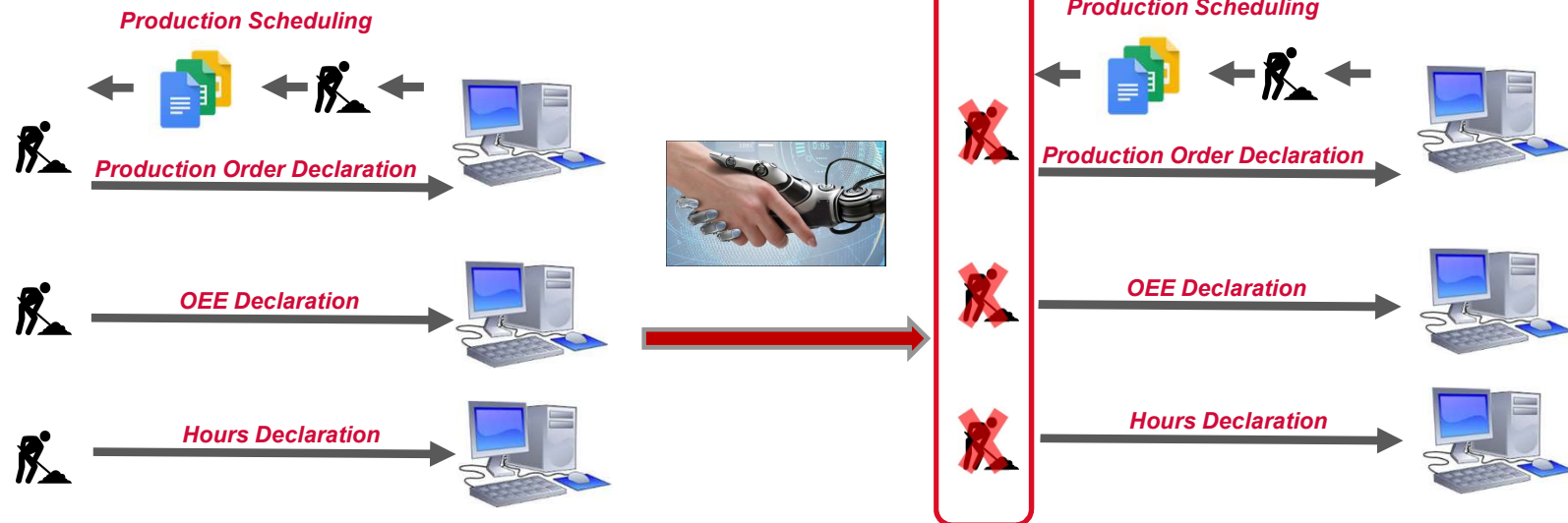




# Lean Industry 4.0 – 2018 to 2020 GOAL



The GOAL:  
OEE Improvement from  
+3% to +5% (\*)



(\*) ACT'18 OEE = 82%





# 4.0 Deployment: Tubes Machining line



- Developed with RALC Italia, it is the most relevant asset introduced in 2017 to support the launch of the new Befree, started October 17
- Certified "Industry 4.0" compliant on December the 27th, 2017



## 2 - Machine O.E.E. Automation



A process in 2 steps to control Machine performance:

1. The Machine sends to the ERP information about process stops
2. The Business Intelligence calculates in-line OEE (Overall Equipment Effectiveness), providing immediate visibility to recover/manage inefficiency trends

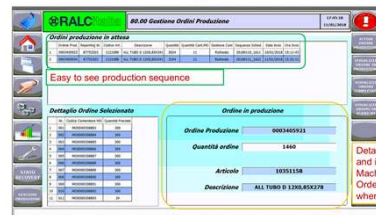


## 1 - Machine Production Scheduling

1-3 The Planner defines the production scheduling in the ERP. ERP sends data to the Machine, the Team Leader gives the machine the GO to start

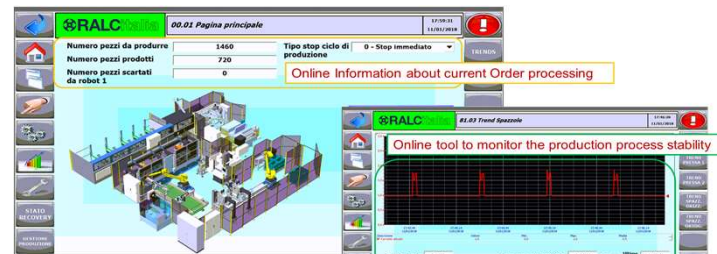


4. The Machine works tubes and automatically sends to the ERP Order closure and details

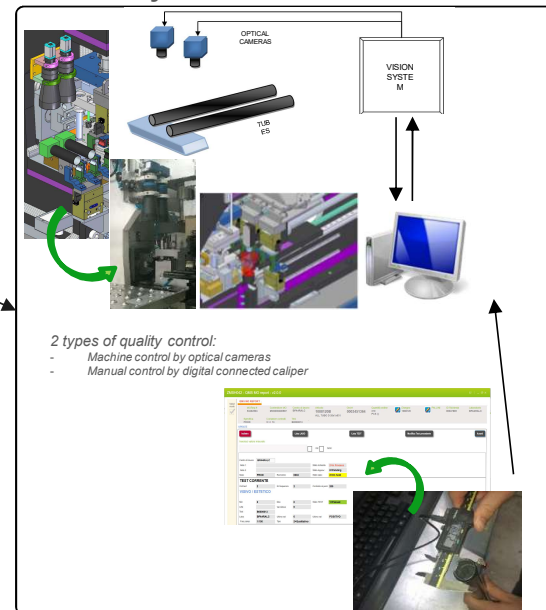


Details about current Order and interface between Machine-ERP to transfer Order declaration details, when completed

## 3 - Continuous Machine monitoring – Visual Interface

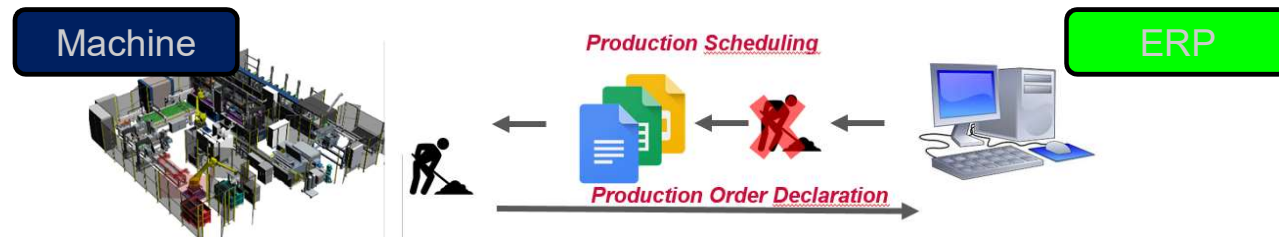


## 4 - Quality Control





# 1 - Machine Production Scheduling



1-3 the Planner defines the production scheduling in the ERP, ERP sends data to the Machine, the Team Leader gives the machine the GO to start

**ERP Smart Interface:**

Clear view of Machine Capacity scheduled/available

ZMSH041 - Prod scheduler - v1.0.8

Lines: BPA4RALC

Data Schedulata

Stato: Invio, Pronto, NonPronto

Carico: 8:35:00, 1:56:00, 5:24:00

Invia Dati

Sposta Prima

Sposta Dopo

Send data

Move Before

Move After

Easy and smart Order scheduling, interface ERP-Machine to send production plan automatically

4. The Machine works tubes and automatically sends to the ERP Order closure and details

80.00 Gestione Ordini Produzione

Ordini produzione in attesa

Ordine Prod. Reporting Nr. Codice Art. Descrizione Quantità Cont. MO

Ordine in produzione

Ordine Produzione: 0003405921

Quantità ordine: 1460

Articolo: 10351158

Descrizione: ALL TUBO D 12X0,85X278

Dettagli Ordine Selezionato

Nr. Codice Cont. MO Quantità Prevista

Easy to see production sequence

Details about current Order and interface between Machine-ERP to transfer Order declaration details, when completed

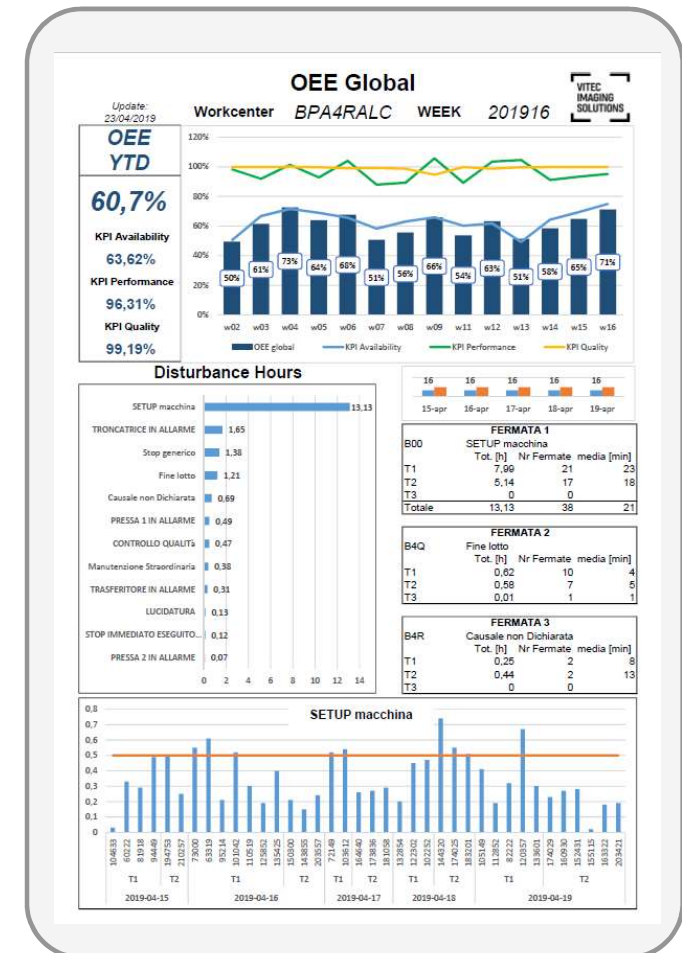
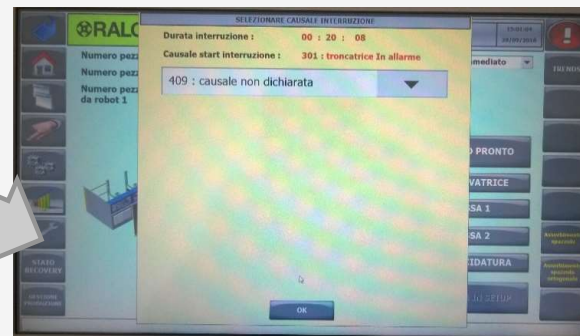
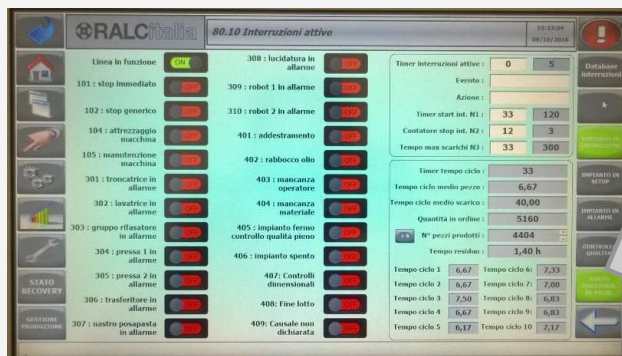


## 2 - Machine O.E.E. Automation



### A process in 2 steps to control Machine performance:

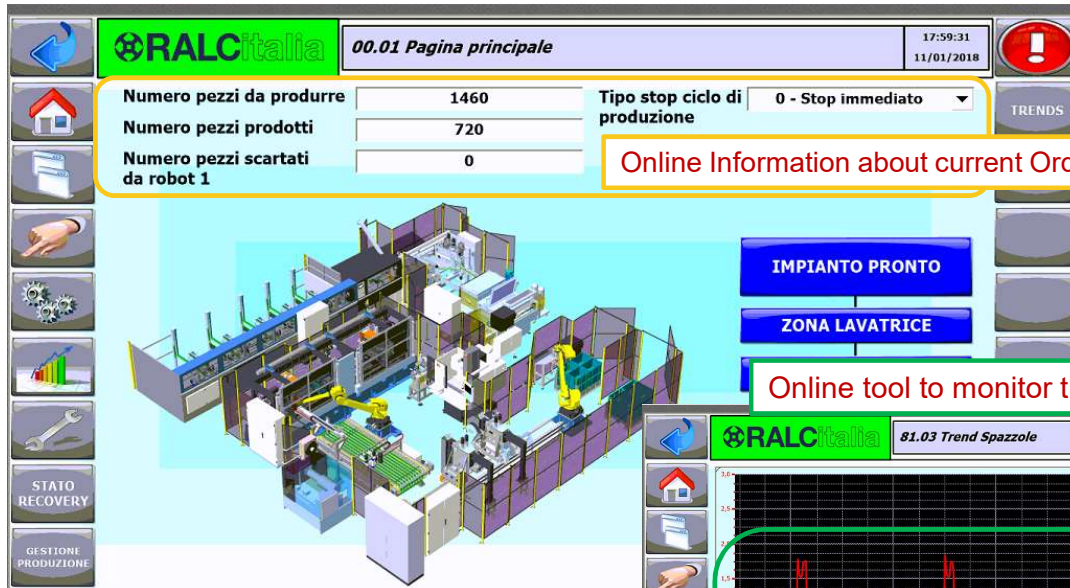
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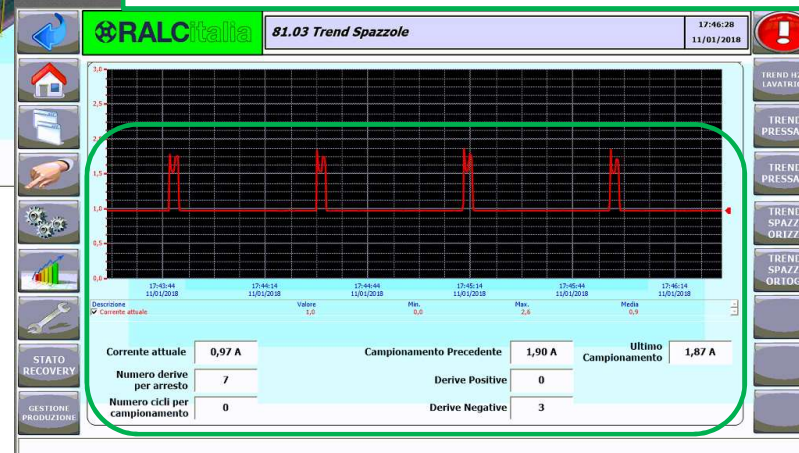


### 3 - Continuous Machine monitoring – Visual Interface

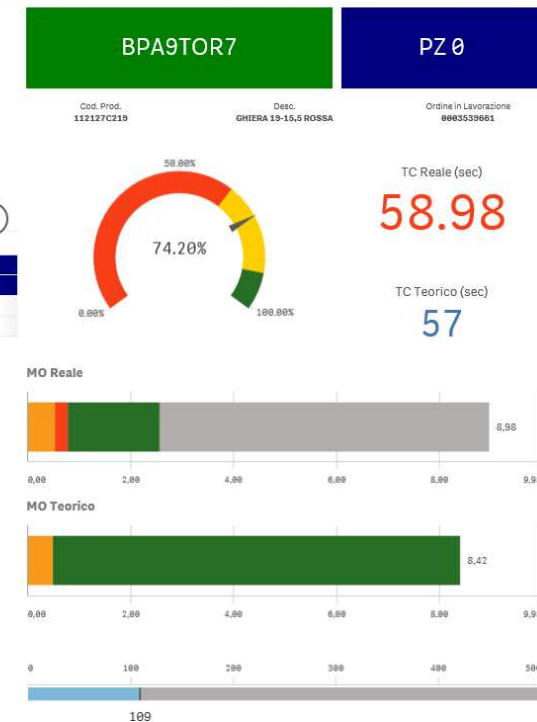
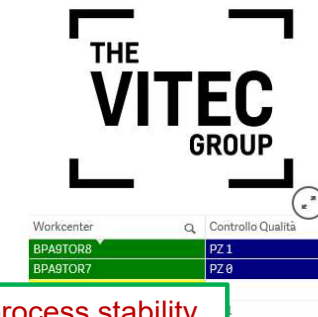


Online Information about current Order processing

Online tool to monitor the production process stability



Analisi Workcenter



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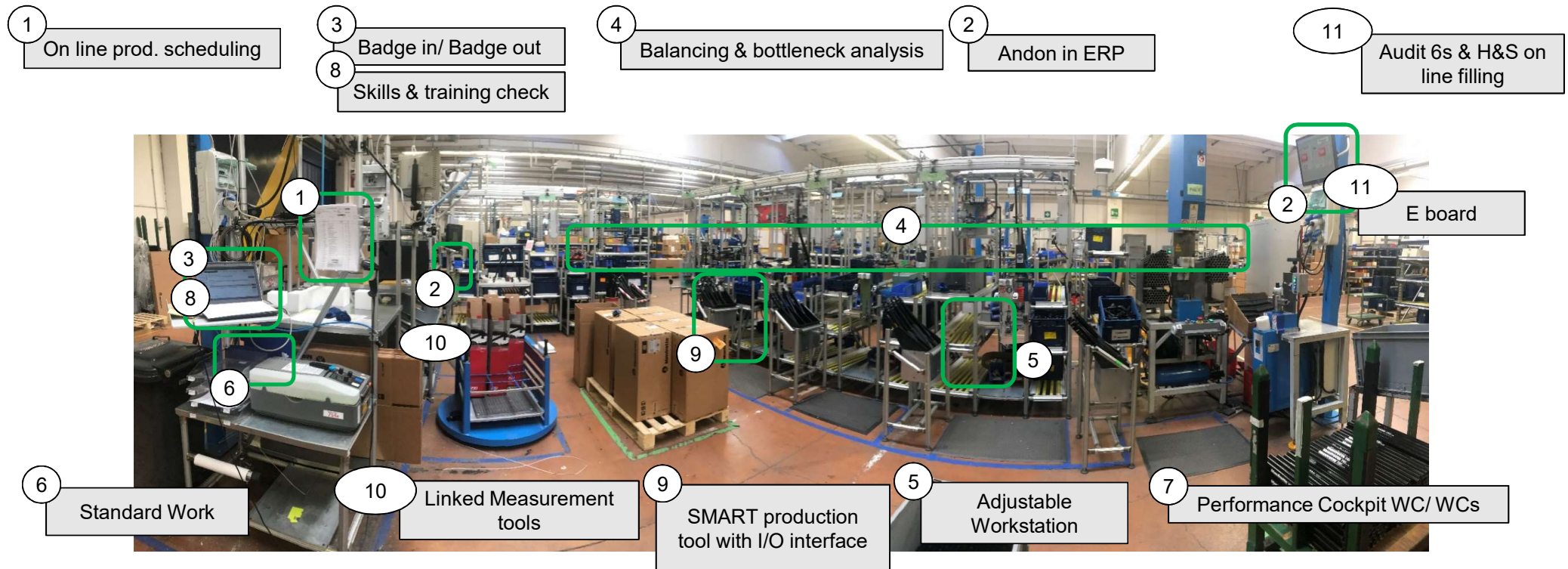
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- Machine control by optical cameras
- Manual control by digital connected caliper



# Lean Industry 4.0 – next steps (2020-2022), Assembly







## Our Takeaways

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- ***The challenge is on People***, not on Technology – Technology is a commodity
- OEE: ***our first implementation was a failure*** , we started from the «number» not from the «user» → from failure to quick learning is a must
- 4.0 enables value creation on clear and stable processes → ***LEAN first, 4.0 second***

**Thank you!**

