



# SMART FACTORY

YOUR INDUSTRY 4.0 AUTOMATION PARTNER



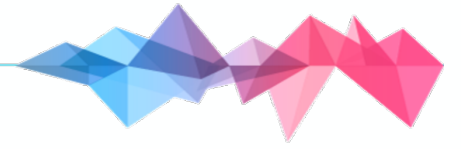


*“Quando la Apple inventò il Mac, L’IBM ne stava spendendo almeno 100 volte di più in R&D.*

*I soldi non c’entrano nulla.*

*Le cose importanti sono le **persone** che abbiamo intorno, chi e come ci guida, e **se stiamo facendo la scommessa giusta.**”*

**- Steve Jobs**



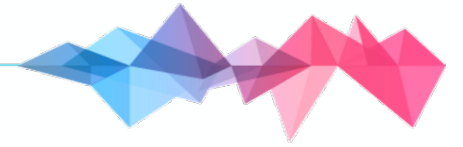
*“L'enorme carico di tradizioni, abitudini e costumi che occupa la maggior parte del nostro cervello **zavorra impietosamente le idee più brillanti e innovative**”*

**– Jose Samarago**

*“Ogni atto di creazione è **innanzitutto un atto di distruzione.**”*

**- Picasso**

# Gli effetti dell'innovazione sotto i nostri occhi...





# La nostra scommessa: la quarta rivoluzione industriale

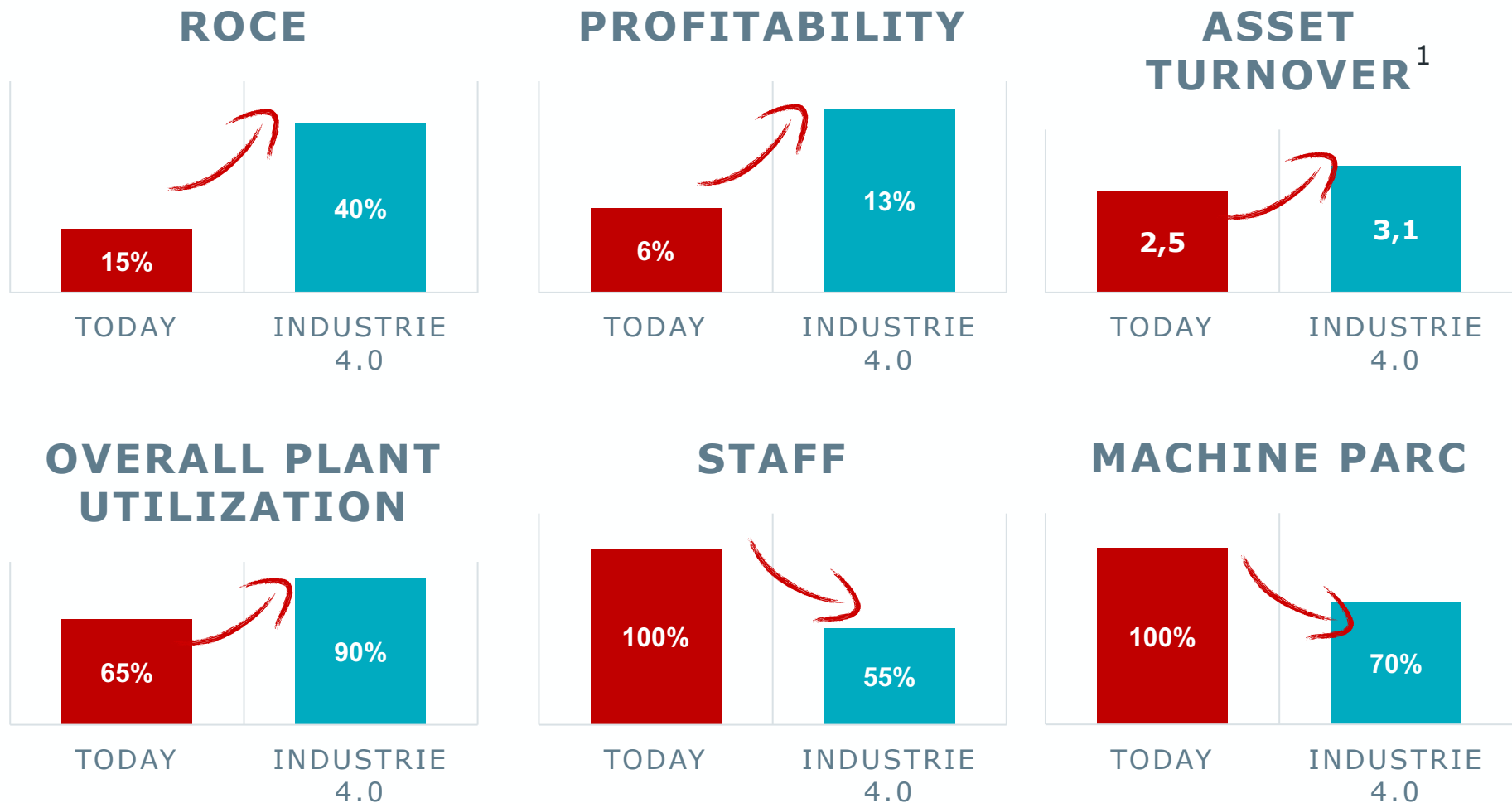


Apowersoft Mac Video Downloader  
Trial Version



# Pensiamo che sia la scommessa giusta perchè le aziende manifatturiere ne trarranno ENORMI vantaggi

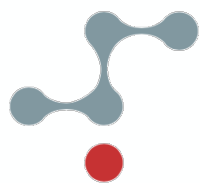
*Simulation of Industry 4.0 effects for a typical automotive supplier performed by Roland Berger.*



Note: 1. Sales/Capital Employed

Source: Think Act: The industrie 4.0 transition quantified, Roland Berger





# Le persone di Smart Factory



**CARLO TAGLIABUE**  
#MACHINEMAN



**ANDREA POZZI**  
#ELECTRONICGURU



POLITECNICO  
DI TORINO



**LUCIA TAGLIABUE**  
#EVERYTHINGELSE



THE LONDON SCHOOL  
OF ECONOMICS AND  
POLITICAL SCIENCE ■



Università Commerciale  
Luigi Bocconi



## VISION

Diventare il **partner meccatronico** di riferimento per l'industria manifatturiera

## MISSION

Supportare le aziende alla trasformazione in Smart Factory, sfruttando la tecnologia come fattore abilitante per una fabbrica **interconnessa, intelligente, e più performante** grazie ad una migliore collaborazione uomo-macchina

### PRODOTTI INNOVATIVI

Produciamo sistemi di automazione flessibili e modulari, che consentono di ripensare radicalmente i processi produttivi

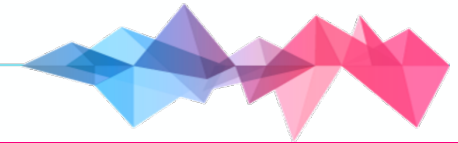
### DNA

Investimento costante nello scouting tecnologico e nell'innovazione

### SERVIZI ABILITANTI

Supportiamo le aziende ad attuare il processo di innovazione con concretezza, per raccogliere benefici concreti dall'innovazione





## Flexim

Smart automation platform

- Industry 4.0 automation platform with state of the art features:
  - Flexibility & reconfigurability
  - Predictive maintenance
  - Improved energy efficiency
  - Interconnected
  - Big data generator

## Flexifeeder

Smart feeding technology

- Industry 4.0 flexible feeder with state of the art features:
  - Flexibility & reconfigurability
  - Predictive maintenance
  - Improved energy efficiency
  - Interconnected
  - Inbound & outbound integrated quality control

## SUPPORTING SERVICES

### Smart Factory roadmap

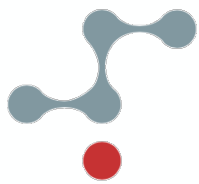
- **Assessment study**, processed optimization applying I4.0 principles, **implementation planning & support**, workforce **training** on I4.0 enablement

### Big Data analytics

- Factory Big Data **availability assessment** & utilization study
- **Big Data analysis & management** for: single-piece quality control, predictive maintenance, efficiency optimization







# I benefici: oltre la fabbrica

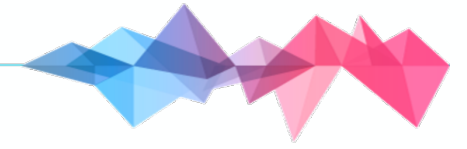


<b>Production</b>	<b>Flessibile, riprogrammabile e veloce</b>	<b>Big Data Enabled</b>	<b>Interconnessa e cloud</b>
	<b>Open Source</b>	<b>Efficiente</b>	<b>Manutenzione predittiva &amp; augmented operator</b>
<b>Business</b>	<b>Migliore time to market</b> grazie al collegamento diretto con ERP aziendale	<b>Nuove opportunità di business</b> Customization, small batches	<b>Migliore livello di servizio</b> e controllo qualità puntuale
<b>Finance</b>	<b>Ottimizzazione indicatori economico- finanziari</b>	<b>Incentivi fiscali Industry 4.0</b>	<b>Improved project ROI, Payback ratio e OEE</b>





# BACKUP



**Our products & services**

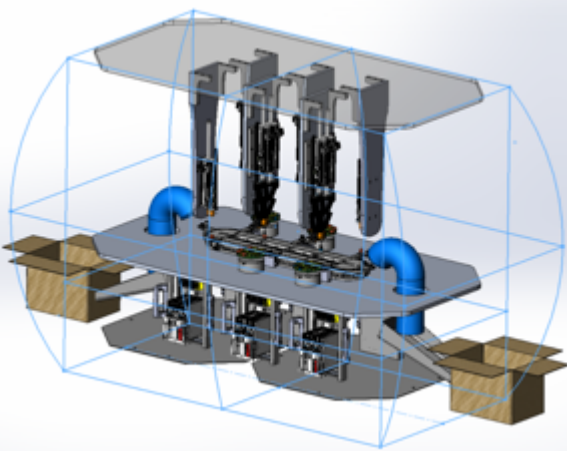


**Our selling arguments**

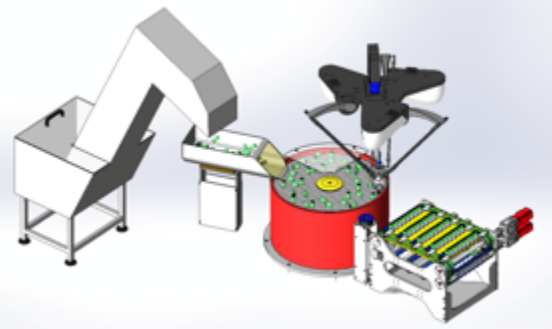
# Our products



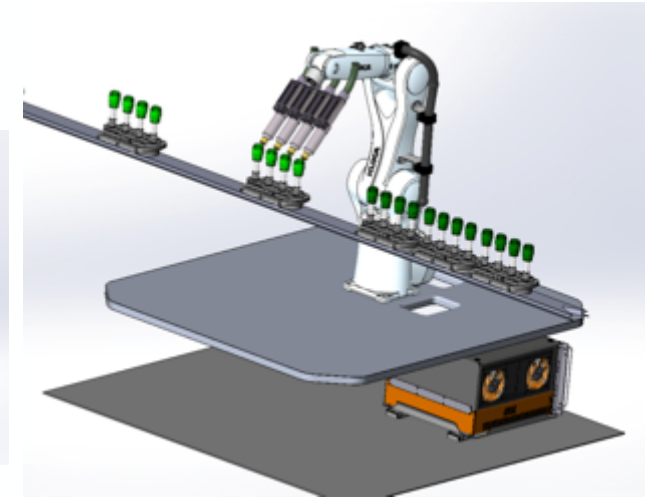
## **Flexim** Automation assembly



## **Flexible Feeder**



## **Custom project for Cosmetics**



# Flexim functionalities

*Our products*



Upload station

Up to seven processing stations

Reload station

## Beckhoff XTS: eXtended Transport System

- **Megatronic system**, combining benefits of linear and rotary system
- **Free movers**, no cables, frictionless, maximum precision
- **Maximum efficiency and flexibility**, being 100% reprogrammable and adaptive to increased production needs
- **Synchronous travel**, constant clamping force, adjustable relative force
- **Arbitrary installation position**, customizable **shape**
- Unlimited power, controlled by an EtherCAT iPC



Watch



Watch



Watch





# Flexim 4S KPIs vs comp. traditional machinery

*Our products*

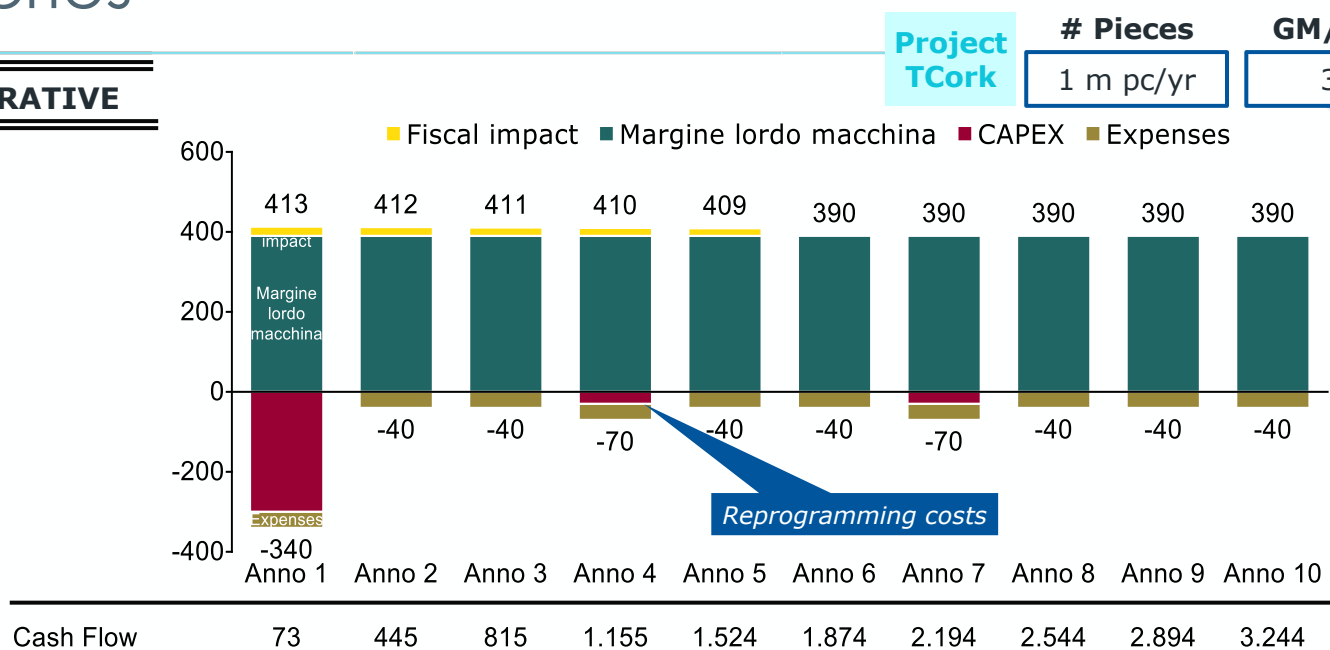


KPIs	SMARTLY 4S	traditional
Nominal speed	<b>80pcs/min</b>	<b>60pcs/min</b>
Real speed	<b>60pcs/min</b>	<b>60pcs/min</b>
Energy consumption	<b>XXXX</b>	<b>XXXX</b>
Compressed air	<b>×</b>	<b>✓</b>
Cloud data analytics	<b>✓</b>	<b>×</b>
Preventive mantainance	<b>✓</b>	<b>×</b>
100% reconfigurable	<b>✓</b>	<b>×</b>
Iperamortization*	<b>250%</b>	<b>normal</b>

# Flexim 4S has better ROI & payback ratio vs traditional machineries

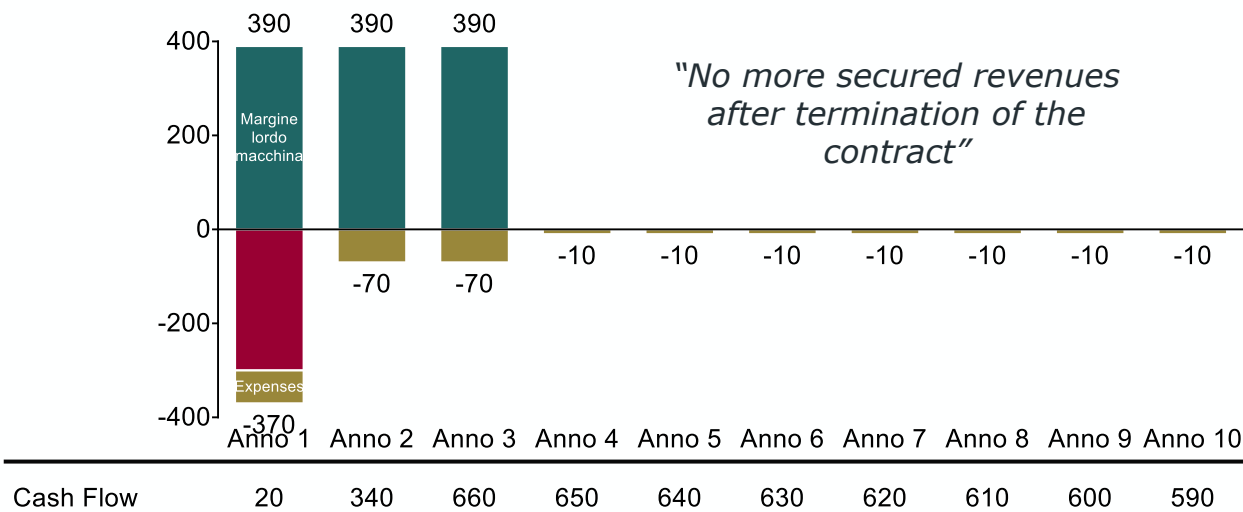
## ILLUSTRATIVE

### Smart Factory



CAPEX	300k
Payback ratio	0,9x
ROI 1Y	21%
ROI 3Y	360%
ROI 10Y	473%

### Traditional machines



CAPEX	300k
Payback ratio	1,0x
ROI 1Y	3%
ROI 3Y	187%
ROI 10Y	164%

# Flexim 4S ensures **increased asset utilization rate**, hence higher ROCE

## REAL EXAMPLE ON GC PROJECTS UNDER SCRUTINY



**Overall  
impact**

# Components	3	3	2	8
Pieces/year (mln)	2,5	1,7	1,5	5,7

### Traditional Machines: KPIs and costs associated to production lines


Throughput (pz/min)	37	50	48	44
Utilization rate	21%	10%	10%	15%
Occupied space	20mq	20mq	20mq	60mq
Maintenance +Labor	TBD	TBD	TBD	TBD
Machine cost	180.000	285.000	55.000	520.000

### Industry 4.0: KPIs and costs associated to production cycle

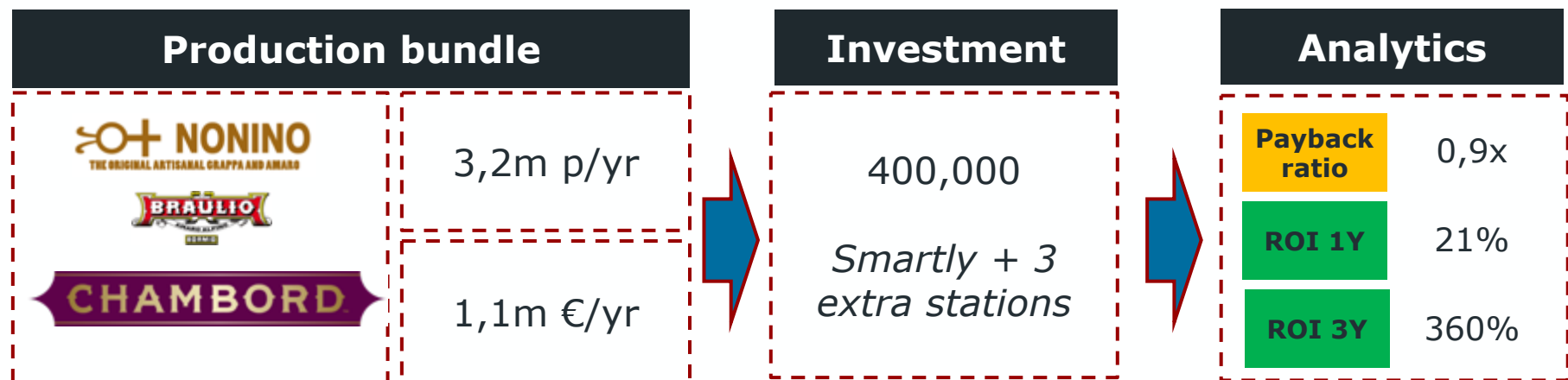
Throughput (pz/min)	60	60	60	60	1,4 x
Utilization rate	13%	9%	8%	29%	1,9 x
Occupied space	20mq	20mq	20mq	20mq	0,3 x
Maintenance +Labor	TBD	TBD	TBD	TBD	
Machine cost	n.a.	n.a.	n.a.	500.000	0,9 x

# Flexim 4S opens up new businesses opportunities

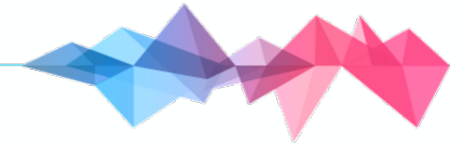
ILLUSTRATIVE

Brand	Project size	Gross margin per year (al mille)	Project 1YR ROI w/ traditional m.
 <b>NONINO</b> THE ORIGINAL ARTISANAL GRAPPA AND AMARO	1,2 m pc/yr	480.000 (400)	-10%
 <b>BRAULIO</b> BIACCHETTO	1,0 m pc/yr	380.000 (380)	-12%
 <b>CHAMBORD</b>	1,0 m pc/yr	250.000 (250)	-15%

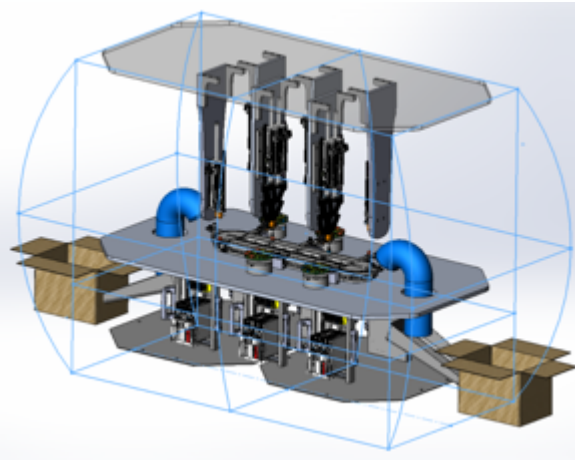
New approach thanks to 4.0



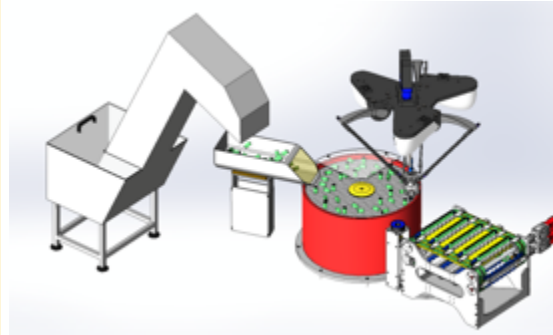
# Our products



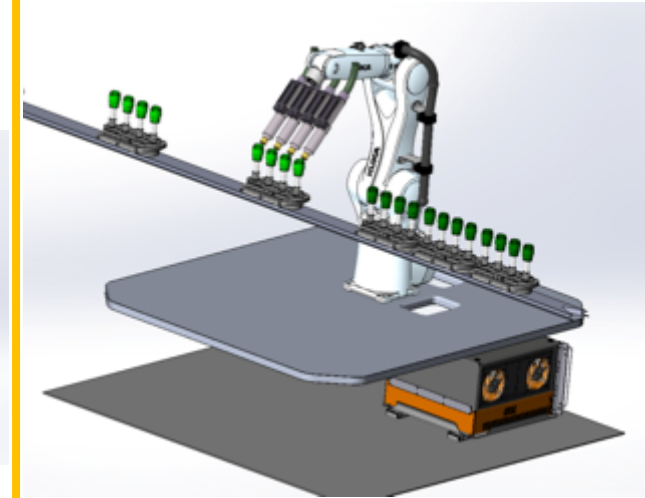
## **Flexim** Automation assembly



## **Flexible Feeder**



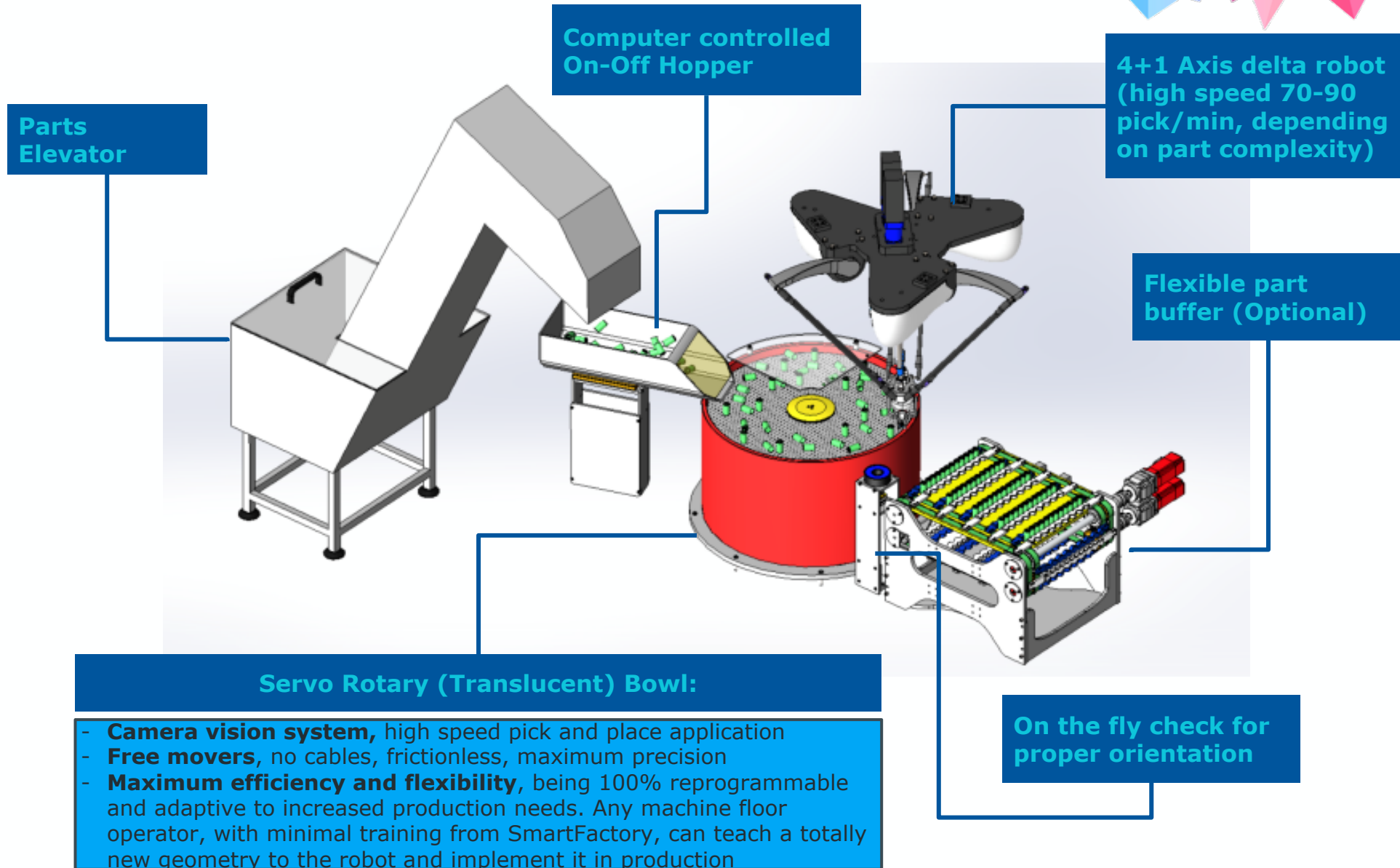
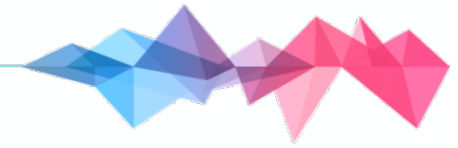
## **Custom project for Cosmetics**



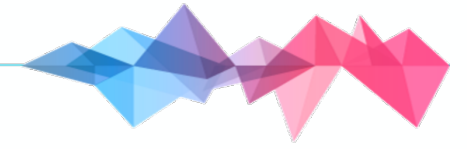


# Smartly 4S functionalities

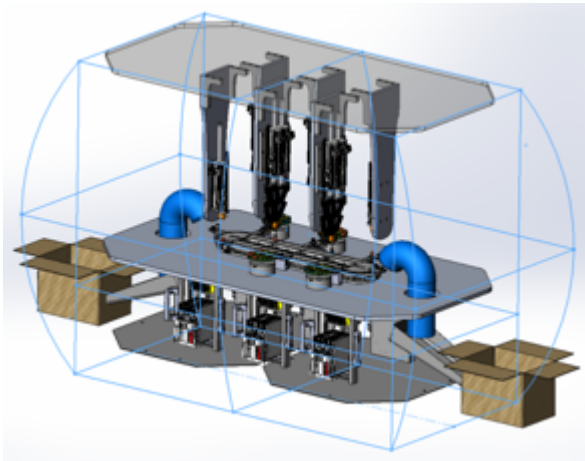
## Our products



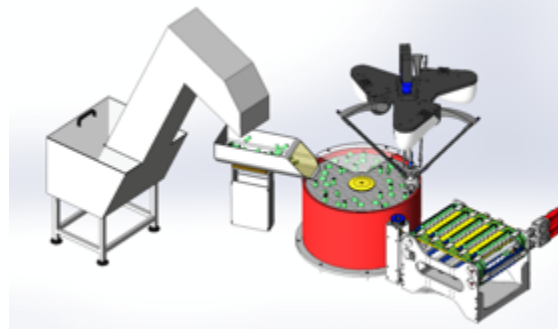
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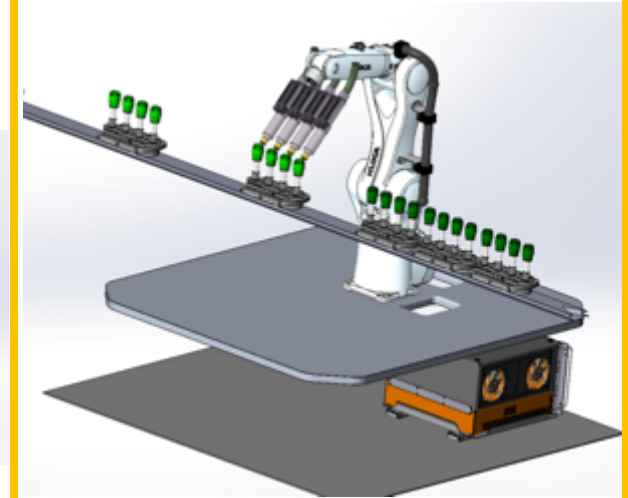
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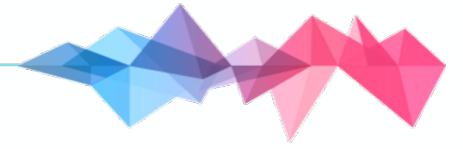


## **Flexible Feeder**



## **Custom project for Cosmetics**





<https://www.youtube.com/watch?v=XTdtR7gDI1I>

<https://www.youtube.com/watch?v=5MKRYOkNsZM>