

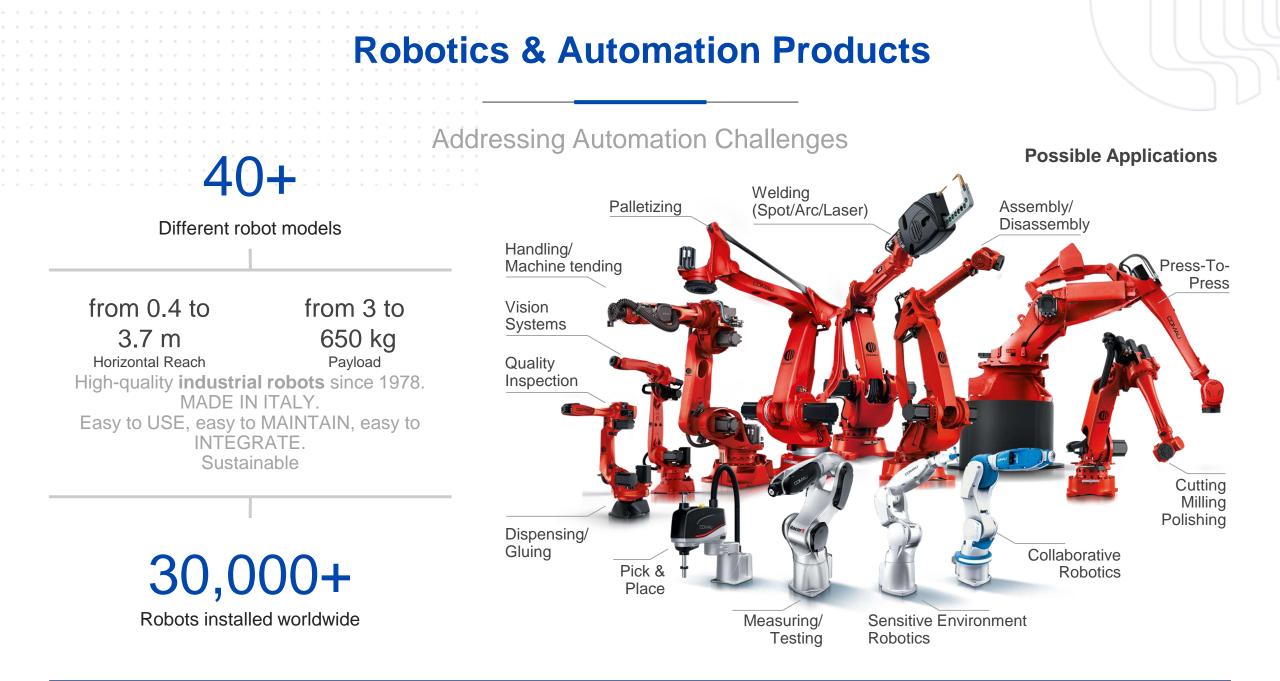
## ReR - Robotica, Al, Idrogeno e Rinnovabili

## The Power of Automation

Giovanni Di Stefano Head of Innovation and Advanced Robotics 07/11/2024

## **Our People and Our Presence**

dustrial heritage, global network and diversified capabilities 3,700+ Employees Worldwide 39% NORTH 34% **AMERICA** EUROPE United States • France Mexico 23% Germany . Italy (HQ, Turin) APAC 60% <40 China Romania India Spain Graduate Average United Kingdom education age Experienced leadership team with diversified 4% (%) Revenues by Region in 2023 industry backgrounds SOUTH AMERICA Argentina Brazil 12 12 **Nationalities** 9()+ **Countries** Innovation Manufacturing Senior Management Women Centers Plants



## **Digital Portfolio**





### Line monitoring

Data collection from the PLCs on the production line. This data will be used to monitor the **overall performance** and **KPIs** of the production lines and identify **bottlenecks** or areas that will need **improvement** 

#### **Robot monitoring**

Data collection from Comau Robot to calculate performance metrics. This data will be used to monitor the **health** and **performance** of the robots and identify potential **issues** that will need to be addressed

#### **Traceability**

Data collection on a **product** during its production, such as quality data and other information related to the product. This data will be used to trace the **product throughout**, production **process** and ensure that it meets the **required standards**.

## **Vision Systems Portfolio**

Cognitive Automation meets Advanced Vision Systems

MI.RA/3D

### MI.RA/Picker

### MI.RA/OnePicker

#### **MI.RA/Depalletizer**









3D robot guidance based on 2D imaging

An automated solution for fast and efficient Random Bin Picking

Vision for unstructured environments, random object positions, complex objects (CAD-less approach), and collisionfree trajectories Automated depalletizing system that can dynamically handle containers of unknown shape, materials, and weight

## Wearable Robotics/Exoskeletons



#### Robotic ergonomic support taken to the eXtreme

MATE exoskeletons are distinct solutions that reduce muscular strain and help mitigate ergonomic risks

## up to 35%

steady reduction of the lumbar or shoulder muscle activation

## up to 50%

**improvement in ergonomics** and productivity with reduced physical strain

#### MATE-XB

#### (back) lumbar support

non-powered exoskeleton for **relieving the muscular effort in the lumbar area** for workers who need to move weights, e.g., when bending the legs (squatting), leaning forward, or the repetitive lifting of loads



ISO 13482:2014

#### **MATE-XT**

(top) arms/shoulders support

mechanically powered exoskeleton (no batteries, no motors), for **relieving the muscular effort at the shoulder level** for workers operating with elevated arm(s).

Also available with advanced sensors for data analytics (MATE-XT 4.0)

### **EDP Validation**

#### elEconomista.sx

Empresas

EDP se adelanta en la carrera por la automatización de la construcción de plantas fotovoltaicas

Economia

\* La compañía lusa prueba en la localidad vallisoletana de Peñaflor un proyecto piloto para reducir a la mitad el tiempo de montaje

\* No supondrá una pérdida de empleo: "Se trata de hacer más con las mismas personas", afirma la compañía

M.Continuo

Mercados y Cotizaciones



Opinión

El robot instala de forma autónoma las placas sobre los soportes

Made in Comau

#### **AAS - Industry**

# Hydrogen Hy

#### zero emission

For both hydrogen production and utilization, Comau supports customers in their manufacturing journey. For electrolyzers and fuel cells, PEM or alkaline, Comau works closely with its customers to offer powerful automation solutions for stacking, testing and BoP.



active enterprise contracts,

presence in **3+** regions (Asia, Europe, North America)



