

COMAU

Motor behind imagination

A name that means tradition, competence and great experience.

A company that looks toward the future.

A brand that implies automation and integration.

A vision that allows humans and machines to work side-by-side.

An identity that represents boundless technology.

<b>HUMANUFACTURING</b>	<b>.04</b>	<b>SERVICES</b>	<b>.55</b>
Vision & Mission	.07	Customer Service	.56
Global Presence	.08	Manufacturing Maintenance	.59
History	.11	Facility Management	.59
Core Competencies	.13	Project Management	.60
Innovation	.15	Consulting	.63
<b>PRODUCTS AND SOLUTIONS</b>	<b>.19</b>	<b>COMAU ACADEMY</b>	<b>.65</b>
Body Assembly	.20	Training	.66
e-Mobility Assembly	.26		
General Assembly	.30		
Powertrain Machining	.34		
Robotics and Automation Products	.42		

# HUMANufacturing

Designing advanced automation solutions means thinking about the industry in a new way, developing new scenarios, designing innovative products and creating ways to streamline production processes. More than technical excellence alone, it requires a team of professionals whose vision is rooted in a culture of excellence. It also requires a combination of talent, passion and experience that unite to define new trends in digital manufacturing.

Comau's competency is expressed within our open, easy-to-use and value-driven offerings. Committed to leading a new paradigm in automation, our lean and sustainable products and solutions are led by the balanced collaboration between people and machines – without payload restrictions or barriers. HUMANufacturing, as we call it, places mankind at the center of business processes within a manufacturing plant, in full cooperation with the industrial automation solutions and new digital technologies that surround them.

HUMANufacturing is a vision through which companies of all sizes, in all sectors, all over the world, can produce, perform and excel with the help of collaborative and connected automation. Smart, flexible, network connected, in perfect and safe interaction with humans.

COMALU

A close-up photograph of a hand touching a dental chair. The chair has a grey upper section and a blue lower section. The word 'COMALU' is printed in black, bold, sans-serif capital letters on the grey part. The hand is positioned on the blue part of the chair. The chair is mounted on a silver metal base with several screws. The background is a light blue gradient.



## Vision

We believe the future of production automation is based on lean, sustainable solutions and products, and led by the balanced collaboration between people and machines. All of which is supported by the potential of the digital transformation.

## Mission

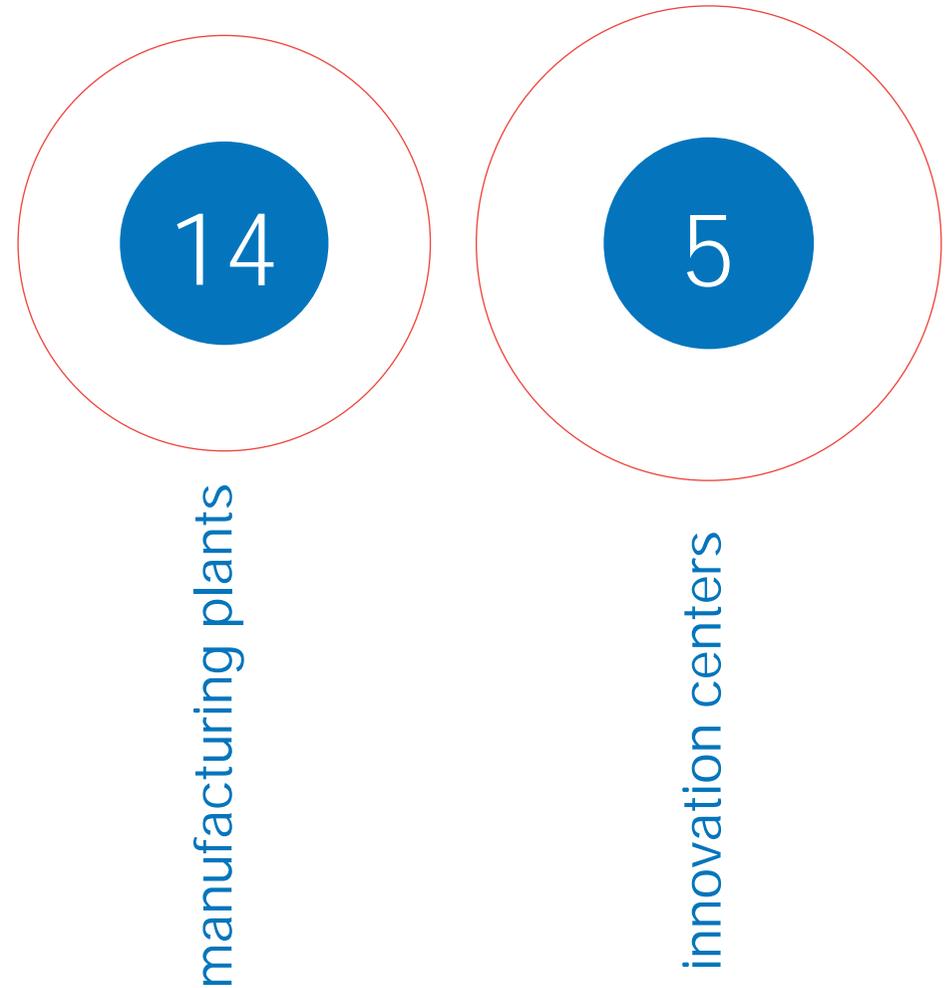
We strive to offer easy-to-use and value driven solutions, exploiting our culture of automation and combining passion and innovation.

## Global Presence

Local support and fast answers are non-negotiable in today's industrial environment. This is why our international network spans 36 operative centers in 15 different countries, with over 70% of our resources in BRIC countries.

With fully integrated capabilities in product, process and service solutions, we apply our extensive automation experience across a wide range of key technologies, anywhere in the world.

All this is supported by **global processes with PMI-based project management, and customized for local market needs and cultures**. By delivering real support every step of the way, we help companies perform at their very best.





employees



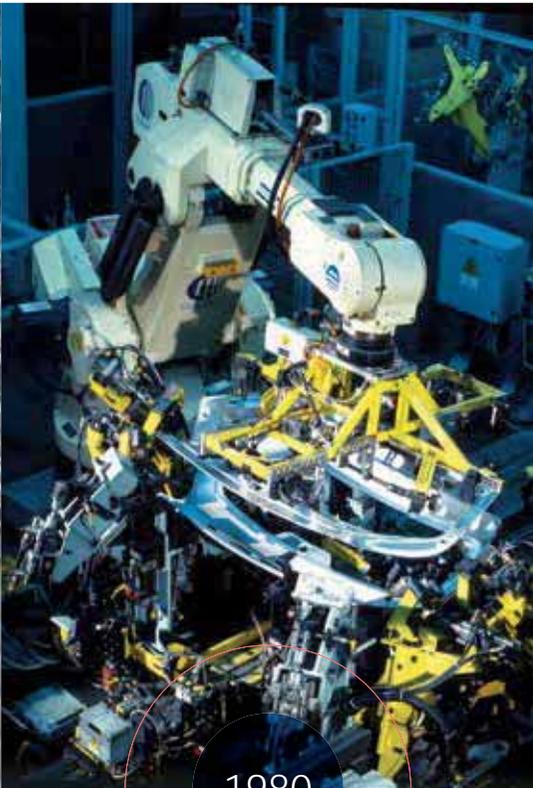
countries



locations



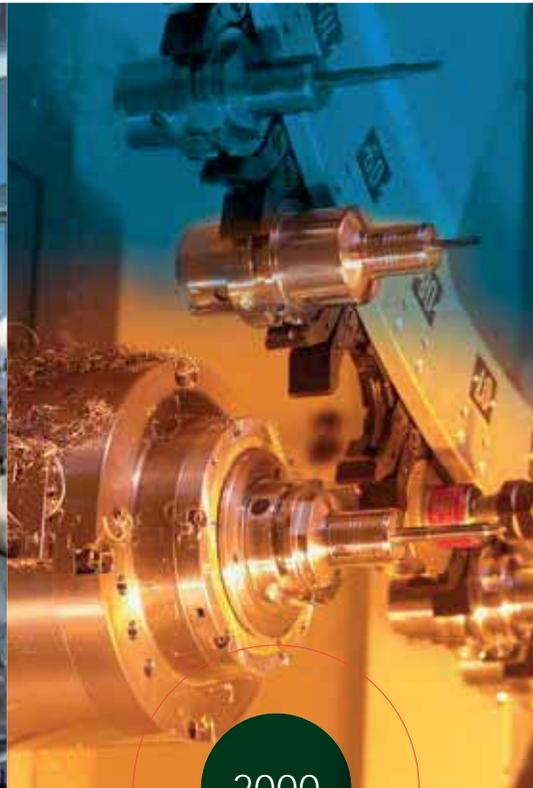
1973



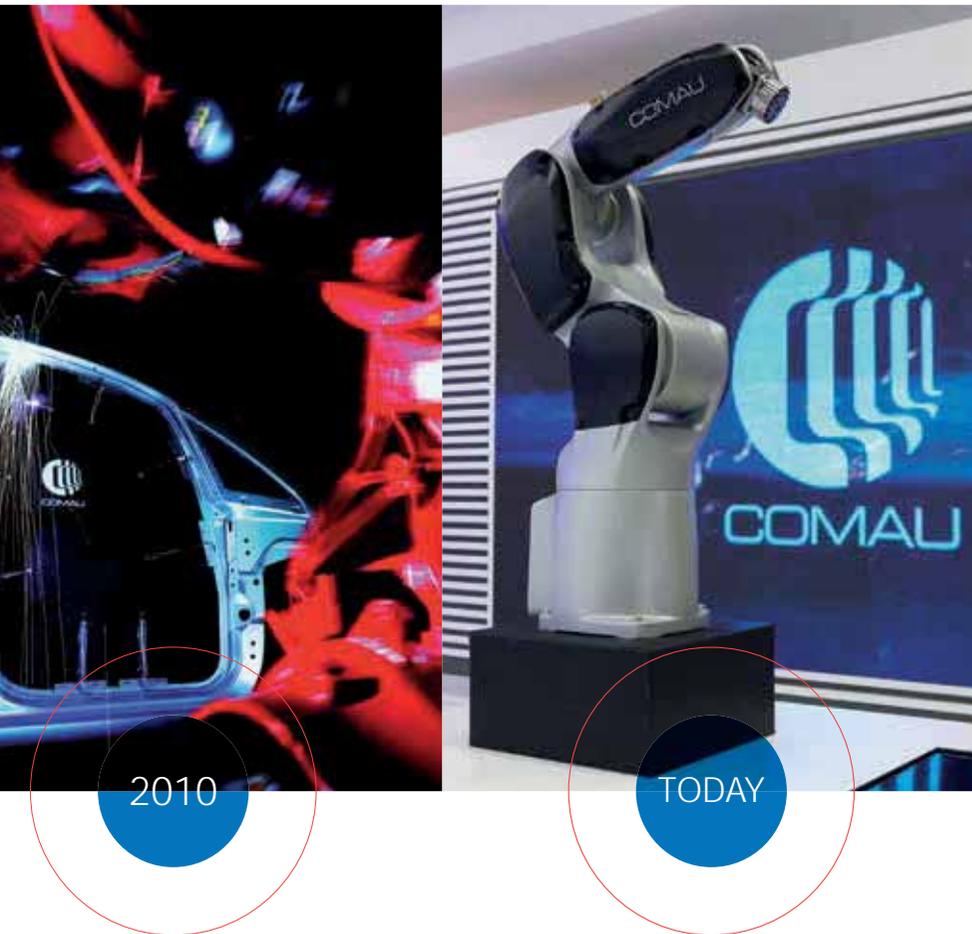
1980



1990



2000



## History

Excellence is not invented, it is created. It is the result of experience, hard work, success, and even failure, that makes a company stronger. This combination forms the roots, the foundation, of every great organization.

Our roots were forged in 1973 when Comau began as the Consorzio Macchine Utensili, formed by the same Torino-based engineers and companies that helped build the landmark Volga Automobile Plant in Russia. We grew during a time when industrial automation was becoming the basis for mass production. When, in the 1980s, technology began to change dramatically with the advent of computers, lasers, robots and the dream of high-speed travel, we had already expanded into the USA.

In the forty-five years that followed the launch of Comau, we have led many firsts, won many awards and have helped many of the world's strongest organizations produce better and faster. And while our history is rooted in excellence, our future is driven by innovation.



*We strive to exceed our clients' expectations by applying key technologies that improve time-to-market with less capital investment.*

## Core Competencies

Founded as a manufacturing consortium over four decades ago, Comau has amassed the very best automation competencies across a wide range of key technologies, which are put to the test every single day. We are also one of the few organizations in the world able to **offer complete and comprehensive solutions, services, products and technologies that meet specific manufacturing needs.**

We specialize in producing automated manufacturing systems with competencies ranging from body assembly and metal cutting to drive unit assembly and comprehensive robotized systems.

- **Products:** Our products combine modern technological know-how and innovative engineering to ensure performance, precision and long-term reliability.
- **Solutions:** We create intuitive, easy to understand and easy to use solutions that keep automation simple while increasing quality and streamlining processes.
- **Services:** Our international network of highly skilled technicians provides comprehensive and reliable management and maintenance support, helping our customers gain a competitive edge.
- **Technologies:** We possess and enhance advanced technologies that drive the future of digital manufacturing.



*Wearable robotic exoskeletons enhance human-machine collaboration by providing assisted support and improved ergonomics.*





## Innovation

Our roots were forged during a time when industrial automation was becoming the basis for mass production; when technology began to change dramatically with the advent of computers, lasers, robots and the dream of high-speed travel.

Here at Comau, innovation is a recurring theme that accompanies almost every one of our activities. It is a state of mind and a driver of excellence. It is also the area where we are considered significantly better than the competition. Innovation drives our future and is inspired by customized production needs and new manufacturing approaches.

Comau innovation is based upon **manufacturing's digital transformation, added-value manufacturing and human-robot collaboration**; these key pillars that will challenge us to reach new heights in leading the culture of automation.





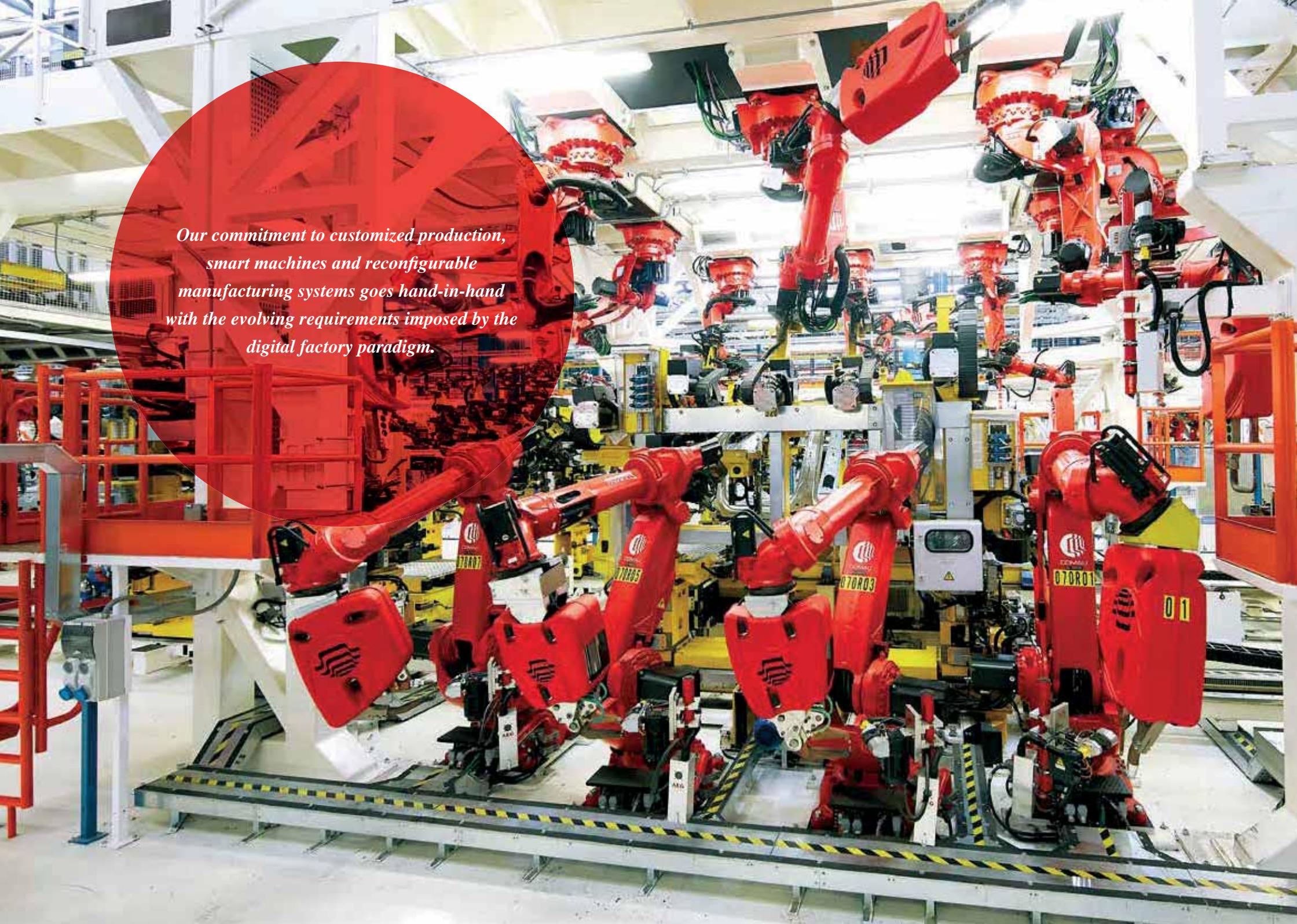
## Expanding the Digital Domain

As 5G connectivity begins to reach the factory floor, Comau innovation is helping transform dedicated physical industrial automation infrastructures into software-driven digital networks and virtual architectures.

By combining virtual control and digital data mining with powerful cloud platforms, we will enable our customers to increase fault tolerance, minimize service loss and achieve direct savings in terms of commissioning times, maintenance costs and equipment efficiency. We are also merging physical processes and products with the virtual world of digital modeling, predictive and preventative maintenance, simulation and augmented reality. From wearable barcodes to the use of 3D modeling, animation and holographic media, Comau innovation is leveraging mainstream multimedia tools with added-value technologies to simplify the interaction between humans and machines that drive the factories of the future.

## New Frontiers in Automation

Leveraging 45 years of experience in industrial automation, Comau is putting its technological competency toward the service of new market sectors. Take outdoor automation for example, where we've developed a patented solution for photovoltaic automation that pairs fully electric guided vehicles with outdoor vision and quick coupling systems to streamline solar panel installation. Energy automation, advanced logistics solutions and emerging, new service-based business models are just the start. We are actively exploring new ways to provide powerful business solutions to an increasingly automated world.



*Our commitment to customized production, smart machines and reconfigurable manufacturing systems goes hand-in-hand with the evolving requirements imposed by the digital factory paradigm.*



# Products and Solutions

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To remain at the forefront of automation, we are constantly evolving our process expertise to meet market needs and spearhead technological advances. Our ability to deliver integrated systems and processes that fully accommodate diverse manufacturing needs stems from over four decades of innovation, R&D and technological excellence. Our active pursuit of opportunities to evolve and improve production performances helps us create the changes our clients demand.

## Body Assembly

From project to production, we are at your side every step of the way to ensure the success of each project.

With over four decades of solid experience in the automotive sector, a strong team of qualified engineers and extensive know-how in leading-edge production systems, we are able to **deliver a complete range of advanced, modular manufacturing solutions for traditional, hybrid and next-generation electric vehicles**. Each of which can be easily integrated within existing facilities while meeting or exceeding the highest requirements of industrial standards in regard to flexibility, quality, speed and reliability.

Our powerful welding and body joining technologies, high-density welding stations, sub-group assembly systems and comprehensive body shop solutions can handle multiple models, materials and productions rates. More importantly, we build each system to satisfy the customer's specific manufacturing requirements, which translates to maximum efficiency and inherent expandability.





## Powerful Systems Reduce Time-to-Market

### Easy-to-install

- Lean and straight lines
- Pre-assembled, easy-to-assemble lines
- Easy introduction of new models into existing lines
- Integrated logistics
- Reduction of operating costs and waste

### Easy-to-manage

- Optimized human-machine interface
- Accurate and repeatable quality

### Highly flexible

- Versatile machines and equipment
- Simultaneous management of multiple models on the same line
- Random mix sequencing for up to four models
- Batch mix production for custom configurations
- Minimized production ramp-up of new models on the same line
- Up to 80 JPH

## Comprehensive Solutions for Lightweight Manufacturing

Functionality and versatility are key requirements for the modern factory. We have developed a complete range of modular manufacturing solutions that can be deployed without the need to replace or renovate existing facilities.

Our systems and solutions are designed to enhance existing processes, streamline the manufacturing approach and fully deploy digital lean manufacturing principles.

### Enhanced Versatility

- Multiple materials
- Multiple joining technologies
- Multiple vehicle platforms flexibility

### 360° Support

- Design and development
- Simultaneous engineering
- Production launch and maintenance

### High Productivity

- Automated assembly lines
- Automated sub-groups assembly
- Complete body shop systems for different production rates





### **VersaRoll**

A standard and modular manufacturing machine for large assemblies

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- High-speed parts transfer
- High-positioning accuracy
- Optimized logistics flow

### **VersaPallet**

An integrated, in-line fast transfer system

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- Supports multiple models
- Replaces fixed underbody tooling requirements
- Automatically moves the body through GeoPallet-based production lines

### **Advanced Framing Systems**

A complete range of flexible framing solutions

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- Compatible with every line transfer system
- Support for 1-6 models and any vehicle size
- Completely upgradeable and reusable

### **Evolutionary Hemming Solutions**

A selection of modular, compact and flexible hemming solutions that can complete the entire cycle in just two steps

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- Higher seam quality, speed and reliability
- Push-pull hemming of very complex elements
- Standard products suitable for any robot brand



## ComauFlex

A complete BIW manufacturing and assembly solution.  
The fully integrated system is efficient, technically advanced and completely scalable.

### **Lower Initial Investments**

Engineering, tooling, conveyors, and building

### **Lower Operating (Labor & Inventory) Costs**

Production, material, maintenance, and plant engineering

### **Lower Future Model Introduction Costs**

Prototype build, tool certification, and product launch

## Versatile Automation Solutions

### The Technology to Drive Advanced Manufacturing Processes

From versatile laser and vision systems to advanced joining solutions, from hemming to palletizing and transfer systems, our innovative technologies deliver efficiency, flexibility, durability and a quick return on investment.

### Products that Enable High-Quality and Efficient Manufacturing

Our innovative products integrate and enhance production systems; furthermore, we develop the solutions around them, adapting to different processes and production volumes.

#### Technologies

- Laser – welding, brazing and cutting
- Laser sourcing – fiber, diode, hybrid
- Spot welding
- Riveting and fastening
- Arc welding
- Lightweight manufacturing
- Hemming
- Vision

#### Standard Products

- Laser Hybrid Technology
- RHEvo Roller Hemming
- Smart Hemmer
- RAIO Vision Systems
- High-speed vision systems modules

## e-Mobility Assembly

Committed to delivering the right mix of process expertise, system flexibility and performance efficiency, Comau is working hard to stay ahead and meet the evolving needs of manufacturing. As the market moves from traditional powertrain solutions to e-power solutions, Comau is positioned as a global player in supplying key technologies and production systems that support this paradigm shift.

Leveraging 45 years of experience in automation and our worldwide footprint, **Comau is developing modular, scalable and flexible solutions to meet the unique requirements of the e-vehicle sector.** With a portfolio of assembly systems and products designed to cover a wide range of production volumes, we can cost-effectively meet the specific and variable demands of the market in a highly-competitive timeframe.

Here at Comau, we believe the basis of a successful project goes beyond providing integrated processes and systems that fully accommodate diverse manufacturing needs. It stems from the ability to partner with clients, collaborating with them during the initial product design phase and working with them to evaluate solutions, exchange experiences, and optimize capital investments.



SMARTCELLCOMAU



## All-In-One Assembly Efficiency

From manual to fully automated assembly lines, our assembly systems are characterized by flexibility, modularity, scalability and re-configurability based on the principles of Lean Manufacturing.

### Highly-reliable Lean Solutions

- Suited for a wide range of products and processes
- Modular and scalable for product types and volumes
- Wide application of standard solutions
- One piece flow capability
- Fast re-assembly and launch using plug-and-play concepts
- Easy re-configurability
- Compact layouts
- Integrated logistics
- Energy saving solutions

### Fully-integrated Assembly Capabilities

- Battery modules
- Battery packs
- Rotors
- Stators
- Electrical motors
- Electrical axles
- Electrical drive units
- Hybrid transmissions
- Engine blocks
- Suspensions

### Fully-integrated Technology

- Product handling and cleaning
- Adhesive and Thermal past application
- Laser and Ultrasonic welding
- Tightening
- 2D and 3D vision systems
- Plasma treatments
- Leak and end of line tests
- Insertion and pressing
- Coil winding
- Hairpin insertion and welding
- Insulation and impregnation
- Magnetization



## SmartCube Comau

From manual, semi-automated to fully automated and serial to parallel cells, SmartCube Comau offers a range of choices for injecting efficiency into your production flows. Because all this adaptability comes with the highest degree of standardization, you can trust that your products embody quality and precision no matter where they are produced. The result? SmartCube Comau can help you reduce management and manufacturing costs while ramping up your production performance.

- Adaptive and responsive to sudden shifts in production
- Uniform precision across machines and facilities
- Quick retooling reduces wasted production time
- Reduced Work in Process (WIP) with Lean Manufacturing
- Space and energy savings
  - up to 50% less floor space needed
  - up to 60% reduction in power and fluid consumption

*Comau helps companies increase their technical performance while reducing production costs and design times.*

## General Assembly

Organizations of all sizes and across multiple industry sectors are increasingly using our results-oriented industrial processes to improve competitiveness, boost performance and optimize production efficiency. By understanding and anticipating the needs of these customers, we can help them obtain the level of automation and flexibility their applications require.

Our highly competent team of specialists is trained to leverage Lean production principles to increase efficiency, streamline processes and lower overall costs of production within virtually any industry.

We understand that every customer has a different starting point when it comes to automation, so we work with our customers to determine where to begin. From engineering process definition and industrial equipment design, to manufacturing and installation, we provide high-quality, innovative solutions to meet emerging automation demands of our customers and increase their competitiveness in the market.







*From the preliminary technical study to the installation and launch of a turnkey line, Comau delivers both the engineering expertise and technical staff to manage the entire design, development, and installation/activation process – anywhere in the world.*



#### **Commercial Vehicles**

True competency in commercial vehicles means tailoring our technology to handle the dual needs of flexible manufacturing and big, heavy structures, all while delivering solutions that ensure higher performance and a lower cost.

#### **Renewable Energy**

As organizations all over the world turn their attention to renewable energy, Comau helps manufacture solutions that can produce energy products more efficiently and develop flexible systems that can adapt as requirements change.

#### **Heavy Industrial**

Companies who supply heavy duty equipment to their customers need a reliable and flexible process to accommodate changing industry demands.

#### **Railway**

In the railway industry, our focus lies in the design, build and installation of new manufacturing processes to accomplish the required production flexibility needed for railway assembly automation and optimal manufacturing flow.

## Powertrain Machining

As a leading supplier of processes and manufacturing systems, we work side-by-side with our customers exchanging experiences and defining the highest quality solutions.

Our creativity, flexibility and versatile approach enable us to generate tailor-made systems based on standard modules. High-speed machining, long-term accuracy and reliability form the base of our solutions.

At the same time, our ability to provide complete integration of processes and equipment makes us a reliable supplier of turnkey systems.

Thanks to decades of experience, we put our customers at the center of our development philosophy and make their satisfaction a key indicator of our performance. It's Comau technology, tailored to meet your needs.

We can support you from the earliest phases of the project through the entire life of the plant. We offer maintenance services, equipment retooling, process engineering and project management to adapt your manufacturing environment to changing market demands and new product evolutions.





**Long-Term  
Quality**

**High  
OEE**

**Industry 4.0  
Enabled**



## Comprehensive Approach to System Integration

### Complete Support

- System integration
- Fast retooling solutions
- Local presence
- Customized training

### Targeted Competencies

- Process engineering
- System architecture
- Workflow logistics and simulation (Overall Equipment Effectiveness)
- FMECA analysis
- Life-cycle costs
- Eco engineering
- Ergonomics
- Interfaces

### Modular Solutions

- Machining center testing
- Assembly and test equipment within the machining process
- Thermal spray coating
- Automation
  - Conveyors, pallets, adapters
  - Gantry loaders
  - Robots
- Integration of outsourced modules
  - Honing
  - Washing
  - Measuring

## High-Accuracy Machining Centers You Can Rely On

With linear motors and electric spindles, our horizontal machining centers ensure high-speed, dynamic performance and long-term stable accuracy with lower maintenance needs.

### Outstanding Dynamics & Accuracy

- High performance
- High productivity
- Long-term accuracy

### Highly Versatile

- Support multiple processes
- Tailored to specific machining needs
- Integrated energy-saving MQL (Minimum Quantity Lubrication) technology
- Compact, modular design

### Industry 4.0 Compatible

- e-connected
- e-documentation
- Predictive maintenance
- Virtual machining
- Virtual commissioning



## Automation, Assembly and Test Equipment Within Machining Line

In addition to metalcutting equipment, Comau is also able to engineer and manufacture any and all of the assembly or test equipment that is needed within your machining line. Having one single supplier helps ensure the quality of the entire process. Several types of handling systems are also available to comply with your automation needs and guarantee the high flexibility and re-usability of the system.

### Assembly & Test Equipment

- Standard assembly products
- Robotics solutions for high flexibility
- Any kind of assembly process, from manual to automatic stations

### Automation

- Floor automation
- Robot supply and integration
- Overhead gantries (cartesian or robotic)
- Validation through virtual commissioning

## Thermal Spray Coating: Technology That's One Step Ahead

An innovative system designed specifically for the automotive sector, SmartSpray uses Plasma Transferred Wire Arc (PTWA) technology to coat cylinder bores, creating a thin layer of hard material by spraying molten metallic particles at extremely high speed.

- Thermal improvement
- Friction reduction
- Improved engine durability
- Engine weight reduction
- Fuel efficiency
- Flexible
  - Quick change between models
  - In-line or V-block configuration
- Highly efficient
- Continuous wire feeding capability



*The high dynamic accuracy of Comau machining centers allows us to deliver complete manufacturing solutions for a wide range of industries and to cover complex products with tight tolerances. Our long experience in the automotive industry ensures stable quality and high reliability in very demanding environments.*





*Comau pledges to deliver the right mix  
of flexibility, convertibility and modularity  
for new products and new needs.*

With open-source hardware and software and a 1kg payload:

e.DO is changing open-robotics in education and business.

The Industry 4.0-enabled “build-it-yourself” professional robot comes with 6 or 4 fully motorized axes.

## Robotics and Automation Products

Our wide range of innovative articulated and SCARA robots includes a large number of models that are perfect for handling, spot welding, arc welding, press-shop automation, palletizing, assembling, sealing, machine tending and many other applications. When deployed in the AURA (Advanced Use Robotic Arm) collaborative robotics version, they can work in close contact with operators without barriers or protection. For personal, business and educational use, e.DO gives users complete freedom to create and execute their own programs and robotic applications.

Technologically advanced, reliable, flexible, and specifically tailored to our customers' needs, we guarantee optimal performances across the entire range of robots, robotized cells and process-integrated solutions.

We also ensure prompt and flexible after-sales services. Our highly qualified and skilled team guides and assists customers for training, immediate intervention or scheduled maintenance.



*e.DO is a unique, open-source,  
Industry 4.0-enabled, professional robot created  
for anyone who wants  
to explore or expand  
the world of robotics.*

**From concept to a new paradigm:  
AURA collaborative robots.**

**No payload limitation and no  
barriers make HUMANufacturing  
a reality.**

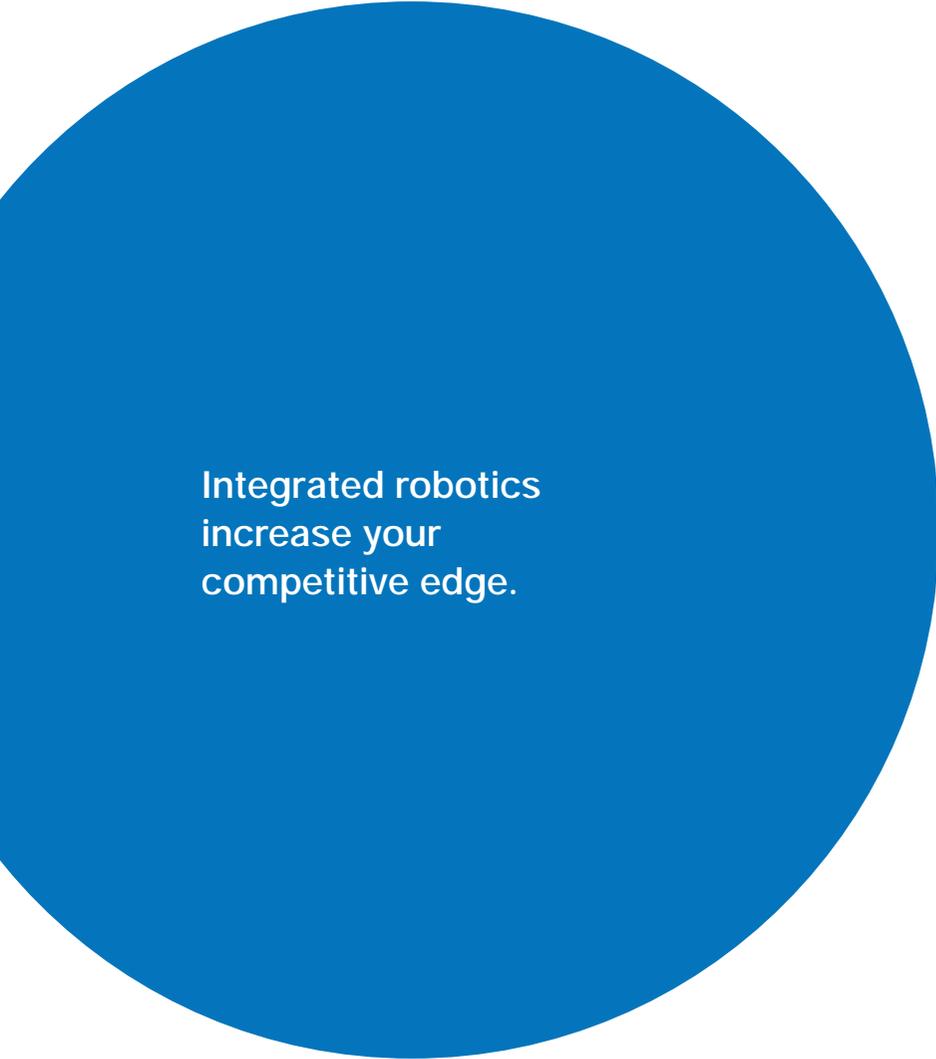
Our robots are characterized by their high performance in terms of speed, repeatability, accuracy and flexibility. With an industrial robot product range that extends from small payload robots to the massive capacity of 650 kg, our team is wide, well-known and appreciated. This extends to our Racer family of compact robots with their enhanced precision, lower ratios and innovative software approach.

From articulated industrial robots suitable for any application to dedicated robots for spot and arc welding, palletizing or press-to-press automation, each robot is designed with a reduced footprint, large work envelope, highly precise movements and positioning, great reliability and low maintenance costs. Maximum on-the-floor performance is achieved thanks to our Racer family of compact robots with their enhanced precision, lower ratios and innovative software approach.

Our expanded service robot offering now includes automated guided vehicles and open-source educational robots.

The comprehensive product range also includes safe and collaborative robots, Industry 4.0-ready robots, wearable robotics, and flexible, enabling technologies within the smart factory paradigm.





Integrated robotics  
increase your  
competitive edge.

### Technology

- Powerful SCARA and articulated robots (4 - 6 axes)
- Broad range covering 3 kg up to 650 kg
- Patented Hollow Wrist technology
- Full set of application equipment and accessories

### Performance Oriented

- Highly flexible
- Highly efficient
- Highly productive

### Complete Control

- Reliable and powerful robot control unit
- User-friendly programming teach-pendant
- Process-oriented software dedicated to each application
- SAFE version available

### Multiple Application Areas

- Spot welding
- Arc welding
- Handling
- Palletizing/pick&place
- Press-to-press automation
- Gluing
- Foundry



## Hollow Wrist

Robots equipped with Comau-patented Hollow Wrist technology are characterized by increased performance, fewer maintenance issues and reduced footprints because the welding equipment and cables are completely housed inside the robot arm. It's yet another Comau innovation designed to increase efficiency and reduce overall costs.

## NJ4

With a payload of up to 270 kg and a wide work envelope, the NJ4 robot family is the perfect choice for spot welding in every manufacturing environment. These Hollow Wrist robots are designed for high payload applications and feature a light, fast and stiff structure together with a maximum horizontal reach of 3 meters.

What's more, the 100% integrated dressing not only reduces the mechanical footprint but eliminates the need for external cable replacement, thereby reducing maintenance and ownership costs. The result is better performance and efficiency, optimal repeatability and an agile structure that can be floor or ceiling mounted for maximum flexibility.



*Fast and easy-to-install, Comau robots deliver larger work envelopes, smaller footprints, and can be seamlessly integrated within high-density spot welding lines for optimal productivity and speed.*

## Agile1500

Agile1500 is the first model within the Comau autonomous mobile robot platform and is based upon Comau's open automation design approach. It is flexible enough to be deployed across a wide range of manufacturing and non-manufacturing scenarios.

- High performance vehicle
- Best in class payload to size ratio
- Modular design
- Multipurpose applications
- Multiple navigation systems

*This fully-automated workflow solution is designed to safeguard productivity and profitability across the entire manufacturing line.*





## Lhyte

With a compact, modular structure that combines fiber and/or diode laser sources for increased flexibility, precision and speed, LHYTE helps you maximize throughput and meet production targets with a single, easy-to-use system.

- Unique product in the market able to operate alternately in two different modes (direct diode and fiber)
- Modular design (direct diode, fiber or combined)
- Common hardware for different applications
- Integrated water and chiller
- Optical chain architecture: Comau patented solution





Lhyte

COMAU

COMAU

gile



*Our commitment to helping ensure the longevity of your investments is reinforced by longstanding expertise in the development, manufacturing, installation and maintenance of industrial automation systems.*



# Services

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From the maintenance of industrial assets to the development of projects and consulting for the best performance of the equipment on production lines, we are always seeking ways to increase asset productivity and efficiency. Our goal is to help companies make the most of their processes and equipment. To do this, we aim to reduce their costs, increase availability and cycle times, improve process performance, and identify intervention opportunities that can truly impact a customer's business.

## Customer Care

The satisfaction of our customers is always a top priority, which is why we provide prompt and flexible after-sales services throughout the life cycle of your equipment. Thanks to a complete range of services, we can help our customers maximize the performance of their installed solutions.

- Efficient on-site technical assistance, repair and re-conditioning services, world-wide maintenance plans (extended warranties)
- Fast delivery of spares (at least 10 years after product end of production)
- On-line support through remote diagnostics and remote aids
- Training at either the Comau training center or customers' sites with multi-language sessions
- E-learning training aimed to explore processes and behaviors, exercise, reflect and provide feedback







## Manufacturing Maintenance

To help ensure the longevity of your investments, Comau specializes in **comprehensive maintenance and inspection services for a wide range of industrial segments**. More than offering simple preventative maintenance, we provide proactive technical and management solutions supported by predictive maintenance analytics. We understand that the productivity of our customers depends on both the efficiency of their machines and the strategic management of their assets, so we continuously invest in the modernization of our processes and key skills to meet these goals. Starting with after sales assistance and maintenance packages to facility management and overall planning services, we help our customers protect their assets and evolve their businesses.

## Facility Management

From the maintenance of industrial assets to specialized services for the operation, repair, and maintenance of utilities, we strive to increase asset productivity and efficiency. This includes a comprehensive building management offering that allows our customers to focus on their business performance while we handle the day-to-day details of their facilities.

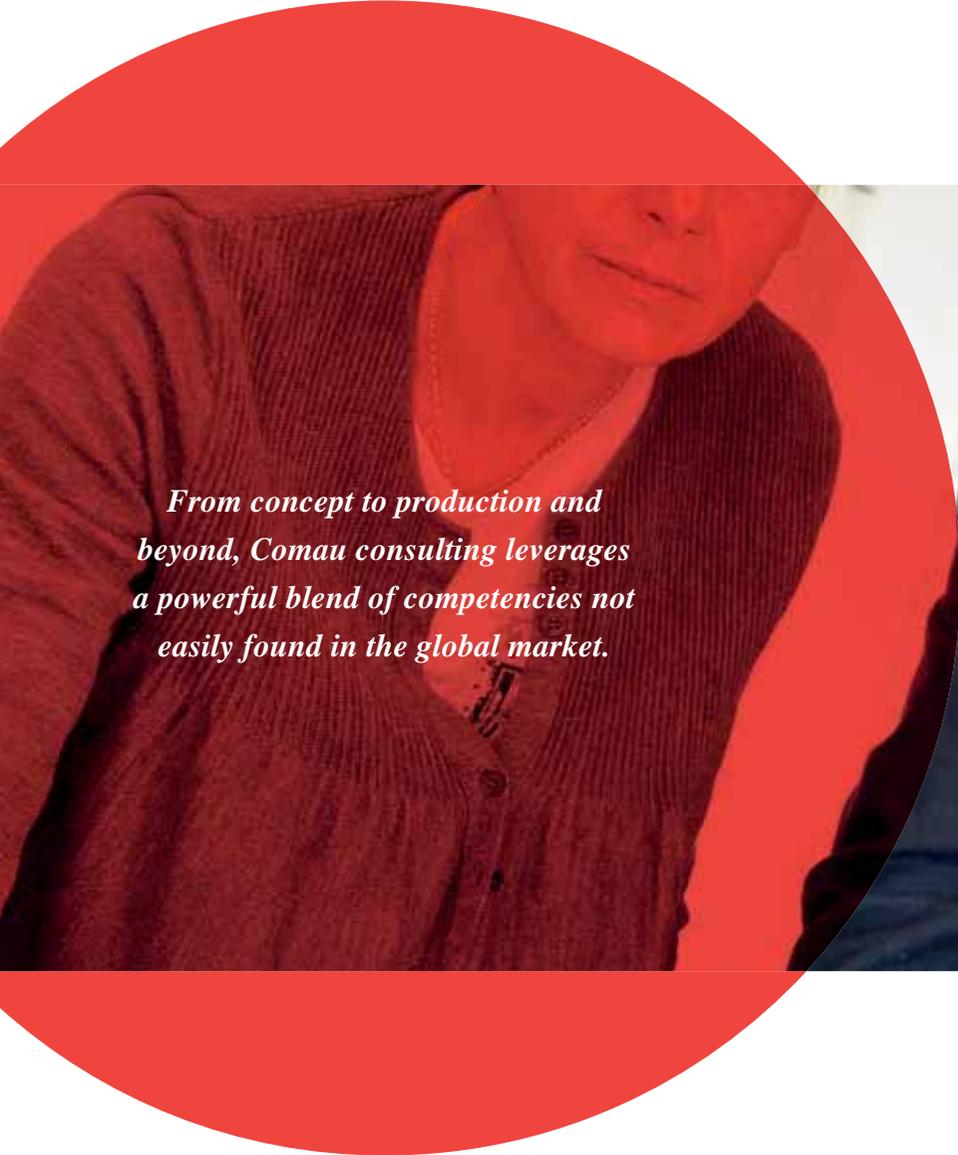


## Project Management

As a worldwide provider of advanced automation and manufacturing systems, we recognize the inherent advantages and challenges of complex, cross-cultural projects. This is why we have enhanced our ability to work at a global level and manage projects across different countries and different cultural mindsets.

At Comau, **project management is more than a function; it is a way of doing business** that is validated by processes and policies, and rooted in the promise to support our customers at an integrated global level. Validated by processes and policies, we work to ensure the success of our projects and the success of the customers who rely on us to achieve their business objectives.





*From concept to production and beyond, Comau consulting leverages a powerful blend of competencies not easily found in the global market.*





## Consulting

We are committed to helping companies improve their competitiveness **in fast-paced markets with challenging demands by applying the concepts of Lean Manufacturing and digital transformation** at a plant level, line level, station level and even an equipment level. Flexible, scalable and lean, our manufacturing solutions focus on streamlining processes to reduce waste in the form of time, space, transportation and resources.

Whatever the process, building or manufacturing complex, our green energy solutions can improve eco-performance and significantly lower your operating costs. Thanks to our “whole-systems” approach, each phase of a project is engineered and executed to guarantee maximum flexibility. This means that our solutions use energy where and when it is needed, in the quantities needed, and employ readily available resources and the optimal mix of technologies.



*The Learning Factory  
We play a leadership role in  
competency development: hands-on  
skills growth opportunities to improve  
production performances.*



# Comau Academy

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Comau Academy was created with the objective of making our 45 years of experience available to organizations and individuals operating in the global market.

Our company is made of people and their know-how. We are leading the automation culture, and through Comau Academy we want to share our knowledge by providing learning opportunities such as Masters programs, training programs, seminars and publications for companies, professionals, young talents, universities and schools.

## Training

We offer innovative training opportunities for young talent and company professionals ranging from hands-on Master's programs to project management and advanced technical training.

Our main professional programs are:

### **Executive Master in Manufacturing Automation & Digital Transformation**

Earn a master's degree while acquiring the technical and managerial skills needed to design and manage during the Industry 4.0. It combines industrial automation, digital manufacturing, people & project management and company project work focused on cutting-edge automation topics.

Furthermore, we provide these courses:

- Project Management Fundamentals
- Risk Management Fundamentals
- Project Management Professional certification
- PME - Project Management Essentials
- Robotics Training: Advanced Programming and Integration, Application, Maintenance, Use and Programming



### *Focus on Developing Competencies*

- *People and Project Management*
- *Master in Manufacturing 4.0*
- *Master in Manufacturing Automation & Digital Transformation*
- *Robotics License*
- *e.DO Open-source Robot*

Our courses for young talents are designed to consolidate their skills set, helping them enter the job market with confidence and a truly professional approach:

### **Project & People Management School**

An intense cross-cultural school designed to improve the preparation and effectiveness in managing people and projects. We cater to companies and individuals who want to manage complex projects with the same proven methodology and tools that we daily use in our projects around the world.

### **Specializing Master in Manufacturing 4.0**

It enables the best university students to earn a master's degree in Manufacturing 4.0 from the Politecnico di Torino while working in, and being hired by, Comau. The initiative combines classroom and hands-on experience, allowing students to practice what they learn.

Comau also has specific programs for students and kids:

### **e.DO Learning Center and the e.DO Lab**

We are working directly with students and educators to further evolve the use of robotics as an innovative learning tool. e.DO supports traditional teaching methods for a variety of subjects – including math, physics, art and computer science – while stimulating creativity and student participation.

### **Robotics License**

A training program that allows students to become robotics experts, even while they are still in school.



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