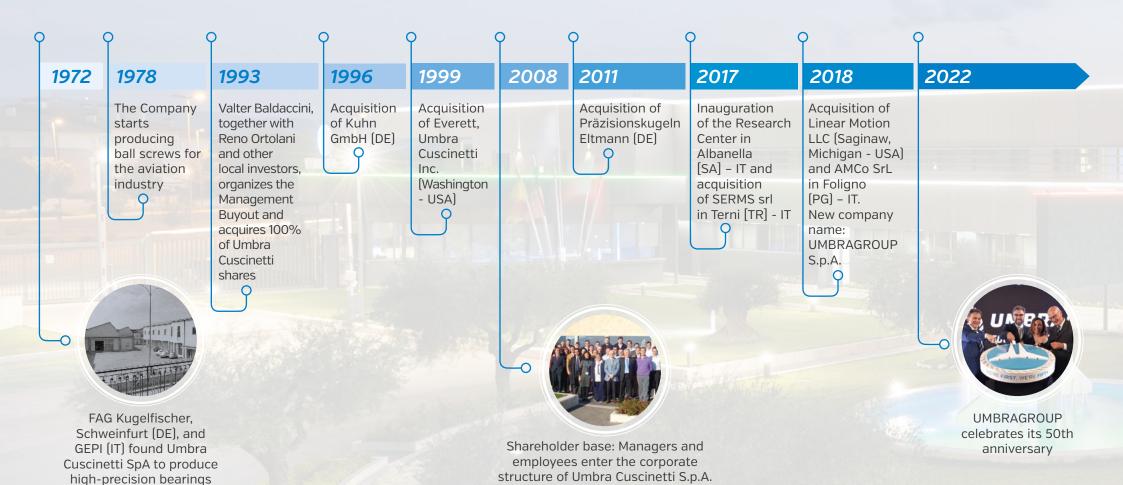


# KEY MILESTONES ON PATH TO BE FIRST



**Our Mission** 

TO BE THE CUSTOMER'S
INTELLIGENT SUPPLIER
OF ACTUATORS, BALL
SCREWS, BEARINGS AND
COMPONENTS IN HIGH-TECH
MARKETS.

**Our Vision** 

AGILE, PASSIONATE PARTNER REVOLUTIONIZING MOTION SOLUTION.



#### **Innovation**

We develop new ideas that foster innovation and improvement of processes, skills and interpersonal relationships.

### **Social Responsibility**

We consider our company as a common good, belonging to all our community.

#### **Teamwork**

We nurture passion and determination to meet and overcome challenges, in full compliance with our Vision. Our strength is our team!











#### Focus on the customer

We want to build a lasting partnership based on mutual trust. We listen to our customer's needs to make a difference.

### Respect

We create loyal relationships based on trust, engaging professional discussion and the exchange of ideas.



### **TRANSPORTATION**

UMBRAGROUP offers a wide range of solutions for Transportation with a strong focus on electrification. It's able to satisfy high volumes, high reliability and strict process control.



### **INDUSTRIAL MACHINERY**

The Group has decades of experience in the design and manufacturing for critical components in Industrial Machinery.

The UMBRAGROUP brand is globally recognized for the quality of its products and the strength of its services.

### **ENERGY**

UMBRAGROUP is focused on sustainability and energy efficiency. Electromechanical actuators designed with the goal of achieving unparalleled performance by supporting the customer in reducing consumption.



### **HEALTH CARE**

The Group can offer solutions for Health Care application using micro ball screws and sub-assemblies with a high level of compactness and precision.

### **AFTERMARKET & SERVICES**

UMBRAGROUP's Aftermarket division is dedicated to continuously support the customer for the entire life cycle of our products. The company can also guarantee in-house heat treatments and special processes.



# **PRODUCT LINE**



#### **ACTUATION**

ACTUATION includes UMBRAGROUP products used in Industrial Automation, both for linear and rotary movements in a variety of applications including Machine Tools, Sheet Metal Bending, Laser Cutting, Presses and Forging.

All UMBRAGROUP products for this sector are characterized by high performance in small dimensions.



#### **TRANSMISSION**

TRANSMISSION includes UMBRAGROUP products used in the Power Transmission sector.

There are both high quality parts such as balls, shafts and gears but also more complex items such as bearings, a flagship product of UMBRAGROUP.



#### **HIGH-SPEED ROTARY SYSTEM**

HIGH-SPEED ROTARY SYSTEMS include both milling and grinding electrospindles but also electric motors with special dimensions and technical characteristics.

# PRODUCT PORTFOLIO



# INDUSTRIAL MACHINERY

#### **Machine Tools**



Grinding • Transfer • Turning • Rotary Table
 Electro Discharge Machine • Wood/Al • Marble/Glass
 Waterjet • Milling • Additive Manufacturing • Nesting
 Flowforming • Peeling • Lapping

#### **Plastic**



• Injection • Blow Molding • Hot Runner • Thermoforming

### Ball Screws



**Bearings** 



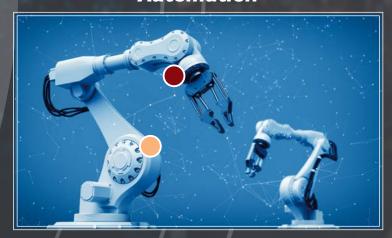
Electrospindles

### Deformation



Wire and Tube • Bending • Punching • Laser Cutting
 Ring Rolling • Straightening • Metal Sheet Rolling
 Panel Bender • Welding • Die Casting • Bar Rolling • Presses

### **Automation**



• Packaging • Robot • Semiconductor • Winding • Brake

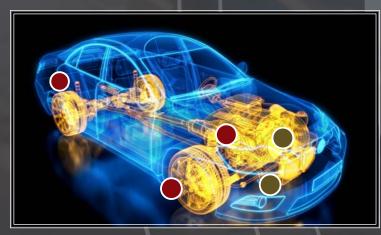
# TRANSPORTATION

### Railway



• Power Train • Switching Point

### **Automotive**



• Dampers • Brakes By Wire • Steer By Wire

### Automotive (Off Road)



• Steer By Wire • Lift System • Side Loaders

### Naval



• Stabilizers • Thrusters





# **ENERGY**

### Conventional



• High Precision & High Load Motion Systems

### Renewable



High Precision & High Load Motion Systems High Load Pumps Generators



# HEALTH CARE

### Biomedical



• High Precision Pumps

### **Medical Instruments**



Positioning Systems





### STEEL BALLS



UMBRAGROUP's Präzisionskugeln Eltmann GmbH facility in Germany is specialized in the production of high-quality steel balls.

They are made with materials sourced from qualified suppliers to the highest standards and manufactured using innovative production systems. UMBRAGROUP manufactures steel balls used in a wide range of Industrial and Aerospace applications.

Fifty years of Industrial-sector experience has made UMBRAGROUP a premier ball screw supplier. Our design and manufacturing is focused on solving specific application requirements such as: high axis linear speed, high acceleration and high load. The Group has the capability to design and produce Industrial ball screws able to respond to a dynamic and challenging market with a wide range of product families.



**BALL SCREWS** 

### **BEARINGS**



UMBRAGROUP is highly experienced in bearings manufacturing. The headquarters, founded in 1972, has always distinguished itself in the production and design of medium and large-sized bearings.

# ELECTROMECHANICAL ACTUATORS



#### LINEAR

UMBRAGROUP designs and manufactures compact, efficient and flexible linear actuators.

The capability to design all actuator components leads to high performance and power density systems. The main design goal is the development of compact high-efficiency systems suitable for a wide range of applications and operating conditions.

#### **ROTARY**

UMBRAGROUP designs and manufactures rotary actuators with performance exceeding market standards for heavy duty applications.

**ELECTROSPINDLES** 



UMBRAGROUP designs and manufactures electrospindles for a wide range of applications such as light and heavy milling, grinding, woodworking, stoneworking and glassworking.

Compact solutions deigned to provide a significant torque power range.

### **SUSTAINABILITY**

Design guidelines that increase the eco-sustainability of products:

- Recyclable materials
- Repairable items
- Sustainable materials and processes
- Extended life (Total quality and design for robustness)

ISO 50001 (System for Energy management Optimization)

### Digitalization:

- Paperless approach
- Time, Communication and logistic optimization (Internal and External)

Local Supply Chain (LSC).

Local for Local business approach.

Energy Saving (Internal actions to reduce consumption, home office, e-mobility).

Internal revamping of old Machines by UMBRAGROUP Tech Inside phylosophy.



### **ELECTRIFICATION**

Integrating different actuation technologies in designing more electric systems, taking advantage of a remarkable specialized knowledge on all the rolling elements design and production.



Laying the foundations for the definition of a new standard of electromechanical actuators removing all the maintenance tasks, using health monitoring technologies and reducing the overall life cycle cost.





# INTEGRATED PROCESSES AND CAPABILITIES

One unique management system



DESIGN AND DEVELOPMENT

Detail Design
Electric Design
Electronics & Software
Functional Analysis
Maintainability
Reliability
Safety
Stress Analysis
Thermal Analysis

Verification & Validation



FAST PROTOTYPING

3D Measurements
Advanced Robotics
Assembly
Tooling



INDUSTRIALIZATION

Built-to-Print Industrialization
Fixtures
Internal Specifications
Manufacturing Sketches
Operative Procedures
Routing
Process PFMEA

Production Part Approval Process (PPAP)



MACHINING

CNC Lathe
Conventional Lathe
Grinding
Haper
Honing Machine
Milling
Precision Deep Drilling
Turning
Whirling

# INTEGRATED PROCESSES AND CAPABILITIES

One unique management system



SPECIAL PROCESSES
NADCAP

Anodizing
Black Oxide Coating
Chromium Plating
Chromic and Sulfuric Anodizing
Copper Plating
Gas Nitriding
Gas Carburizing
Hardening and Tempering
Induction Hardening
Low Pressure Hardening
Low Pressure Carburizing
Passivation
Precipitation Hardening
Phosphate Coating
Zinc-Nickel Plating



ENVIRONMENTAL & STRUCTURAL TESTS

Combined Vibration + Temperature Test

**Dynamic Load Tests** 

**Endurance Test** 

**Environmental Test Limit** 

Fatique Test

**HALT Test** 

Noise Test

Operational Shock and Crash Safety

Performances Test

**Ultimate Load Test** 

Vibration Test



EMI TESTS

Audio Frequency Conducted Susceptibility

Electrostatic Discharge

Emission of Radio Frequency Energy - Radiated and Conducted

Magnetic Effect

**Power Input** 

Radio Frequency Susceptibility
- Conducted

Voltage Spike



SERVICE & SUPPORT

2 Repair Stations AOG Service ILS

Inventory Mgmt

# **QUALITY SYSTEM**

UMBRAGROUP rigorously works together with its customers, fully responding to their needs and expectations, guaranteeing respect and satisfaction of the contractual agreements in terms of quality, timeliness, costs and always acting in accordance with applicable regulations. This commitment includes the punctual flow-down of the requirements towards your supply chain.

UMBRAGROUP is highly motivated to improve the effectiveness and efficiency of management and operational processes, ensuring full compliance of the products and processes to the specifications and regulations applicable to quality and safety.

UMBRAGROUP implements these strategies through its **quality management system**, developed and certified according to the rules: ISO 9001, AS/EN 9100, NADCAP.

### **CERTIFICATIONS**

- ISO 9001 ISO 14001 ISO 45001 ISO 50001
- EN/AS 9100 FAA NADCAP







## **PRODUCTION SYSTEM**

UMBRAGROUP works cohesively to harmonize and centralize the forecasting, planning, and management of customer orders in all our worldwide locations.

The UMBRAGROUP Production System is based on a set of tools and rules, derived from Lean Production and 6-Sigma principles. It is suitable for managing productive and organizational activities to guarantee on-time-delivery to the Customer, respect for quality targets and reducing waste, with the aim of increasing competitiveness in the market.

It is a group approach oriented to the consolidation and improvement of all business processes aiming for higher efficiency.





# THE VALTER BALDACCINI FOUNDATION

We strongly believe in the possibility of an ethical approach to economic development, which combines productivity and the centrality of the individual in strategic business decisions.

The Foundation was founded in 2015 to preserve the memory of Valter Baldaccini, founder of UMBRAGROUP, and to continue helping the most vulnerable through social development projects.

"Together we sowed a great seed that will become a great plant"

Valter Baldaccini, 09/04/2014



www.fondazionevb.org/en



