

# Metal Testing Solutions



### 1890 Our Heritage

Since 1890, the strength and pride of a company that over more than a century has created its history, growing and developing with determination and continuity, always ready to face new challenges and deal with change.

### **Core Values**

Galdabini's strong values and philosophy put customers first, working with dedication and commitment to come up with the best technology and set new standards in material testing machines.

Innovation is our culture. Finding technological solutions to meet customer needs is our common goal. Challenges inspire our passion.

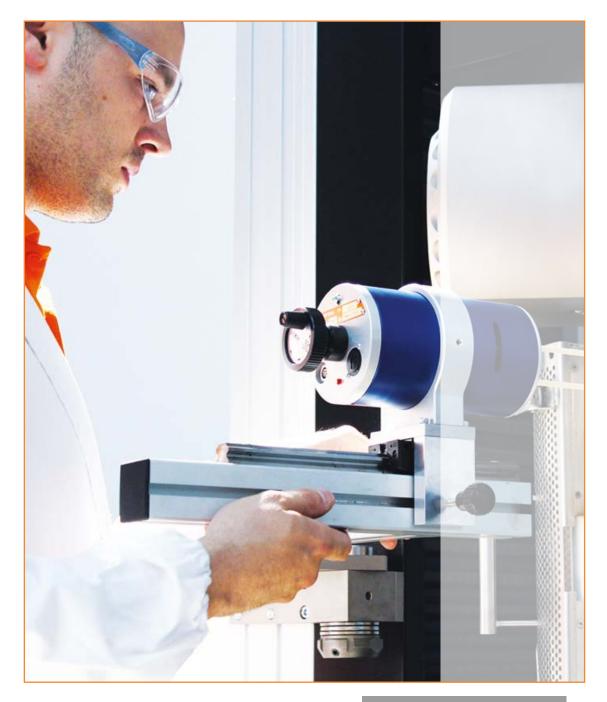
### Customer First

How do we satisfy your needs and requirements?

### Providing our customers with the best know how, experience and service

We supply the highest quality products, innovative technology, expert support and world-class service.

With more than 120 years of experience in the material testing industry, Galdabini instrument systems are found in applications and industries such as plastics, metals, composites, elastomers, components, textiles, aerospace, automotive and biomedical.





#### Product Portfolio

A wide range of electromechanical materials testing machines suitable for bidirectional tests: tensile, compression, flexure, bending, cycle, constant load and many others according to International Standards or customer procedures.



# Quasar Line at a glance

# Single Column Benchtop for Low - Force Testing:

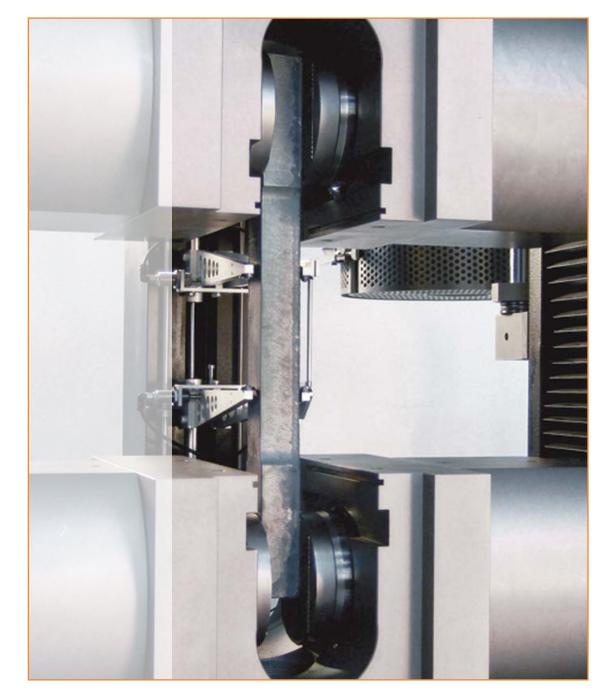
- Capacities up to 2,5 kN
- Small dimensions, high performances
- Commonly used in microelectronics, wires, small components, textiles, plastic films, rubber.

#### Dual Column Benchtop for Mid - Force Testing:

- Capacities up to 100 kN
- Multi-purpose, versatile requirements
- Used for automotive and aerospace industry, non-ambient temperature applications; metals, plastics, wood, composites, technical textiles.

#### Dual Column Floor Model for High - Force Testing:

- Capacities up to 2000 kN
- Tough, Heavy-duty frames
- Used for high-strength metals and alloys, bolts, fasteners, steels plate, elaborate components for automotive and aerospace industry.

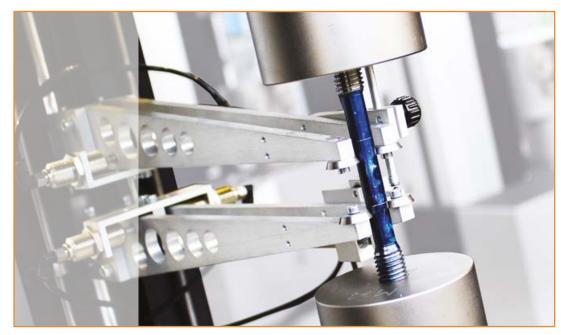


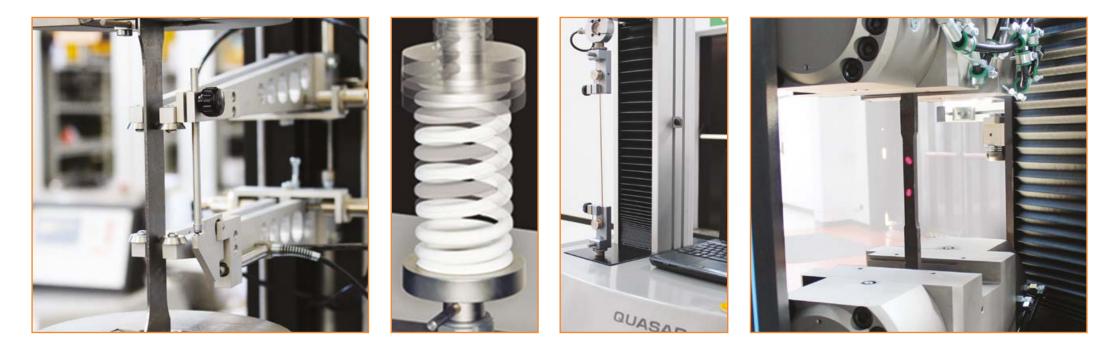
### **Applications**

Galdabini has a wide range of customised solutions for specific applications and in accordance with International Standards. Our expertise allows us to meet our customers' requirements by providing the best testing equipment, gauges, and accessories.

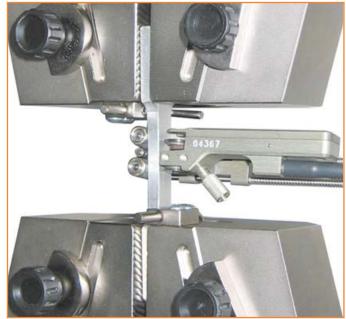
If you wish to see more details about applications and accessories please contact us at: info@galdabini.it











# Details that make the Difference

The design and manufacturing of fixtures and extensometers take place internally at Galdabini. This allows us to have complete control over testing processes, which are in full conformity with ISO / ASTM / JIS / GB Standards, enabling us to entirely guarantee our testing machines.

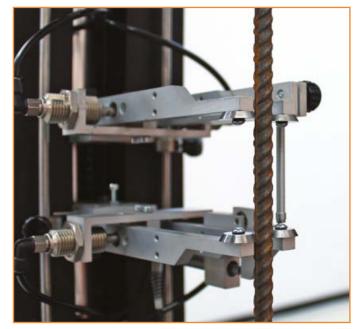
All machining and assembly of testing machine frames, crossheads and major components take place in-house at our Galdabini factory.





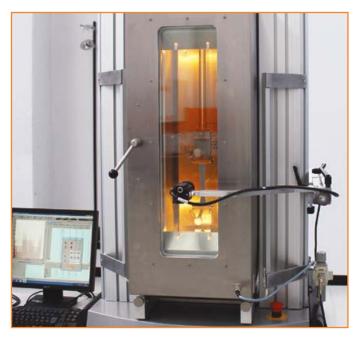












### Software

Performance beyond your expectations

The simplicity of the software and the user friendly interface allow the operator to program easily.

Graphwork 5 Plus - The completeness of our software enables it to be used for all applications and Norms with no additional costs for software.

Designed and updated by the Galdabini software engineers in response to customers feedback and needs.

Graphwork 5 Plus includes a library of hundreds of test methods and allows the customer to program a test method with the aid of interactive help.

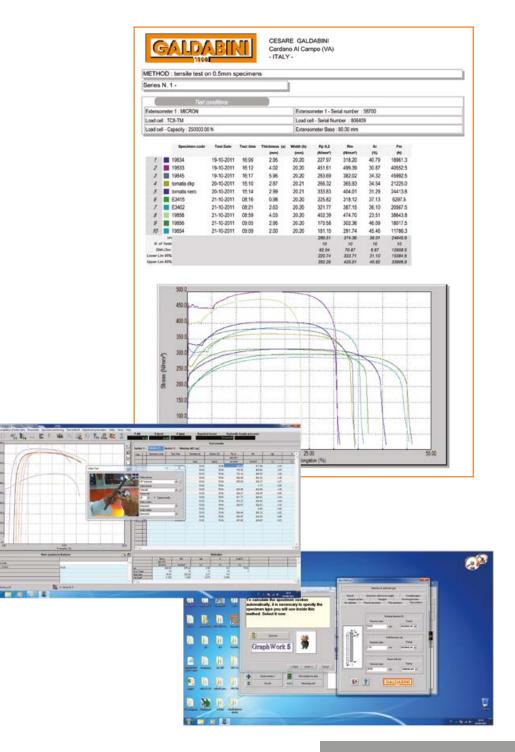




Data results may be stored, analysed, transferred and included in personalized test reports.

Free, remote on-line customer support by means of a "team viewer" module, enables us to help customers from our service department – solving programming issues promptly and carrying out a full inspection of the machine.





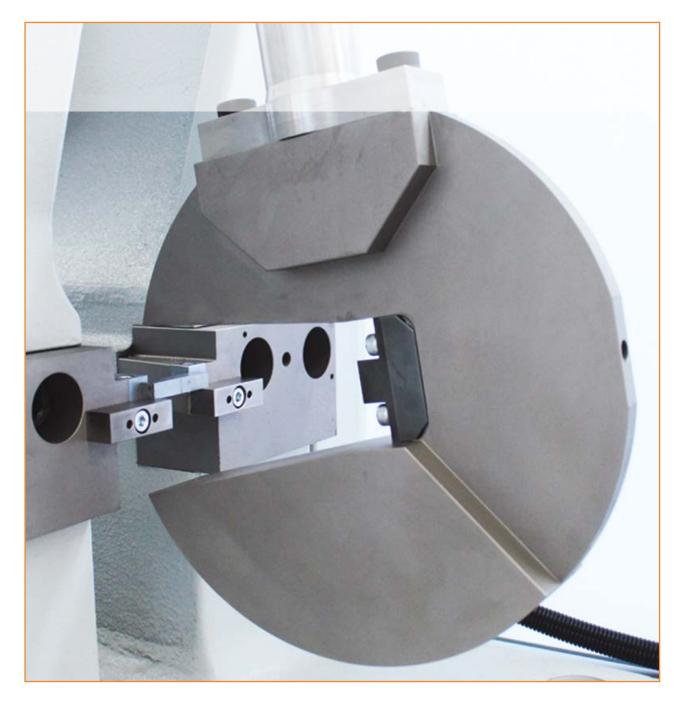
# Impact Line

#### Product Portfolio

A complete range of impact machines for testing resilience covers nominal energy of 25, 150-300, 450, 600-750J, following both Charpy and Izod methods.

A variety of specimen-preparation machines, thermostatic chambers, instrumented knives and many useful accessories for instrument set-up are available on customer request.











### **Robotized Systems Line**

Galdabini is a pioneer in automation technology applied to industrial equipment. The software engineering department's dedicated team develops solutions for robotized testing systems with the integration of Quasar tensile and Impact resilience testing machines. The winning synergy between testing machines, robots and warehouse systems for specimens grants users high productivity and repeatability of results with limited human attendance.

Robotized systems are governed by a GTA area controller and a dedicated PLC, connected through Ethernet line.

This set up allows an intensive and reliable 24 hour operation with lasting performances.

Two lines of solutions are available: Multi and Compact Line, with six and three-axis robots respectively.





### Be Galdabini

#### What is competence for customer?



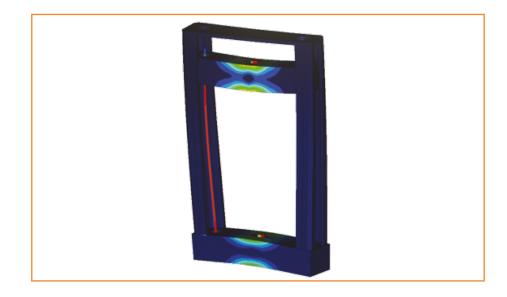
Galdabini electronic board is designed and made by using highquality components at the best state of the art.Widely used in heavy industrial application, the board offers important distinguishing features such as a data acquisition frequency starting from a standard of 500 Hz expansion capability. High reliability grants an accurate use even in the presence of difficult environmental conditions. Thanks to exceptional performance features, this solution is applied to both robotized systems, subject to intensive use, as well as on stand-alone testing machines.



Galdabini is a manufacturer of dead weight primary force machines, installed at major official national metrological research centres. The Galdabini metrological centre in Cardano al Campo uses its own dead weight primary force machines of 500kN for the purpose of accurate internal calibration of load cells.



We have been manufacturing ball-screw driven testing machines for more than 30 years. Over the years we have supplied several thousands of machines worldwide to some of the most important players. Ball screw quality is extremely reliable and meets the best ISO Standards. Expert assemblers ensure a perfect assembly of frames and ball screws, to guarantee precise coaxial mechanical alignment of grip connections.



Galdabini instrument frames and fixtures are designed using 3D parametric programs. Frames are verified by means of Finite Elements Method (FEM) that allows to evaluate the stress and the behavior under working load. The use of this technology brings huge benefits to the product through the correct dimensioning of the frames and all installed components. The guarantee to have lean and sturdy structures, at the same time, is an important step supporting the user. An intensive activity of research and development allows to improve the projects through solutions that meet the ergonomy of machines and equipments. In addition, specific studies, commissioned to universities, are performed to optimize the individual operator movements during tests.

Considering that a specimen for a high-capacity machine may weigh 7 kg and that customer operators might perform up to 1 test every 4 minutes - this is a valuable aspect.

#### Calibration and After Sales

Galdabini is an official European Calibration Centre for both load, deformation, resilience, hardness and other physical units typical of material testing laboratories. This is a service to ensure that our products are state-of-the-art as well as enabling us to provide the most reliable support possible. Additionally, Galdabini, as a partner of leading brands in the aerospace industry, also complies with the NADCAP certification quality standards for calibration and alignment.

A qualified staff supports customers on-site during installation, training and calibration on a world-wide scale. The technical support is provided by our skilled service engineers all over the world and is available throughout the entire life cycle of the machine. We always include on-line after sales service carried out via remote interfacing module, Team Viewer. In addition, a wide range of spare parts is stocked in our warehouse, enabling us to provide rapid delivery to customers.





# Business and Values

#### Growing together

#### Certification

ISO 9001 - Calibration Centre LAT N° 034- UNI EN ISO/IEC 17025 "General requirements for the competence of testing and calibration laboratories"- Signatory of EA, IAF and ILAC Mutual Recognition Agreements.



#### You can count on us

We are represented in every continent and in over 80 countries, providing technical and commercial service through a network of highly-qualified personnel who regularly attend on-going training courses.

#### Call us!

Available year-round, anywhere in the world for professional customer care in technical assistance, calibration, repair, and instrument upgrade services of our machines.

#### galdabini.it

Enjoy our experience.







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