

ENG

# PRODUCT RANGE



# GEFRAN

BEYOND TECHNOLOGY







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More than fifty years of experience, an organization with a strong focus on the customer's needs and constant technological innovation have made Gefran a benchmark in the design and production of sensors, systems and components for industrial process automation and control. Expertise, flexibility and process quality are the factors that distinguish Gefran in the production of integrated tools and systems for specific applications in various fields of industry, with consolidated know-how in the plastics, mobile hydraulics, heating and lift sectors.

Technology, innovation and versatility represent the catalogue's added value, in addition to the ability to create specific application solutions in association with the world's leading machine manufacturers.

# GLOBAL VALUE DISTRIBUTED THROUGHOUT THE WORLD

-  8 PRODUCTION PLANTS
-  13 SALE OFFICES
-  660 EMPLOYEES
-  134 MILLION EUROS (Turnover\*)  
\*2022

To be trailblazers in new technology advancements we typically invest about 5% of our total turnover in research and development activities.

Engineers, designers and software developers represent 14% of the Italian workforce.

Collaboration with national and international research centers and universities guarantees a continuous transfer of knowledge and represent one of our success factors.

## MAIN APPLICATION SECTORS



PLASTIC



MOBILE  
HYDRAULICS



INDUSTRIAL  
FURNACES



METALWORKING

### PRODUCT RANGE

## CONTROLLERS, INDICATORS AND POWER CONTROL

### CONTROLLERS AND PROGRAMMERS

A complete range of PID controllers with front panel installation, for the precise control of process variables such as temperature, pressure, force, position and humidity. Fully scalable and available in both single loop and multi-loop versions, these controllers satisfy the most varied application needs also thanks to advanced logic and mathematical functions and connectivity features, including remotely.

**Modbus TCP** **Modbus RTU**



### INDICATORS AND ALARM UNITS

Instruments dedicated to all the applications that require a clear and precise display of the process variables, capable of detecting alarm thresholds with visual indications and digital signalling outputs.

**PROFI BUS** **Modbus RTU**  
FM APPROVED



### POWER CONTROLLERS

A large portfolio of modular Power Controllers up to 600A, for heating processes control with electric heaters like Resistive/ Infrared (SWIR) / MoSi2 / SiC / Graphite and Transformer.

Gefran power controllers integrate the main Fieldbus communication protocols in addition to the diagnostic and predictive maintenance functions.

**EtherNet/IP** **PROFI NET** **PROFI BUS** **Modbus TCP** **Modbus RTU** **EtherCAT** **CANopen**  
**ODVA CONFORMANT** **PIV** **SCCR RMS SYM 100KA / 600V**



### SOLID STATE RELAYS WITH/WITHOUT HEATSINK

Available in sizes from 15 to 120 A, with integrated diagnostics and an ultra compact and particularly strong design. Ideal for a wide range of electric heating applications.

**SCCR RMS SYM 100KA / 600V** **NFC** **IO-Link**



# SENSORS

## INDUSTRIAL PRESSURE

Transducers to measure the pressure of fluids (liquid or gaseous) in various industrial applications. Also available in ATEX intrinsic safety versions for use in potentially explosive atmospheres.



## MELT PRESSURE

The transducers for pressure measurement at high temperatures (up to 538 °C) are available with different filling systems or with patented IMPACT fluid-free technology. They are the ideal solution for the most common extruded materials such as plastic, polyurethane foams or expanded foams, food products or two-component resins.



## STRAIN & FORCE, LOAD CELLS

A unique range of transducers used for controlling the tension of plastic film, paper or fabric, including unique strain sensors for temporary or static measurements of force or compression / tensile load.



## TEMPERATURE

A complete range of resistance thermometers and thermocouples that can be fully customised according to the type of application, environmental conditions, temperature range and required accuracy.



## PRODUCT RANGE

## POSITION - MAGNETOSTRICTIVES

Thanks to the magnetostrictive HYPERWAVE technology, the primary element detects the position without mechanical contact, eliminating wear and use-related problems. Extremely versatile and available with different strokes, both with profile mechanics for external mounting and with rod mechanics for installation inside a cylinder, these sensors represent the ideal solution for position measurements in the most varied applications.



## POSITION - POTENTIOMETERS

Sensors with potentiometric technology are typically used in the industrial or geotechnical world for the measurement of linear or angular displacement and they allow to maintain the detection of the stroke, therefore of the position, even in the absence of power.



## POSITION - TWIIST

TWIIST is the innovative multivariable sensor that can measure position, linear acceleration, angular acceleration and temperature at the same time. All thanks to a patented system for the position measurement based on the 3D Hall effect. With environmental protection, shock and vibration resistance this product represents an ideal measurement solution in various industrial and mobile hydraulics sectors.



## POSITION - ROTARY, INCLINOMETERS, LINEAR BY WIRE

Very resistant position transducers, designed for measuring angular positions, inclination or considerable lengths, suitable for use outdoors and in particularly harsh conditions.



## AUTOMATION PLATFORMS

Gefran Soluzioni, a company of the Gefran Group, provides products, solutions and services for the industrial automation of plastic material transformation processes and other applications, from the simplest thermal processes, such as in the glass sector, to the more complex ones, such as industrial autoclaves dedicated to the production of composite materials.

Gefran Soluzioni designs and manufactures automation platforms, solutions characterised by specific hardware and software that are constantly updated also thanks to the continuous collaboration with OEMs in the sector.

### PANEL PC AND HMI

Panel PC unit (3.5" to 15" in size) with advanced control and graphics functions in a single product.

HMI interfaces with capacitive multi-touch screens (10" to 21" in size), also in IP67 version, for the management of PLCs from inside the panel.

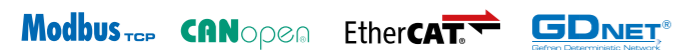
Touchscreen controllers (10" to 15" in size) with dedicated keyboard, available in different sizes, for injection machines.

All of these automation products are Industry 4.0 compliant and include OPC UA and MQTT functionality.



### REMOTE I/O

High performance remote modular I/O. Compact design with high I/O density per module for installation in small spaces. High performance Fast-ethernet GDnet, Ethercat or CANopen protocol with easy integration into third party products. Our offer includes a custom I/O module which main characteristic is that it is assembled according to user requirements, combining different type inputs and outputs on the same card, in the quantities required. In this way you can adapt perfectly to the requirements of the machine or system to be controlled. The modules can be prepared for assembly on DIN runner or plate.



## INTEGRATED DEVELOPMENT ENVIRONMENT

GF\_Project VX and GF\_Project LX are integrated development environment (IDE) for real time control applications based on Gefran automation platforms. They contain a complete environment for building HMI pages, for configuring fieldbus and all the standard programming languages IEC61131-3 for PLC applications. Dedicated function blocks are provided as rich libraries in order to simplify many different automation duties. GF Designer HD is the new environment for multitouch HMI and web-server applications with enhanced graphics features.



## CLOUD & EDGE CONTROLLERS

Gefran Cloud is an advanced connectivity management solution that puts you in control of your IIoT business. Gefran Cloud is powerfully robust, highly scalable and offers advanced VPN capabilities.

The user interface is incredibly clean and easy to use. This IIoT-ready, secure, and user-friendly platform dramatically reduces the excess costs involved with installation and maintenance as well as preparing you for the new IIoT business models of tomorrow.



## CABINET SOLUTIONS

With an installed fleet of over 15,000 machines and a know-how of multiple applications, Gefran Soluzioni provides consolidated expertise and offers HW and SW solutions to OEM and end users in different industrial applications and different geographical markets.

The solutions are certified in conformity to international standards, including the North American market (UL 508 A).





WE EMBRACE TECHNOLOGY

WE ARE  
CONSCIOUS

WE CARE

WE SMILE

WE WORK  
HARD

WE ARE STRONG

PASSION MOVES  
US FORWARD

WE BELIEVE IN WHAT WE DO

OUR VISION IS GLOBAL

OUR VISION  
IS LOCAL TOO

WE MAKE IT EASY  
FOR YOU

WE MEAN BUSINESS

WE RISE TO  
THE CHALLENGE

WE ARE  
COMMITTED

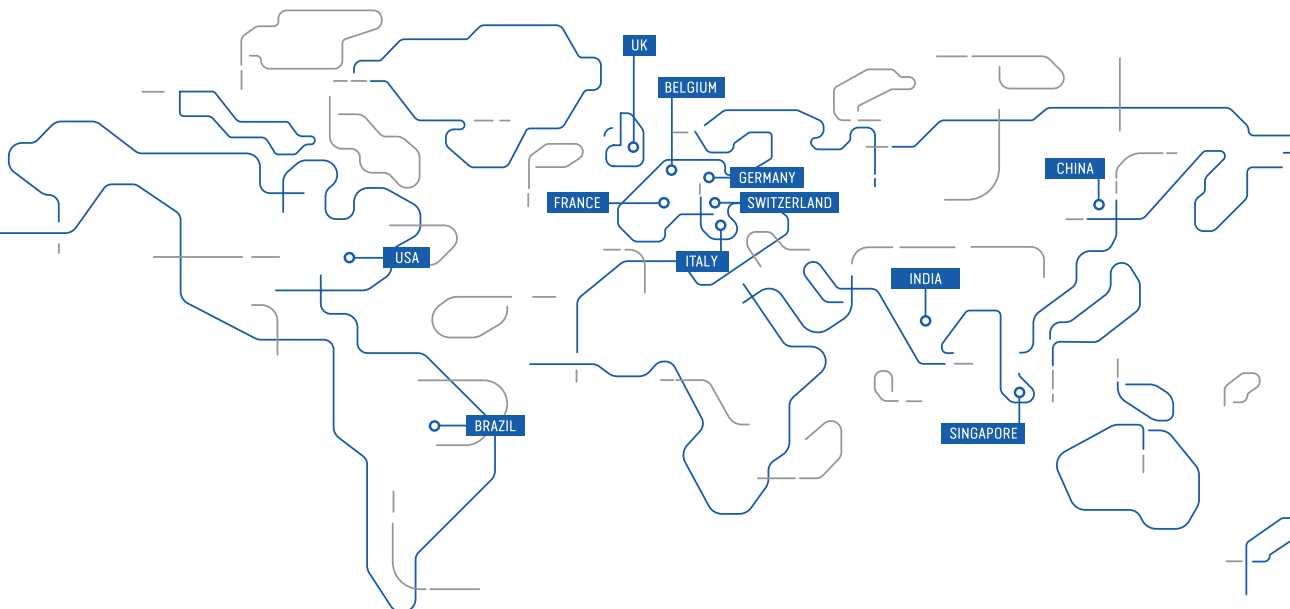
THE FUTURE IS OUR PRESENT

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