



# *REEL Torino srl*

## Industrial electronics



*Since 1979: technology, servicing and reliability.*

***Complex solutions at hand***

***Customisation and products tailored-made for the customer***



***Internal use***

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***REEL TORINO** was established in 1979. Today, we have been professionally operating for thirty years in several sectors: industry, environment (aqueducts, landfills), winery, domotics, agriculture, offering a complete line of electrical board equipment, interfaces, control units and adjustment, and a series of complementary accessories.*

*Thanks to the highly qualified technical staff and optimising the performance of company resources at all levels, **REEL TORINO** is able to tackle complex issues by offering its Customers **standard and tailor-made** products, as well as cutting-edge solutions. What distinguishes its technological development is its **efficient and flexible structure, oriented towards Customer's satisfaction by means of reliable products and a massive technical service.***

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## APPLICATIONS TO MONITOR PRODUCTION AND PROCESSES



Our products allow to fully monitor production machines, displaying their production speed, total uptime, daily and yearly total output. In particular, our **REV COUNTERS** and **PRODUCTION COUNTERS** have a broad application field in measuring and checking the capacity and flow speed. **They can be applied to various fields: plastics, aqueducts, food industry, metal industry, etc.**

Dosing, pre-determination, batch controls, display checks and linear and angular displacement checks are only a few of the possible applications of REEL TORINO counters.

They allow to acquire, totalise and pre-determine signals coming from industrial sensors, such as: photocells, proximity switches, incremental encoders (angular and linear positions), optical lines (linear positions), mechanical limit switches, dry contacts.

These devices can be applied to all industry environments, such as:

- aqueducts
- paper and metal industries
- steel industry
- food industry
- chemical industry
- pharma industry and more

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## APPLICATIONS TO MONITOR PRODUCTION AND PROCESSES

### REV AND PRODUCTION COUNTERS

Rev counters have a broad application field in measuring and checking the capacity and flow speed. They can be applied to various fields: **plastics, aqueducts, food industry, metal industry, etc.** By means of available programmes it is possible to conveniently choose to use the device as a frequency meter, rev counter, meter counter, litre counter, production counter (on an hourly basis).

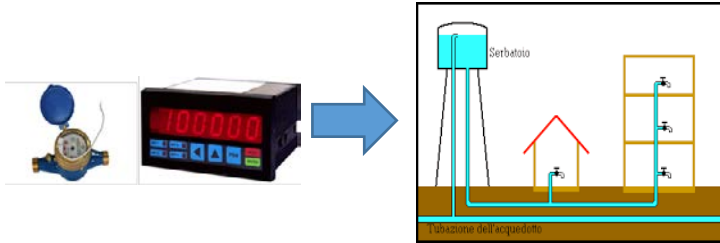
The production counters of the “CRONO” line are tools that are mounted on machines and provide useful information to operators about ongoing production, and to maintenance technicians about operation time and total production since commissioning.

Its completeness of checked data, its compactness and reduced size of operation, together with its independence from monitoring systems make CRONO a crucial element to always ensure solid and reliable information about machine status and ongoing production.



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## APPLICATIONS FOR AQUEDUCTS AND LANDFILLS



This is a series of products that allow useful measures for aqueduct and landfill applications. They allow to measure, control and record an array of specific variables: level (pipes, shafts); flow rate; pressure; flue temperature



High-performance products that adapt to several type of applications in the fields of measuring, controlling and recording specific variables, such as level, flow rate, pressure, etc. In particular:

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## APPLICATIONS FOR AQUEDUCTS AND LANDFILLS



### Pressure gauges

- Pressure or level indicators
- Monitoring 1-4 pumps
- Internal or external remote control
- Timing (0...9999 seconds to delay the output relay switch in)
- 4 to 20 mA input with programmable stabilisation filter



### Level & flow rate measurement

- Devices with 4 to 20 mA or impulse input
- Easy-select reading for instantaneous or total measurement
- 4 alarm thresholds (model with 4 to 20 mA input)
- analog output proportional with instantaneous flow rate (model with impulse input)
- broad acquisition spectrum

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## APPLICATIONS FOR AQUEDUCTS AND LANDFILLS



### Shaft monitoring

- Control unit to measure leachate or water level
- Possibility to count litres
- Analog measurement input (4 to 20 mA) or from floating units (up to 4 signals)
- Monitoring and recording of pump lifetime (operation time; number of operations)
- Data extraction through pen drive



### Stand-Alone Recorders

- 4 digital inputs (ON-OFF) and 8 analog 4 to 20 mA inputs
- Recording rate can be set from 10 to 20000 seconds
- Recording medium USB stick
- Internal date/time clock
- Recording start / stop input

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## APPLICATIONS FOR AQUEDUCTS AND LANDFILLS

### Flue adjuster



**E2X\_21P1**

96x48; two alarm  
thresholds

This product offers several operational possibilities in order to adapt best to the application needs

- Setup of the maximum and minimum limit in the set point field in order to avoid wrong setups
- Setup of the analog output excursion limit, to always ensure acceptable levels;
- Forcing the analog output through digital inputs to facilitate control and maintenance operations.

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## APPLICATIONS IN THE NAVAL INDUSTRY



Our products allow to measure and control up to eight levels (fuel oil, water, waste water, etc.) in the engine and control rooms (via fieldbus).



**The device is aimed at measuring the level or the flow rate (single channel).**

It includes two indicators:

Indicator no. 1: displays the level or the flow rate.

Indicator no. 2: displays the volume.

It consists of

the following checks: safety (faults)

filling, maximum level

output to repeat the measurement

Fieldbus for the connection to PC/PLC

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## APPLICATIONS IN THE NAVAL INDUSTRY



**The device is aimed at measuring the level/volume of eight channels.**

A few examples of measurement:

- Fuel oil
- Drinkable water
- Waste water

The level or volume of each channel can be displayed, alternatively.

The device has eight bargraphs.

Displaying options: all eight simultaneously, in pairs –with percentage indication–, numeric value and corresponding unit of measurement, identification tag (developed on three lines)

It includes:

filling, maximum level

outputs to repeat the measurement

Fieldbus for the connection to PC/PLC

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## APPLICATIONS IN THE DOMOTIC FIELD



Hotel that wish to fulfill high quality standards need to equip themselves with a broad network of technology systems.

The devices produced by Reel Torino offer the chance to use a centralised domotics system to supervise and control in real time all systems and facilities hosted by the hotel.

These customised applications for hotels offer an easy and efficient management of energy savings, cooling and heating, safety and alarm control, access control and comfort in rooms and common areas.

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## APPLICATIONS IN THE DOMOTIC FIELD: ROOM MANAGEMENT

### These applications allow to:

- ✓ managing heating and air-conditioning systems in the rooms, check the fancoil speed with specific settings if the customer is in the room, out of the room or if the room is empty
- ✓ Adjust light intensity, turn the lights on or off independently or in a group, report system faults
- ✓ Check the alarms and prevent intrusions or dangers, display the location where the alarm activated.



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## APPLICATIONS IN THE DOMOTIC FIELD: MANAGEMENT OF COMMON PLACES

### These applications allow to:

- ✓ Check and monitor in real time the reception, fitness and garden areas
- ✓ Adjust the lighting of tennis court, wellness area and gardens
- ✓ Thoroughly control the swimming pools



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## APPLICATIONS IN THE DOMOTIC FIELD: MANAGING WINE CELLARS AND DEPOSITS

Over the last few years, domotics has found application in wine cellars, too.

Air-conditioning, microclimates in the aging areas, lighting and opening/closing the facility are monitored in order to create the perfect environment for wines, always taking into account energy efficiency.

All automated controls can be managed remotely and ensure the right temperature to each bottle.



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## APPLICATIONS FOR WOODWORK: Case History

### Client company - Integrated automation with REEL TORINO Forestry technology to service sustainable energy



Our Compact Wood Cutter has been produced for over 18 years and has significantly changed the way we produce firewood with safety, both in Italy and in the rest of the world. Its main features include:

- Only one operator needed
- Manual or fully automated operation options
- Drive with electric motor / power takeoff of the tractor.

From the command desk, the operator can choose, either manually or automatically, the cutting width, cutting grid, how to do the peeling and operate the log loader. By automatically choosing the type of cut, the cutting grid automatically shifts according to the log diameter.

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## APPLICATIONS FOR CONCRETE



Correctly evaluating the quantity of water in the aggregates is the most important check to perform while producing concrete. A correct detection ensures the observance of the A/C ratio of a project. Selecting adequate tools ensures that concrete will have high mechanical resistances and guaranteed durability



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## APPLICATIONS FOR SOLAR PANELS AND ENERGY SAVING



These products can be used on solar panels to display and check thresholds with zero consumption, and measure temperature despite of bad weather conditions. Further devices allow measurements of up to 8 temperature and current channels.



**Self-powered loop indicators with direct mounting:** they allow to display the variable (temperature, current, level, pressure) and create an alarm or control signal at a predefined set point

**Self-powered loop indicators for panels:** These are self-powered products from the same 4 to 20 mA loop and, thus, they have no impact on system consumptions



**Photovoltaic accessories:** A series of accessory products that allow to: detect temperature with a solid, weather-resistant body

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## REEL TORINO owns the Quality Management System UNI-EN ISO 9001:2015 certification

At **REEL TORINO**, we have established our company strategies to build a solid and reliable structure in order to protect and grow our business, and ensure our organisation a sustainable future. Our directors have focused on identifying and managing all assets that significantly influence our company's business, through a risk-based thinking.

All levels of our organisation were involved through a solid management system, by balancing risks and opportunities. Our organisation committed to identifying the most relevant values in relation to our business objectives ("key assets"), and established a strategic importance scale inside the context we operate in. While analysing our context, we considered: **environment, social fabric, market, financiers, supply chains, distribution network, employees, technology, available infrastructure**. In conclusion, embracing the standard UNI EN ISO 9001:2015 was a virtuous journey that our Company began to manage our business with the highest possible awareness. On December, 22-23 2016 the accredited Body DNV verified our Quality Management System according to the new standard UNI EN ISO 9001:2015. That verification had a positive result, and we obtained the new Compliance Certificate no. "CERT-03837-98-AQ-TRI-SINCERT"

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