

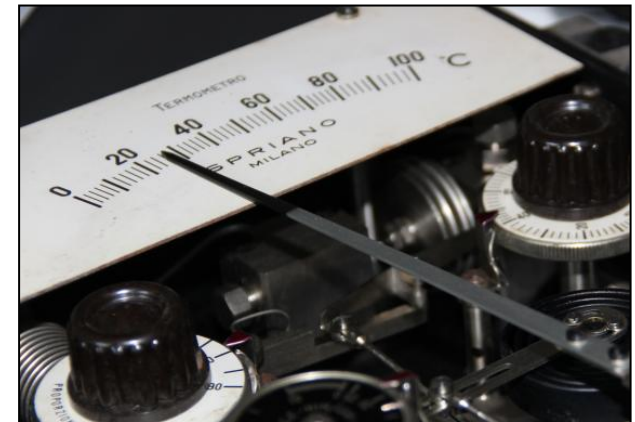
COMPANY PROFILE

- PRESSURE, LEVEL, TEMPERATURE AND FLOW TRANSMITTERS
- PRESSURE, LEVEL & TEMPERATURE SWITCHES
- PRESSURE, LEVEL & TEMPERATURE GAUGES
- ELECTROPNEUMATIC CONVERTERS, FLOW ELEMENTS,
- PNEUMATIC RECORDERS, REGULATORS & CONTROL PANELS.

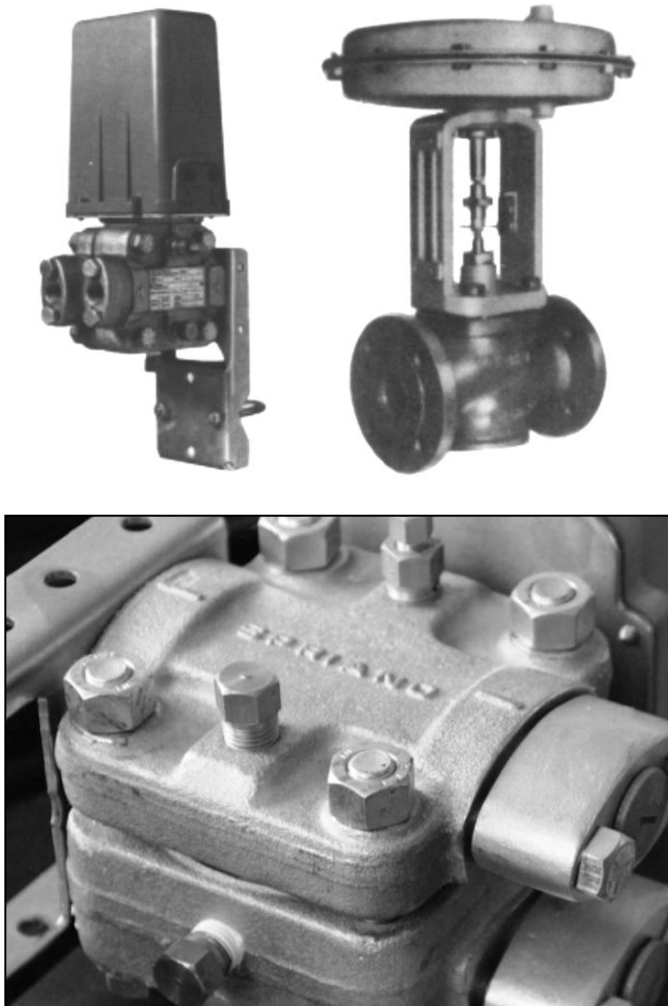


Founded in **1923**, SPRIANO® began his activity manufacturing pressure and temperature gauges.

In **1936** SPRIANO® has been the first company in Italy to manufacture a modulating pneumatic controller, contributing a consistent technical improvement to Industrial Automation and Control in the Rubber, Oil & Gas and Food industries.



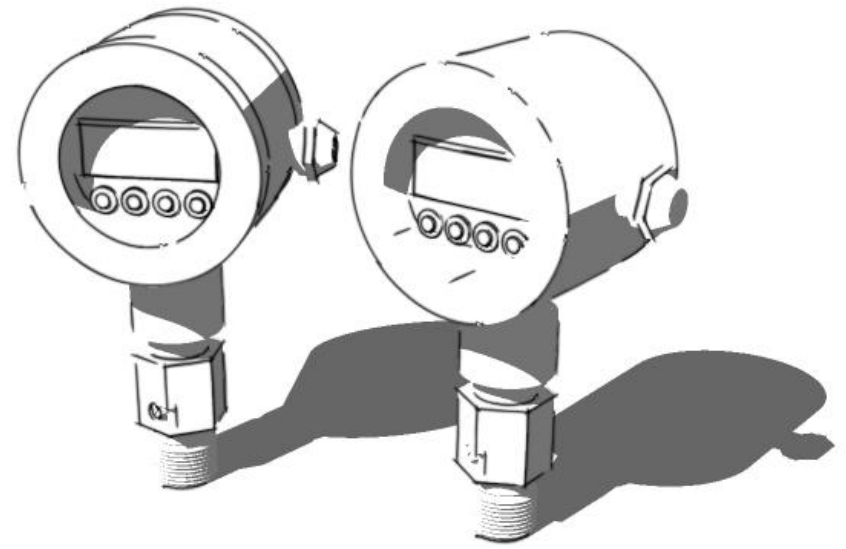
OUR HISTORY



In **1970** SPRIANO® engineered and started manufacturing a complete line of Control Valves branded MEC-RELA®, providing effective and efficient solutions for Industrial applications.

During the **80's**, SPRIANO® completed its technological transfer from pneumatics to electronics by developing a complete line of innovative instruments, the 2-wire system and microprocessor-based transmitters.

TODAY SPRIANO® engineers and manufactures pneumatic and electronic instruments for Automation and Control, which can be system integrated into turn-key systems for various industrial sectors: Chemical, Oil & Gas, Pharmaceutical, Food, Power and Marine. ISO 9001, ATEX, PED & SIL certifications guarantee the products to be compliant with the up-to-date technical standards.



SPRIANO[®] TODAY

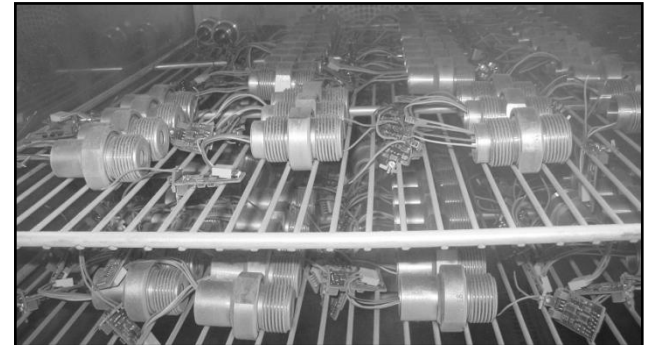
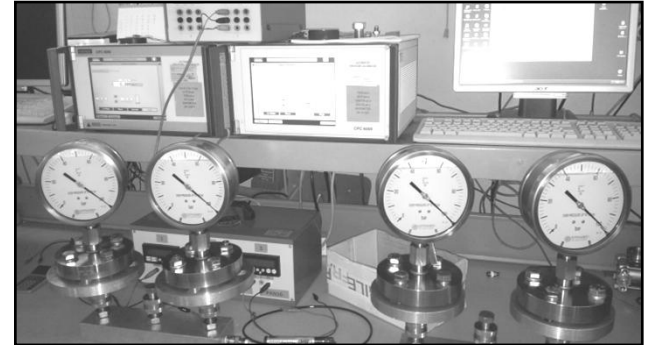


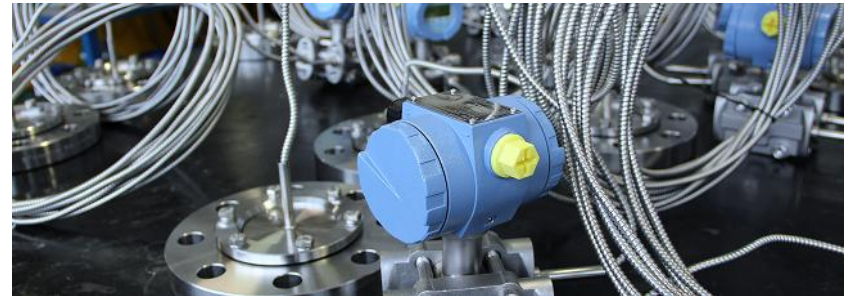
— Borders of the facility in Terranova dei Passerini (LO), located 60 Km South of Milan.

- The Manufacturing area is composed by 3 main buildings for a total covered space of approx 1700 m².
- Area destined for covered space Warehouse is approx 800 m². Uncovered is approx 800 m² as well.
- Purchasing, Sales and Administration department are distributed for a total covered space of Approx 1200 m².

Equipment availability:

- Over 20 different pressure generators
- Climatic chambers
- Welders (TIG, LASER, Microplasma)
- Tooling, Drilling & Cutting Machines
- Twin vacuum systems
- Hydro testing machines
- Tags engraving machines
- Ultrasonic washers
- 250Kg & 600Kg Cranes
- Calibrators, multimeters, Meggers, and more generic equipment







SALES ACTIVITY



Our consolidated activity in Italy is integrated by a growing Export activity in many foreign countries, managed by an internationally selected and well trained Sales Network. **SPRIANO®** products are available in standard (Carbon Steel and Stainless Steel) and special alloys (Hastelloy C, Duplex, Superduplex, Titanium, Inconel, etc.). Solutions for high temperatures and cryogenic applications are also available.

Our **domestic business** is mainly focused on engineering and contractor companies, as well as end users:

- EDISON / ENEL
- FOSTER & WHEELER
- FORES ENGINEERING
- GE OIL & GAS
- ENI / SAIPEM
- SNAMPROGETTI
- BELLELLI ENGINEERING
- SIMECO ENGINEERING
- STP ENGINEERING
- APS ENGINEERING
- PEG ENGINEERING
- ...



Our abroad business is mainly focused on reliable and professional agents that operate in their own territories, through which we are or are entering many AVLs:

- PEDEC / NIGC / IGEDC / NIOEC / IOOC / POGC (IRAN)
- ADCO / ADGAS / ZADCO / TAKREER / ADNOC (UAE)
- QAPCO / QATAR PETROLEUM (QATAR)
- EGAS / AGPC / ENPPI (EGYPT)
- NOC / SOC (IRAQ)
- DESCON (PAKISTAN)
- SAIPEM (NORWAY)
- POSCO / KNHP (KOREA)
- AIR LIQUID (FRANCE)
- HALLYBURTON (USA)
- ...



PRESSURE, LEVEL & TEMPERATURE ELECTRONIC TRANSMITTERS SST5X - SST7X SERIES



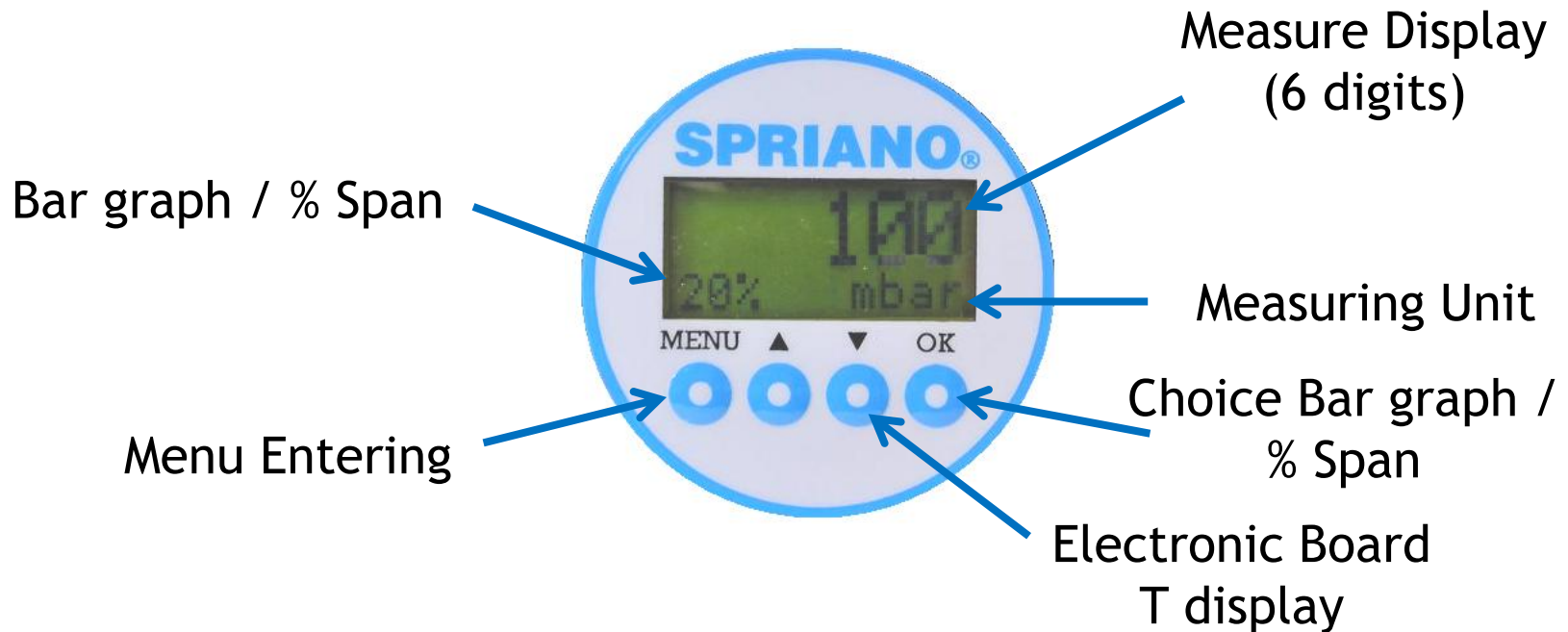


ELECTRONIC DEVICES SUITABLE FOR MANY INDUSTRIAL APPLICATIONS

- Microprocessor inside for managing signal, HART digital communication protocol and analog output
- Double 16bit Input for differential signal of analog sensors (piezoresistive, PT100, photodiodes...)
- 4÷20mA standard analog output with high accuracy
- Completely developed inside our Research & Development Department

LCD INTERFACE DISPLAY WITH CONFIGURATION MENU

- Menu security with password (default: 0000)
- Direct communication between HART[®] commands and display functions
- Immediate visualization for temperature instrument and sensor (optional) indication
- Bar graph with full scale indication



ANALOG STANDARD 4÷20mA OUTPUT (“2 WIRES” CONNECTION)

- Output resolution 16bit (0.0015%FS)
- Programmable calibration independent from the real measure (URV and LRV commands)
- Direct calibration commands based on real measure (**SET LRV**, **SET URV**)
- Transfer analog Output Function linear or quadratic (XFR FUNC)

Upper Sensor Limit - USL
Upper Range Value - URV
Lower Range Value - LRV
Lower Sensor Limit - LSL

20 mA
4 mA



Double visualization mode:

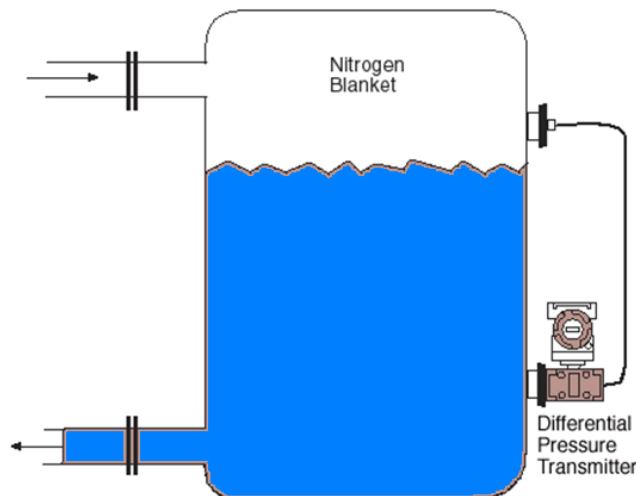
- PRESSURE (bar, mmH20,..)
Output 4-20mA linear or proportional to the square root of Δp
- FLOW (m³/h)
Output 4-20mA linear to the Δp

PROGRAMMABLE MEASURING UNITS FROM LCD DISPLAY

- Large choice from Anglo or metric system measuring units.
- Complete compatibility with standard HART[®] rev 7.0 measuring units.
- Measuring units scientific, technical, engineering.

DAMPING OF MEASURING VARIABLE

- Typical setting value via display between 0 and 60 seconds.
- Useful to reduce undesired effects due to waves, mixers, fluid movements in tanks.



For pressurized vessels: with Remote seal side Minus.

For non pressurized vessels: side Minus open.

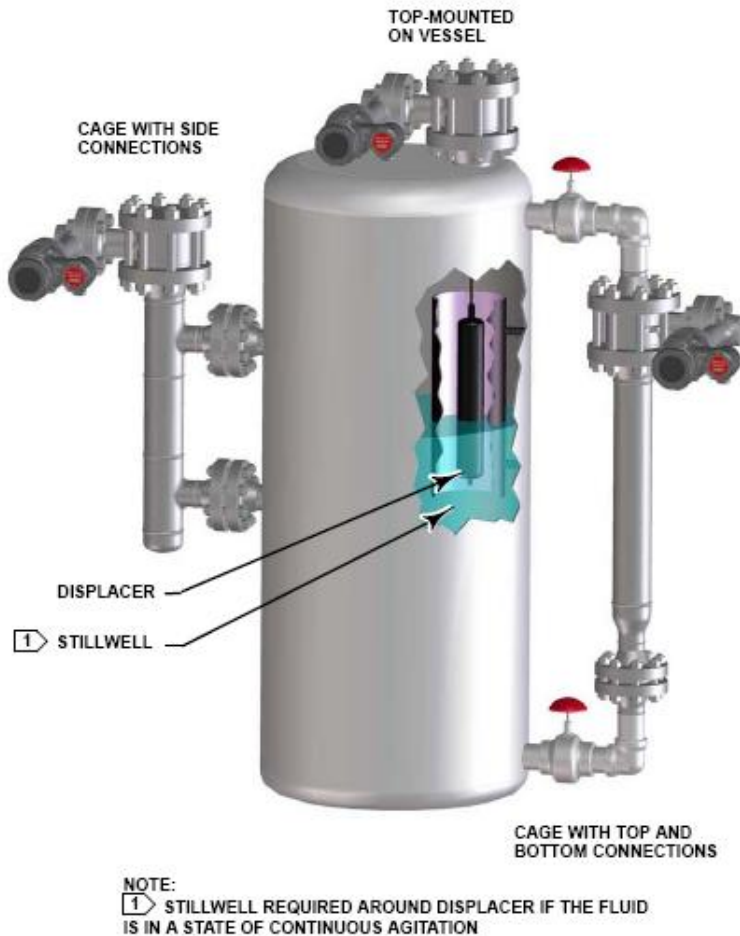
SPAN ELEVATION AND SUPPRESSION

- It is possible to regulate the measure of the instrument in field via elevation and suppression command (**SET ZEROEL**): the actual input value is associated to the beginning of the scale. The same procedure can be done manually via **ZERO ELEV** command: in this case it is necessary to insert manually the numeric value of deviation of the measure.
- The command **OFFSET** permit to set the actual reading to the value zero: for this it is necessary to bring the instrument in zero measuring conditions (ex a differential pressure transmitter should be put with both sides to atmospheric pressure).



GAIN REGULATION OF THE MEASURE AND PRODUCT SPECIFIC GRAVITY

SG (specific gravity) command permit to insert the specific gravity of the product of which the level is measured: it is necessary to input this parameter in transmitters with force measuring principle with displacer or hydrostatic level.



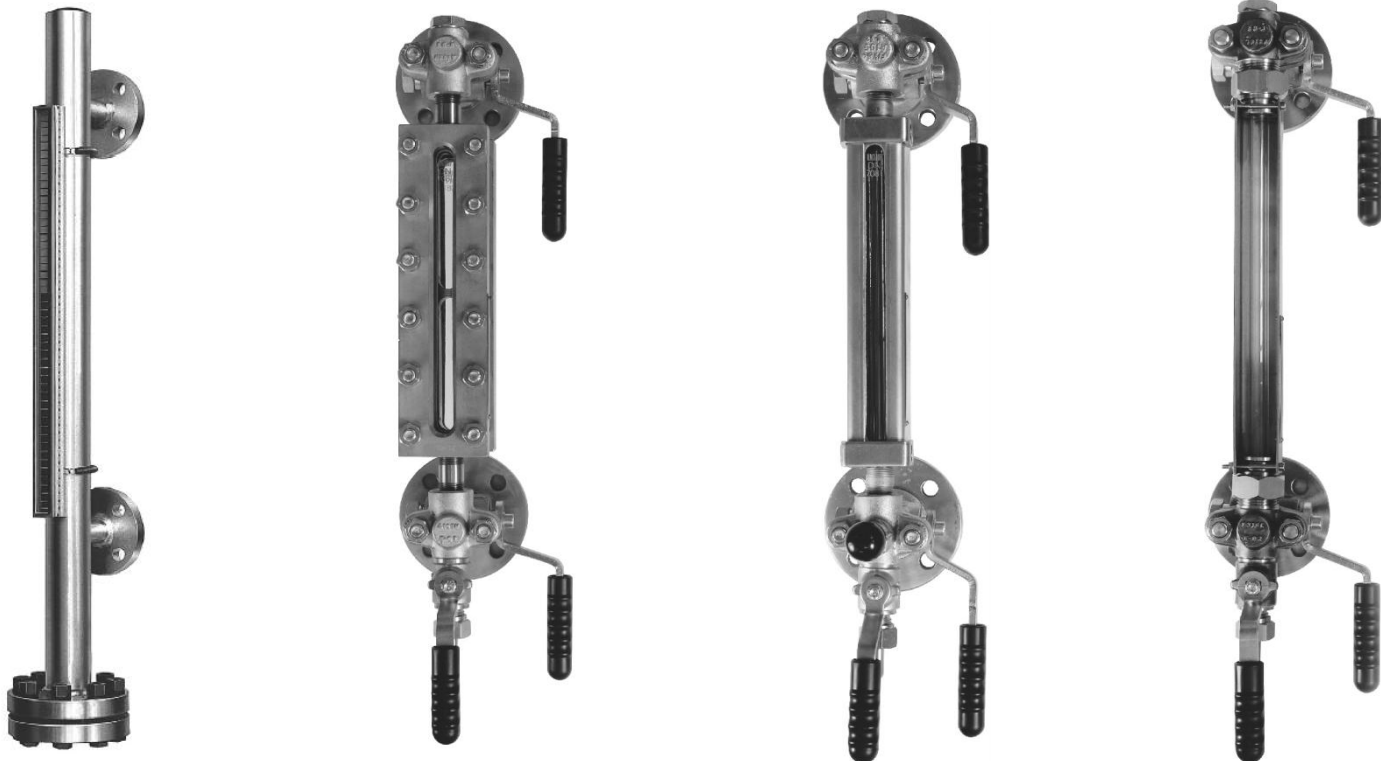
PRESSURE GAUGES MN - SGD SERIES



TEMPERATURE GAUGES XTB - XTG SERIES



LEVEL GAUGES MLG - RLG - TLG SERIES



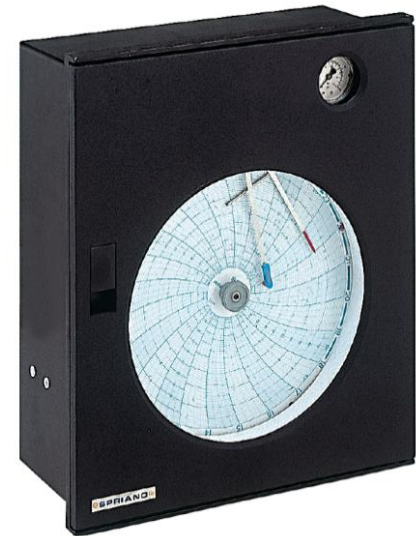
DIAPHRAGM SEALS



MEASURING ELEMENTS ORI - MET- MUL - PIT- VEN

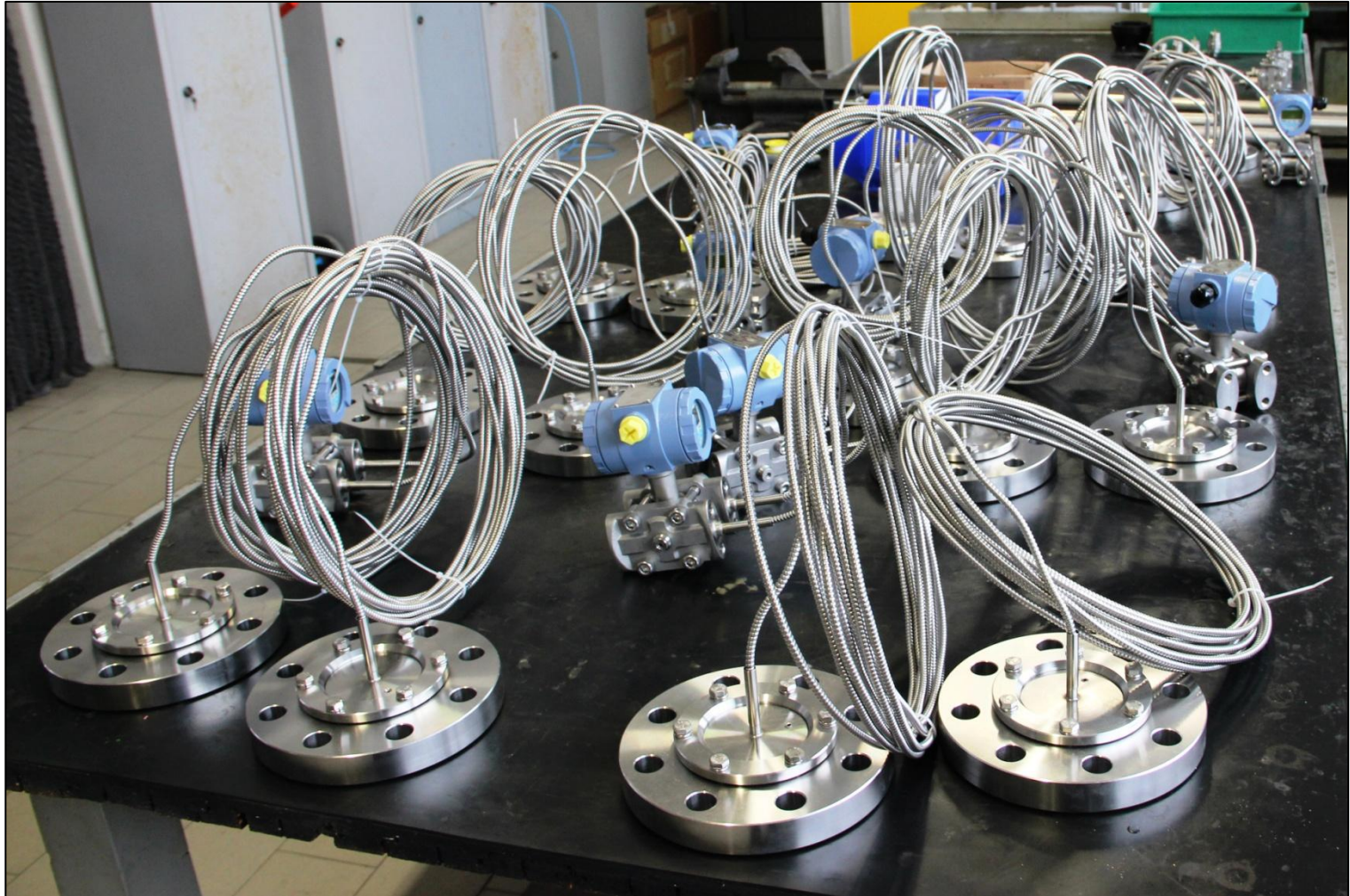


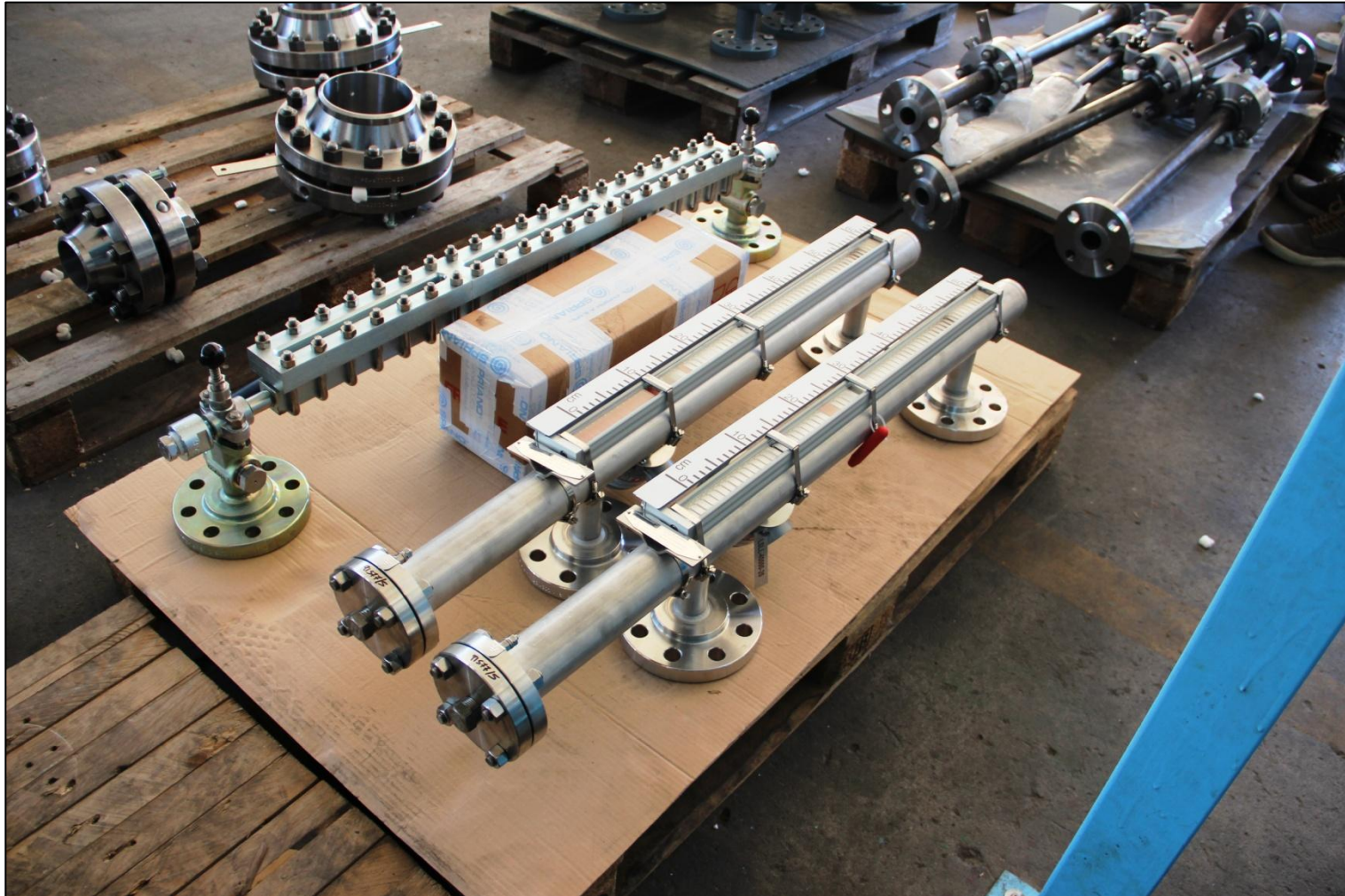
PRESSURE, LEVEL & TEMPERATURE INDICATING RECEIVER CONTROLLER & RECORDERS





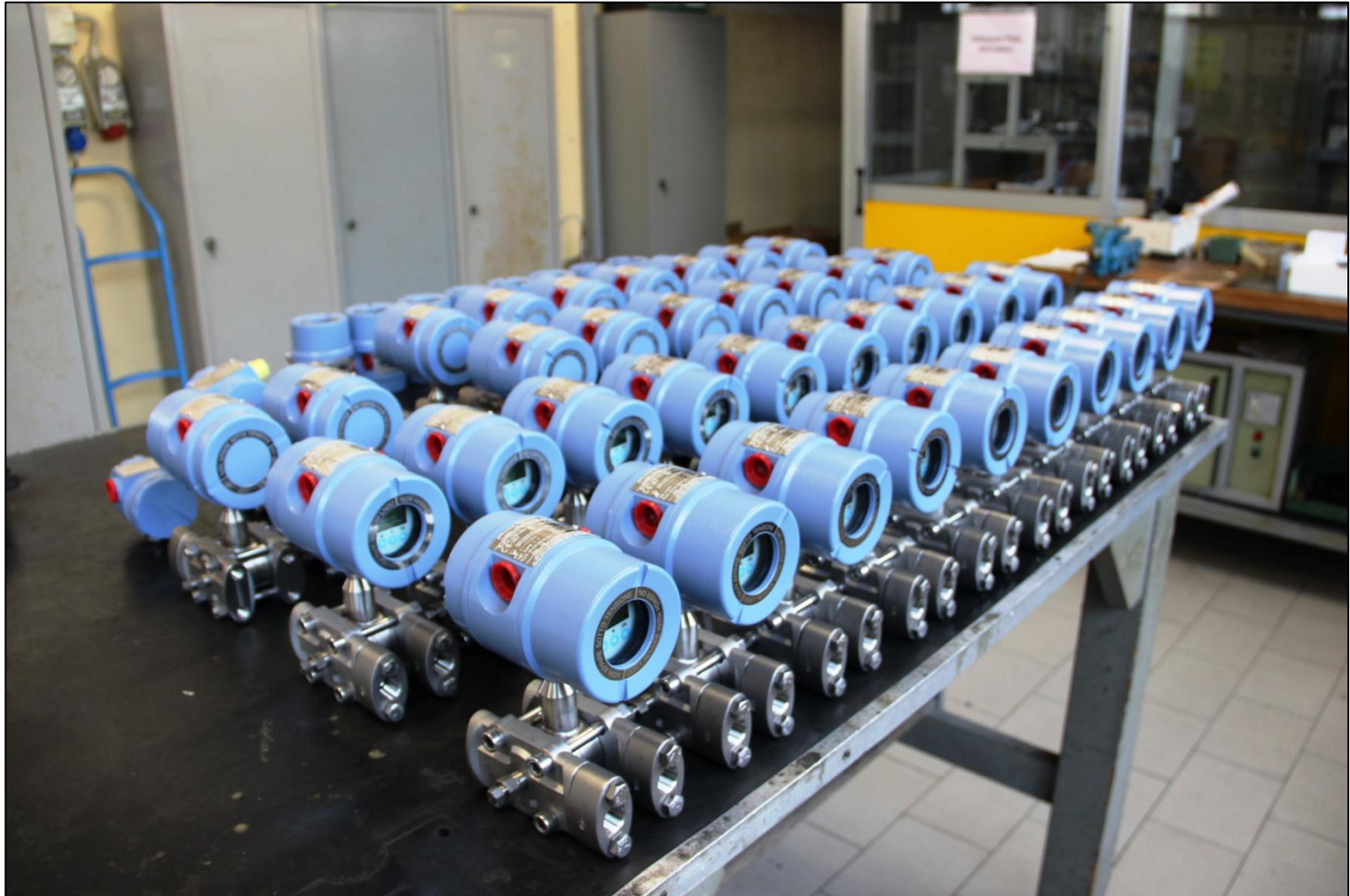


















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