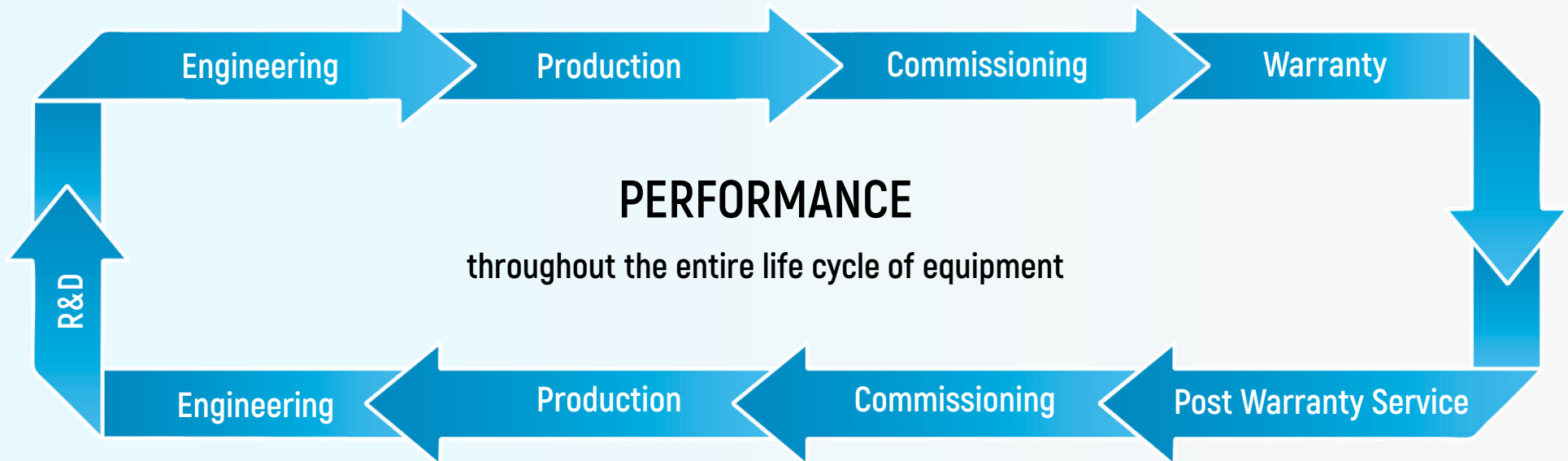


65 years of excellence

Industry 4.0 Innovation Technology Industry 4.0 Experience Smart Grid Performance Safety
Experience Smart Grid Performance Safety Reliability Innovation Technology Industry 4.0 Experience Smart Grid
Reliability Innovation Technology Industry 4.0 Experience Smart Grid Performance Safety
Safety Industry 4.0 Experience Smart Grid Performance Safety Reliability Innovation
Performance Technology Innovation Industry 4.0 Experience Safety Smart Grid Performance



AT A GLANCE



Low Voltage • Medium Voltage • Automations & SCADA • Electronics

AT A GLANCE



PRIORITIES

- › **Reliability** and security
- › Continuous **innovation**
- › Quality / cost ratio optimization
- › Integrated route from engineering to commissioning
- › Support throughout the product life cycle
- › Professional teams

EXPERTISE

Design, production and support services:

- › Medium voltage electrical equipment
- › Low voltage electrical equipment
- › Complex automation systems
- › ATEX MV, LV applications
- › ATEX integrated systems RMU, communication&control

FIELDS

- › **Oil&Gas:** offshore, refineries
- › **Energy & Utilities:** nuclear, hydro, thermos; electricity transmission and distribution, water and sewerage networks
- › **Industries:** steel, petrochemical, building materials, machine tool manufacturing, food and so on
- › **Other:** Transport, Agriculture, Tertiary

R&D, Engineering, Software

- › Mechanics
- › Medium voltage
- › Low voltage
- › Automation
- › Industrial equipment

Manufacturing

- › CNC
- › Welding
- › Painting
- › Electrical equipping
- › Testing/Quality control

Site operations




- › Initial evaluation
- › Setup, SAT testing and commissioning
- › Retrofit
- › Maintenance



STRATEGIC LOCATION

Bucharest-Ilfov Region

Otopeni, 98C Tudor Vladimirescu Street

-  Airport (OTP): 10 min by car
-  Bucharest Ring Road: immediate access
-  Port of Constanța via A2: fast export route



TIMELINE



- **1935 Ford** first operational assembly line in Eastern Europe
- **1960** Automatica SA is established, meant to be the pioneer of a new industrial model in Romania
- **1981** Nuclear industry certification - Quality Assurance Program in line with the Canadian Standard CSA Z 299.3
- **2002** Siemens Sivacon 8PT licenced partner
- **2021** New manufacturing facility in Otopeni, Romania (Bucharest ring road)



PRODUCT RANGE

- **Energy Supply:** Fixed or mobile stations, with pressurization options
Medium voltage: 3.3-24 kV
Low voltage (0.4 kV): Classic and withdrawable panels
- **Energy supply, communication panels, and other applications for hazardous areas (Ex)**
LV – up to 4000 A, 65 kA short-circuit current
MV – RMU (oil&gas offshore installations mainly)
- **Skid/container equipped for remote control, MCC**
- **Control desks** for indoor or outdoor use, including potentially explosive environments
- **Electronic subassemblies** for various applications: devices and industrial control equipment, automation, and signaling using analog, digital, mixed circuits, and power electronics

Note:

Automatica SA can integrate existing projects into production or get involved from the R&D phase to develop equipment requiring expertise in electrical, mechanical, and electronics fields.



ENGINEERING: R&D

- **Discover & Scope:** Define problem/opportunity, do feasibility, risks, and high-level plan/business case.
 - **Requirements & Architecture:** Freeze concept, write specs (SRS/PRD), plan verification, compliance, and schedule.
 - **Design & Prototype (EVT):** Detailed design (mechanical/electrical/software), build first prototypes, iterate on risks.
 - **Verify & Validate (DVT/PVT):** Test against requirements, certify/regulatory, pilot with users, finalize changes.
 - **Industrialize & Launch → Sustain:** Transfer to manufacturing, release package, monitor KPIs, handle ECOs, cost-down.
-
- *Proved experience in complex international projects*
 - *Strategic partnerships for solution development*



ENGINEERING: CUSTOM MADE SOLUTIONS

- **Application & standards engineering:** Translate specs to requirements; ensure compliance with IEC 61439 (LV), IEC 62271 (MV), IEC 61850, CE/UKCA; prepare conformity packs and technical files.
 - **Electrical design & protection studies:** SLDs, EPLAN schematics, cable sizing, short-circuit/selectivity/arc-flash studies; relay settings and coordination (Siemens, Schneider, SEL, etc.).
 - **Mechanical & thermal design/customization:** 3D CAD of enclosures/busbars; IP/IK/seismic/thermal checks; DFM/DFA for manufacturability; materials and coating selection for harsh/hazardous areas.
 - **Integration, automation & digital engineering:** Protection relays, PLC/SCADA, HMI, and communication protocols (Modbus, Profibus/Profinet, IEC 61850); digital twins, configuration management, BOM control, and data continuity to ERP/PLM.
 - **Verification, testing & commissioning:** Type/routine tests, FAT/SAT, QA documentation and traceability, on-site commissioning & training; continuous improvement (ECO/ECN) and reliability monitoring.
-
- *Engineering teams familiar with some of the top suppliers such as Siemens, Schneider Electric, ABB, Eaton*
 - *Technology neutral: choice of supplier to best meet project requirements*

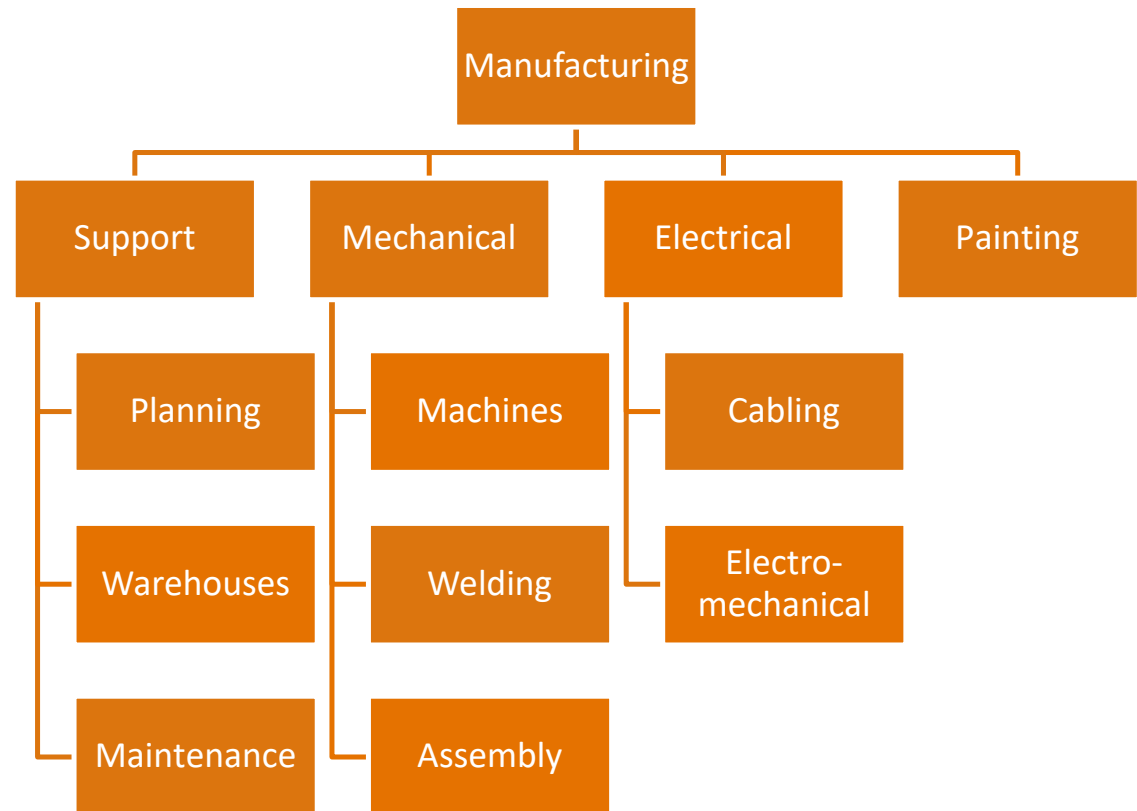
MANUFACTURING CAPABILITIES



Production facility:

- Area: total usable area 7000sqm, 800sqm office, 6200sqm production and logistics, 45000sqm land
- Production sections: machines, welding, assembly, cabling, painting

This is a production unit operating since September 2021.





MANUFACTURING CAPABILITIES

Processing of Carbon Steel, Stainless Steel, and Aluminum Sheets:

- Laser cutting;
- Guillotine cutting;
- Punching on numerically controlled machines;
- Bending on numerically controlled machines;
- Forming with an eccentric press;
- Forming and straightening after welding using a 2500 kN hydraulic press.

Machining of Carbon Steel, Stainless Steel, Aluminum, and Copper:

- Milling, drilling, and threading on vertical CNC machines;
- Turning, milling, and threading on CNC lathes;
- Drilling and threading on classic column-type machines;
- Drilling large profiles and welded structures using machines with magnetic bases.

Welding of Carbon Steel, Stainless Steel, and Aluminum:

- TIG;
- MIG-MAG;
- MMA;
- Resistance welding (spot welding);
- Capacitor discharge welding.



MANUFACTURING CAPABILITIES

Metal Surface Treatment and Coatings

Electrostatic Powder Coating

Surface treatment: degreasing and phosphating

Materials that can be processed: carbon steel, galvanized sheet, aluminum

Blasting

Carbon steel

Stainless steel

Metalizing

Sandblasted surface - carbon steel

Liquid Painting with Airless Pump System

Applications:

Painting of electrical equipment enclosures and other metal objects

Painting of equipment enclosures designed for offshore environments

Other treatments for outdoor use, saline environments, and corrosion risk



MANUFACTURING CAPABILITIES

Electronics

Devices and industrial equipment for control, automation, and signaling using analog, digital, mixed circuits, and power electronics

Electrical

Electrical assembly department

Testing and simulation capabilities for the entire range of electrical equipment

Structural Strength Tests:

Hydrotest with pressure up to 0-30 bar

Verification of mechanical and electrical cable crimping, 0-14 kN



CERTIFICATIONS

Automatica SA

ISO 9001:2015, ISO 14001:2015 & BS OHSAS 18001:2007

Integrated Management System that meets the requirements of ISO 9001: 2015, ISO 14001: 2015 and BS OHSAS 18001: 2007, a system evaluated and certified by TÜV Thüringen.

E2 type ANRE (Romanian Energy Regulatory Authority) Certificate

for the execution of transformer stations, electrical stations and works on the electrical part of the center with any standardized nominal voltages

E1 type ANRE Certificate

for the design of transformer stations, electrical stations and installations belonging to the electrical part of the power plants with any standard nominal voltages.

SIVACON Technology Partner Certificate

Manufacture and sell the SIVACON design verified low-voltage power distribution board.

CNCAN (National Commission For Nuclear Activity Control) Licence – Design & Manufacture

For the quality management system in the nuclear field. – in progress to be renewed

ATEX and IECEx QAN/QAR certifications – in progress to be obtained

MEDIUM VOLTAGE ELECTRICAL EQUIPMENT

Tested SWGR range: up to 24kV, 50kA, 2500A.

TECHNICAL CHARACTERISTICS:

- › Primary distribution MV switchgear
- › Air-insulated switchgear, with vacuum or SF6 switching equipment
- › 6, 12, 24 kV single busbar system switchgear with rated current ≤ 4000 A
- › 6, 12, 24 kV double busbar system switchgear with rated current ≤ 2500 A
- › 6, 12, 24 kV Retrofit solution with fully enclosed cradle with circuit breaker, secondary circuits, two doors and frames for rated current ≤ 2500 A
- › Power capacitor banks, automated, for 6, 12, 24kV, $\leq 2,4$ MVar
- › Custom-made MV indoor or outdoor Switchgear



MEDIUM VOLTAGE ELECTRICAL EQUIPMENT

SCHNEIDER LICENSE - MANUFACTURER OF PIX SWITCHGEAR

Air Insulated Switchgear up to 2500 A; 31,5 kA; 24 kV

Exceptional performance, outstanding reliability, PIX offer you a comprehensive solution that responds to all your electrical distribution applications - even sensitive applications.

Structure of a PIX switchboard:

- * PIX switchboards are made up of several interconnected functional units.
- * Power connections are made between the functional units within a switchboard via a single busbar.
- * The electrical continuity of all of the metal frames is provided by the connection of each functional unit's earthing busbar to the switchboard's main earthing circuit.
- * Low voltage wiring trays are provided in the switchboard above the low voltage control cabinets.
- * LV cables can enter the switchboard through the top or bottom of each functional unit.

MEDIUM VOLTAGE ELECTRICAL EQUIPMENT



Schneider
Electric

 **AUTOMATICA**

MEDIUM VOLTAGE ELECTRICAL EQUIPMENT

EVAset 12 Single Busbar Air Insulated Switchgear up to 12 kV

Features

- › No handling of insulating gas and low and high pressure monitoring required;
- › As insulating medium, air is always available;
- › Factory-assembled, tested switchgear according to IEC 62271-200;
- › Use of standardized block-type current transformers;
- › Use of maintenance-free vacuum circuit-breakers or contactors;
- › Type tested of the vacuum circuit-breaker and the earthing switch disconnector in the switchgear;
- › Pressure-resistant partitions;
- › Flexibility regarding the low-voltage equipment (removable compartment, plug-in wires);
- › Quality assurance in accordance with DIN EN ISO 9001;
- › All operations with closed high-voltage door;
- › Metallic enclosure, earthed shutters and partitions;
- › Internal arc classified switchgear according to IAC A FLR; front, lateral and rear accessibility, for all short-circuit currents and an arc duration of 1 s, optionally 0.1 s;
- › Separate partitions for busbar, connection and switching-device compartments;
- › Separately lockable shutters;
- › Logical mechanical interlocking system;
- › Easy access to all switchgear components.



MEDIUM VOLTAGE EQUIPMENT FOR EX-PROOF ENVIRONMENT



Technical data:

Ex protection type: Ex II 2G Ex d/e/ IIB T5 Gb

Protection class: IP 66

Operational voltage: up to 11,000 V

Rated current (busbar): 800 A

Rated current (VCB): 360 A at 50°C AAT (type rating: 1250A)

Rated current (contractor): 400A

Rtd. Short time withstand current (VCB): 51.5 kA/3s

Dimension (VCB) HxWxD (without accessories): 1.7 m x 1 m x 1.7 m

Weight: about 3,300 Kgs

Ambient temperature: -20 °C ... +55 °C

Characteristics:

Simple operation

The closed unit can be operated from the outside.

Efficient servicing

Safe use

The low voltage unit can be independently removed without working in the medium voltage range.

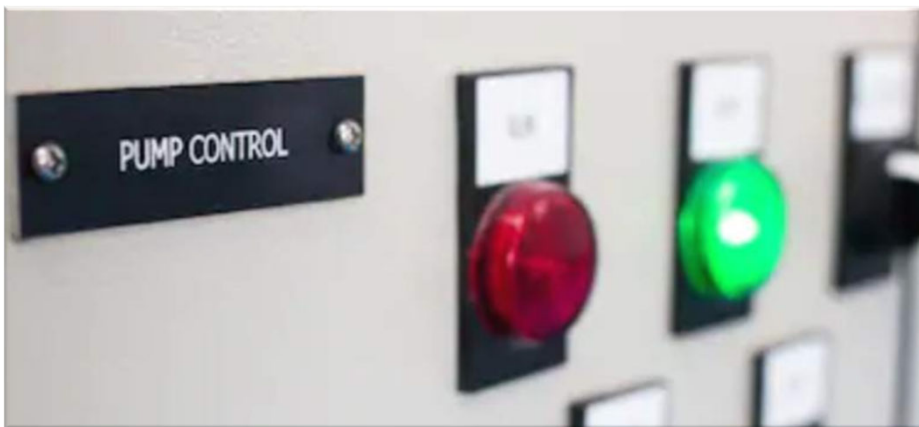


THREE PHASE MEDIUM VOLTAGE SOFT-START MOTOR EQUIPMENTS

Provided equipment and associated switchgear offer a combination of controlling electronic motor-starting styles:

- › Soft start with Selectable Kickstart
- › Soft stop
- › Current limit start with Selectable Kickstart
- › Dual ramp with Selectable Kickstart
- › Full voltage
- › Pre-set slow speed
- › Automated MV Switchgear with motor actuated truck, disconnectors and earth switch

Optional pump control module to completely mitigate the damaging effects of water hammer within water and wastewater industry applications and multi-motor soft-start solutions.



ARC FLASH PROTECTION RELAY

Electronic relay for optical detection of the occurrence of electric arc in medium voltage electrical equipment.

The ArcFlash electronic relay comprises the UC4 main unit and one to four AFD sensors. They are located in the compartments adjacent to the main switch in the power distribution equipment. Electric arc protection is achieved by triggering this switch.

Technical characteristics:

- High speed arc detection
- Integrated light sensor supervision
- Digital light processing
- Factory adjustable light sensitivity

Benefits:

- Improving personnel safety
- Cost of insurance reduced
- Increase the life expectancy of installations

Key features:

- Low investment
- Fast installation and commissioning time



LOW VOLTAGE ELECTRICAL EQUIPMENT

- › Low voltage power distribution boards, I_{max}. 7200 A designed and produced by Automatica under Siemens "8PT" and "S8" licence, in fixed assembly, withdrawable and "plug in" type
- › Control switchboards for SCADA type industrial processes
- › Control switchboard for machine-tools
- › Protection and measurement boards
- › DC and AC power supply boards
- › Automation equipment for reactive power control
- › Automated Transfer Switch (ATS) boards, marshalling boards and boards with PLC
- › TDRI boards for power supply and distribution
- › LV Power Bus Systems with rated currents up to 4000A



SIVACON TECHNOLOGY PARTNER - SIEMENS LIECENSED

AUTOMATICA is licensed by **SIEMENS AG** to manufacture **SIVACON S8** low-voltage switchboard for Industrial applications or infrastructure applications, marine and offshore use.

SIVACON® S8

The SIVACON® S8 low-voltage power distribution board sets new standards as a power distribution board or Motor Control Center (MCC) for industrial applications or in infrastructure.

The power distribution board system up to 7,000 A for the simple and consistent distribution of power offers a wide range of possible uses.

TESTED SAFETY

The low-voltage power distribution board is a design tested power switchgear and control-gear assembly with a design verification based on testing.

Evidence of its physical properties has been provided in the product testing department under both operating and fault conditions. An arcing-resistant locking system also ensures maximum personal safety.

FLEXIBLE SOLUTIONS

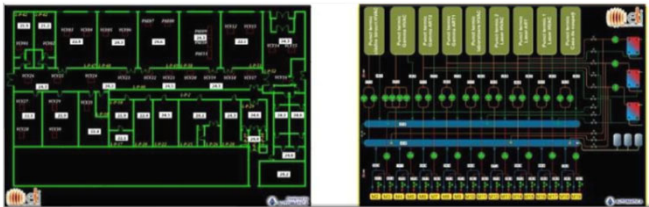
The section, either single or double-fronted, can be installed together with a main busbar system or back-to-back with a separate main busbar system.

Different installation designs can be combined in one section with ease. The flexible, modular technology allows for the simple exchange or addition of functional units.



AUTOMATION AND SCADA SYSTEMS

- › Distribution and automation equipment for electric power plants
- › Electrical panels, including for nuclear power plants
- › Sequential process control equipment
- › Machine-tool electrical equipment
- › SCADA systems



Temperature monitoring labs.
ELI-NP LASER Măgurele -
Romania.

DDC "Clean Room" system.
ELI-NP LASER Măgurele -
Romania.



Twelve 2MW groups
automation (including
SCADA). LUXTEN –
Valea Doftanei -
Romania.



EQUIPMENT SHELTERS

- › Shelter analyzer for the petrochemical industry
- › Electrical substations shelters
- › Technical shelters
- › Workshopshelters

Designed solutions can include the installation of fire resistant components, thermal and acoustic insulation, or components to create ATEX controlled (explosion-proof) environments, specialized equipment and equipment such as HVAC, fire and gas systems and electric systems.

Customization, variety of applications and the diversity of integrated equipments provide an extensive range of solutions.





SAMPLE PROJECTS 2024-2025



Project: Mažeikiai Refinery catalytic processing unit

EPC: Petrofac

End user: ORLEN Lietuva, Lithuania

Technical details: 16 stations, 320 cabinets, 3x400V, 4000A

Status: on-going

Project: Petromidia Refinery, Romania

EPC: Rominserv

End user: Kazmunaigaz, Romania

Technical details: 3 stations, 3x400V, 2500A, 62 cabinets, including high-power soft starters

Status: delivered 2024





SAMPLE PROJECTS 2024-2025

Project: Lower Zakum Habshan Upper Recovery & Lekhwair +20 MBD
EPC: NMDC Energy
End user: ADNOC Offshore
Technical details: 5 RMU, 9 EID, 1 415V SWITCHBOARD (IECEX – zone 1 IIB T3)
Status: on-going



KEY TAKEAWAYS

Proven Expertise in the Nuclear Industry

Over 40 years of experience delivering certified solutions for nuclear facilities, including Cernavodă NPP, with strong references and a comprehensive understanding of regulatory requirements.

Integrated In-House Capabilities

Complete value chain covered—from R&D and engineering to production, commissioning, and post-warranty service—ensuring control, traceability, and reliability throughout the product life cycle.

Advanced Manufacturing & Testing Infrastructure

State-of-the-art facility near Bucharest with specialized equipment for metal processing, electronics, and high-performance testing, including arc flash protection and hydrostatic testing.

Certified Quality and Safety

Manufacturing aligned with nuclear and industrial standards (e.g., CSA Z299.3, ISO 9001), offering design-tested and arc-rated solutions for both standard and ATEX environments.

Strong International Track Record

Trusted by major EPC contractors like Petrofac and Rominserv for large-scale, high-demand projects in the energy and oil & gas sectors especially Europe and Middle East.

Thank you!



Automatica SA

Phone: +40 371 048 723

Address: 98C Tudor Vladimirescu Street

Otopeni, Ilfov, 075100 Romania

Email: office@automatica.ro

Web: www.automatica.ro