

Fire protection and control of ventilation systems





> Perfect compliance with safety requirements and qualification procedures

The design of VRACO products is validated after extensive research in order to meet the toughest technical specifications for fire safety, in the context of updated European standards and directives.

All our equipment is accredited by official, approved certification bodies in France (CSTB, EFECTIS, CETIAT, CNPP, IRSN, INERIS, SOPEMEA).

Every single unit produced is tested ex-works in order to guarantee compliance and perfect operation for our clients.

VRACO is also currently undergoing specific certification procedures in various countries to ensure that its products comply with the applicable standards throughout the world.

Environmentally-friendly products

VRACO products are designed and developed with life-cycle optimisation in mind - from materials procurement to final recycling, with energy consumption kept under close control at every stage of production.

This constant commitment is in line with the values of the Nuvia Group and the environmental policies of the company's partners.





> Fire dampers

Unique “dry sealing surface” technology

This unique fire damper technology was invented by VRACO, giving our products exceptional operability at high temperatures. These qualities are particularly appreciated by operators needing to manage hot gases and smoke in the event of the spread of fire in a nuclear ventilation system.



Unlike dampers with an “intumescent seal”, the damper is mechanically sealed via a system of flaps and specially-machined reverse-slope seats that are fitted to the tunnel body using a high-precision joining process.

VRACO is the only fire damper manufacturer whose products have been accredited by the French Institute for Radiological Protection and Nuclear Safety (IRSN) that advises the French Nuclear Safety Authority and have received CTHEN certification (Technical Centre for Approval of Nuclear Equipment).

Proven reliability and robustness

The VRACO range of dampers is extremely reliable with a reputation for being extremely robust, thanks to the quality of materials used, specific production methods for the different components and the high-precision joining and inspection process.

Our most recent products have been qualified for their resistance to very severe conditions (fire, negative pressure, earthquake, corrosion, explosive or degraded atmospheric conditions, humidity, radiation exposure etc.) and are designed to be fitted in nuclear facilities with little or no requirement for maintenance throughout plant service life.



- A range of VRACO dampers are available from 300x300mm to 1000x1000mm with a wide selection of actuators (manual, motor-operated, ATEX-certified motor-operated, air-operated).



> Air tight dampers and valves



VRACO has developed a range of isolation and control components for ventilation systems. These products are designed for use in the most severe operating conditions for ventilation systems in nuclear facilities or hostile environments.

S400 Cut off Valves

S400 Cut off Valves are made of stainless steel and are designed to operate in temperatures up to 200°C (peak temperature 400°C). A range of motor-operated or air-operated valves are available in diameters from 150mm to 600mm.

S400 Control Valves

The control valves have a similar design and are used to control the angular opening of the flap (0° to 90°). They are available in the same diameters with identical operating temperatures.

RC200 re-inforced air tight dampers

VRACO RC200 motor-operated (Bernard FQ12 motors) or air-operated dampers are made of stainless steel with a range of diameters from 300x300mm to 1000x700mm. They are guaranteed compliant the most demanding upstream-downstream and internal-external seal-tightness standards (EN 1751) and have been qualified under the criteria for EDF's EPR reactor at Flamanville 3 (earthquake resistance, radiation resistance, resistance to degraded atmospheric conditions).

> Smoke extraction vents and dampers

VRACO offers a range of qualified devices for efficient smoke extraction from ventilation systems, with various models of fireproof smoke extraction vents and dampers, with or without motor-operated actuators.





> Vertical integration, from design to installation

A fully integrated production process

The VRACO production facility near Lyon in France brings together all the necessary services, from initial product design to final quality control. This integrated structure guarantees the reliability of the production system, enabling us to quickly respond to customer requests with flexibility and to continually improve our products thanks to the operational proximity of R&D and manufacturing.

Continual improvement in products and processes

The VRACO quality policy is ISO 9001 certified and is a genuine management commitment to continual improvement in product quality and the performance of our production processes. The durability and reliability of VRACO is a reality that is acknowledged by nuclear operators who choose our products for their facility.

The performance specifications of these products has enabled VRACO to develop into other business areas (railway industry, haulage, water purification etc.).

A guaranteed service throughout the product life-cycle

VRACO provides its clients with specialised technical support from the design phase (through advice, technical specifications, ventilation design studies, risk analysis etc.) through to on-site installation and maintenance.



Nuvia Group

A subsidiary of Soletanche Freyssinet, Nuvia is a specialist service provider in the nuclear industry, working throughout the nuclear lifecycle in New Build, Plant Life Extension, Operations, Decommissioning, Radiation Protection and Waste Management.

The Group's skills and experience have developed over more than 50 years, through projects and partnerships with the leading nuclear operators, from involvement in building the earliest nuclear plants in France and the UK to today's decommissioning projects and waste management.

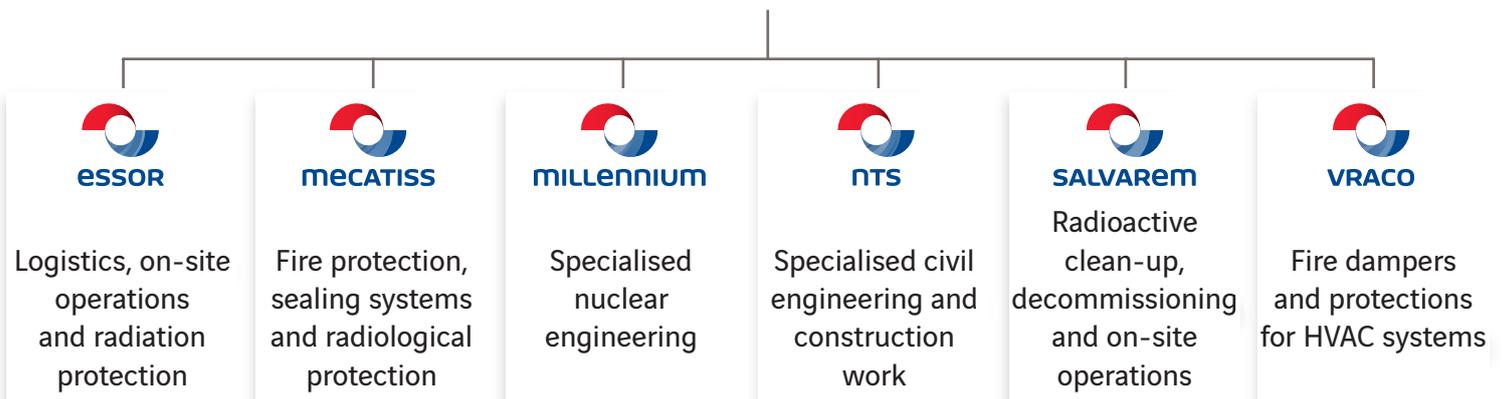
Nuvia's teams work at locations across the world, very often based on-site at nuclear facilities.

The 2000 staff working for Nuvia have experience in hostile environments and have a common ethos focusing on constant innovation, openness and efficiency, professionalism and technical excellence, and close control of costs, deadlines and safety issues, in order to provide the best possible solutions to our customers' needs.



Nuvia France

Nuvia France comprises 6 companies, all of which are nuclear specialists:





> Certification & qualifications



AFAQ

- ISO 9001 Certification



INERIS Certification

- category 2G for the manufacture of fire dampers for potentially explosive atmospheres (ATEX accreditation)



Fire dampers compliant with European Standard EN 1366-2

- qualified with a negative pressure value of 1500 Pa



> Geographical presence

• Head office

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