



WATER



TELECOMMUNICATIONS



CIVIL ENGINEERING



ENERGY



SERVICES

sade



Operating in more than twenty countries and with a workforce of 9,000 people, SADE specialises in the design, construction, rehabilitation and maintenance of networks and related facilities for its clients in the public, private and industrial sectors.

Its business lines have been developed, for many years, in accordance with its sustainable development policy, in a constant search for constructive solutions to safeguard the environment.

OUR BUSINESS LINES

WATER

As Europe's leading hydraulic contractor, SADE has been involved for 100 years in all phases of the water cycle, from catchment in the natural environment through to discharge after use and treatment, including transport and distribution networks, connections and related facilities.

Specialities

- Drinking water and public health: drilling and catchment; water treatment systems using filtration; pipelines and connections; repairs of leaks; water meter parks; compliance of hydraulic installations; related facilities (catchment wells, manholes, etc.).
- Wastewater treatment: pipelines and connections; wastewater remediation units; collectors; effluents containment; dry docks; individual sewerage systems.
- Specific networks: fire protection; irrigation; watering systems.

Service provisions

Design, construction, extension, rehabilitation, protection, compliance work, maintenance.

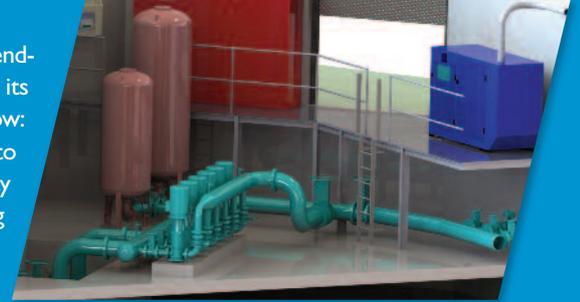
Patrimonial management networks.



A connected end-to-end offering, from design through to completion

Via SADE Ingénierie, its in-house engineering division, SADE Group supports its public sector and industrial clients, from design studies through to project construction. Its experts are based in two hubs in Paris and Bucharest and provide the right solutions to the different problems encountered, from the most conventional to the most complex, as well as ensuring internal project management by getting as close as possible to the operations.

Within the framework of this end-to-end offering, SADE offers its clients the worksite of tomorrow: "worksite 4.0", 100% connected, to meet all the needs of the smart city and including BIM (Building Information Modelling) approaches.



TELECOMMUNICATIONS

SADE is now a leading player in the design, construction, technical operation and maintenance of telecommunications networks.

Specialities

- Wired networks: copper networks; fibre-optic networks; FTTH; cable networks.
- Wireless networks: 2G, 3G, 4G; Wi-Fi; radio; TV reception units.
- HV/LV networks: videosurveillance; VDI wiring; dynamic display; mobility.

Service provisions

Design and operational project management; sites equipment; network evolution; construction; extension; connection; technical operation; commissioning; maintenance; troubleshooting; emergency interventions; integration of security solutions.



Expertise in industrial environments

Thanks to the group's diversity in terms of expertise and skills needed to fulfil its missions, its historic know-how and its autonomous teams, SADE can provide its industrial clients with a solution suited to their every need and specific constraints, whilst keeping to the required deadlines.

Irrespective of the project configuration, SADE rolls out proven and innovative technical solutions. The group offers the guarantee of significant references, acknowledged certifications and targeted professional qualifications.

Present in nuclear power plants since 1977, SADE notably has recognised expertise for operations on nuclear sites. With a dedicated organisation, it is extensively involved in post-Fukushima facility enhancement and lifespan extension programmes and in the Grand Carénage plant refurbishment programme in France.



ENERGY

Specialities

- Electricity: low current and high current networks; connections; junctions; lighting; transformer substations; penstocks for hydro power plants; recharging terminals for electric vehicles.
- Gas: transportation and distribution networks; subscriber connections.
- Wind farms.
- Geothermal energy.
- Solar power plants.
- Heating and cooling networks.
- Heat recovery in wastewater networks (Energido process).

Service provisions

Design, construction, extension, connections, rehabilitation, protection, compliance works, maintenance, troubleshooting.



Canascan®: innovation for the patrimonial management of networks



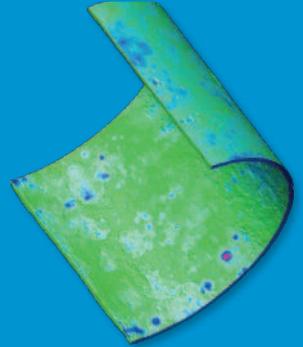
The findings of the first National Water Forum recently highlighted the necessity to improve knowledge of networks as a prerequisite for stimulating investment.

SADE has designed CANASCAN®: a service that is fast, turnkey and easy to mobilise in order to:

- gain a better understanding of network conditions,
- estimate the provisional lifespan,
- conduct digital mapping of network conditions.

Thanks to CANASCAN®, it is now easy to:

- feed the asset management strategy with reliable and pertinent data,
- prioritise and optimise operations for the renovation and replacement of pipelines, while respecting budget and timing constraints.



SERVICES

Specialities

- Smart networks: network modelling and mapping; raw surface water warning and monitoring stations; pre-locating and detecting leaks.
- Connected structures and IoT: remote water sensor readings; continuous water quality monitoring; detecting of water drawn from fire hydrants, consumption monitoring with user and operator alerts.



- Services for network operators: meter park management; metering optimisation; periodic checks.
- Services for interior networks: pollution control systems; water management systems; water gate handling.
- Pneumatic waste collection.

Service provisions

Design, construction, rehabilitation, compliance works, multi-technique maintenance, troubleshooting.



Mastery of large-scale projects

SADE has developed significant expertise in major project management involving the coordination of subcontractors, the deployment of multiple skills, strong coordination of subcontractors, a high standard of technical expertise, and recognised financial strength.

The group's leading status as a main contractor is illustrated by some exceptionally large-scale work-sites in France and the rest of the world: Afout Essahli (180 km in 1400 mm cast iron) in Mauritania; the BOT project (27 km in 2400 mm steel) in Chengdu, China; participation in the construction of the Flamanville EPR; consolidation of French nuclear power plants (post Fukushima and the EDF refit); methane terminal at Dunkerque, etc.



CIVIL ENGINEERING

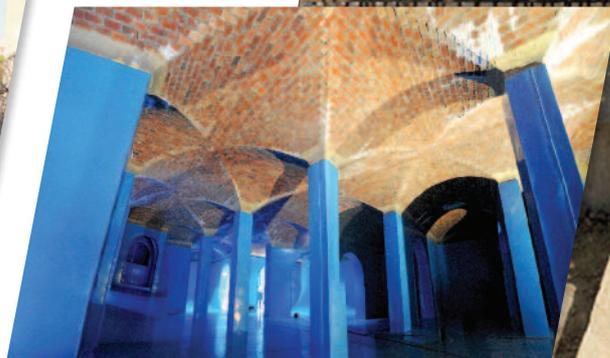
Civil engineering, both hydraulic and traditional, is involved at every stage of SADE's work.

Specialities

- Hydraulic civil engineering: tanks and basins; lifting and pumping stations; maritime and river works; waterproofing (geosynthetic materials, bentonite-cement walls and the hydroclick process); boreholes.
- Traditional civil engineering: galleries and tunnels; rest area for travellers; technical rooms; delivery areas and car parks; gateways and platforms; reinforcement and redevelopment of quays; dismantling of structures; reinforced walls; box culverts, round culverts and pipes culverts.
- Roads and utilities: roadways; pavements; paving; asphaltting; ground repairing; small urban civil engineering.

Service provisions

Design, construction, rehabilitation, compliance works.



A commitment to sustainable development

SADE has determined that all its business lines should be committed to sustainable development.

The group's environmental undertaking is evidenced in its day-to-day action, with a "clean site charter", the measurement of the carbon footprint of its worksites via the group's certified Carbon 6 software, and priority given to recycling (road surfacing materials, excavated materials), either on-site or nearby.

Prevention and safety are two of SADE's absolute requirements: protection of staff, users and local residents, and prevention of risks relating to the presence of other networks. This determination has borne fruit: the group's industrial accident frequency and severity rates are well below the average for the profession.



TECHNIQUES

SADE possesses all the skills, know-how and high-performance equipment required to use the technique best suited to the features of the projects. The techniques and methods are defined after studies, in accordance with soil types, underground congestion and the immediate surroundings of the work site.

TRADITIONAL TECHNIQUES

Laying networks, with open trenches, by mechanical earthworks.



TRENCHLESS TECHNIQUES

Network laying techniques: directional drilling; pipe extraction; microtunnelling; drilling; pipe jacking; tunnelling; conventional galleries, etc.

Gentle earth-moving techniques: suction digging; environmental connections.

Network rehabilitation processes: lining; slip lining; injection; bursting; joint sealing; shells; sprayed concrete; etc.



SPECIALIST TECHNIQUES

Underground works

Works in difficult-to-access locations

Works in confined spaces

Sheeting systems

Recycling



A strong local presence guaranteeing responsiveness at all times

Organised in a flexible and decentralised way, SADE combines the power of a large company with the responsiveness of a local business.

Its 90 offices, all over France, guarantee local service, availability and responsiveness at all times.

Relying on its experience acquired in France, SADE has been developing its international activities for a long time now. Grouped into four geographical zones and backed up by the specialised resources and departments of the Head Office, its subsidiaries and branches have already worked in 75 countries on every continent.

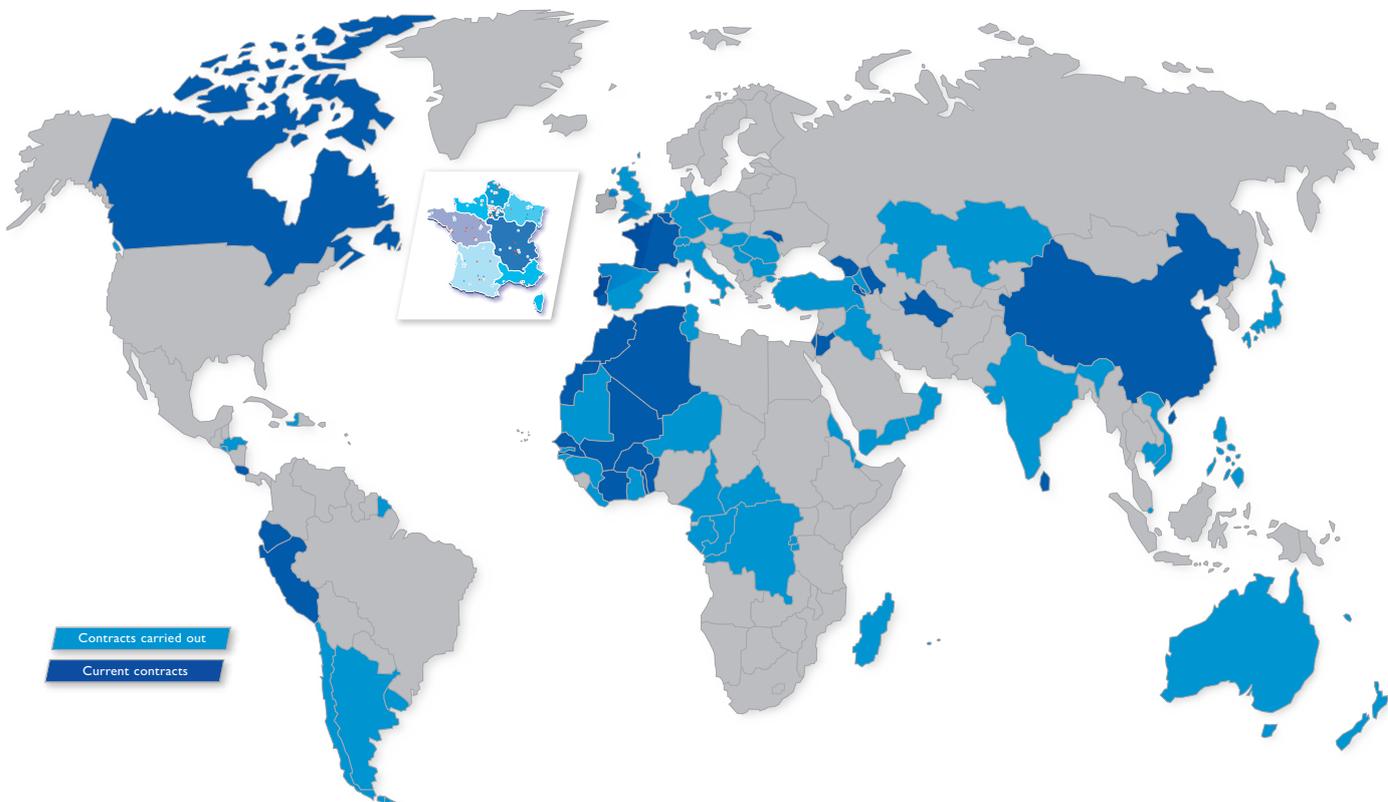


CERTIFICATIONS

- ISO 9001
- ISO 14001
- OHSAS 18001
- CEFRI
- COFRAC (N°2.1444, 3-1455)
- GEHSE
- UTO
- MASE/UIC
- ASBESTOS TREATMENT
- GEOREFRENCING AND NETWORK DETECTION

AN INTERNATIONAL GROUP

- 8 Regional Management
- 4 Specialized Services
- 23 subsidiaries in France
- 25 subsidiaries and branches abroad



sade



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