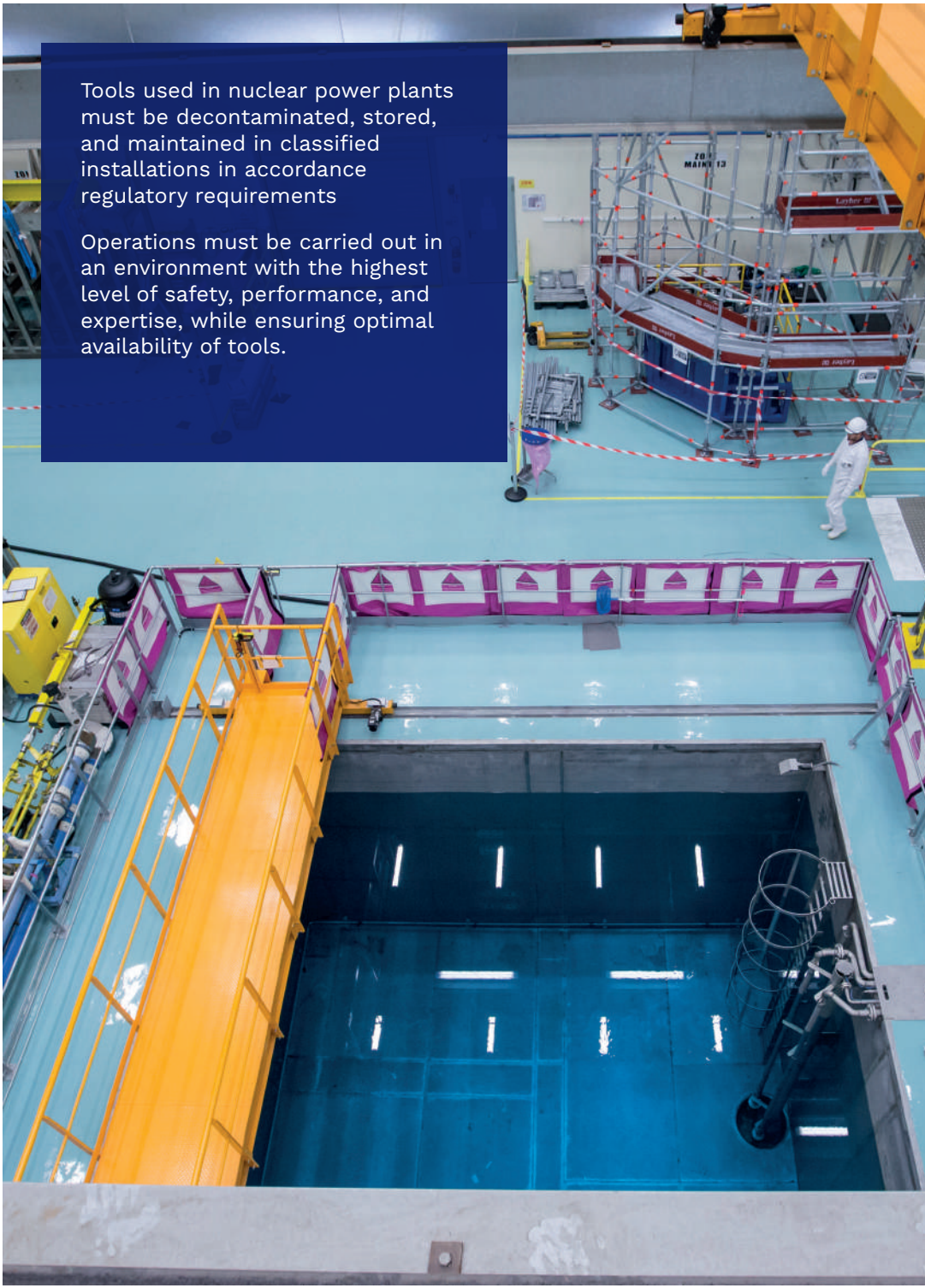
framatome

Hot workshops

Centers of operational excellence specializing in the maintenance of contaminated equipment and tools in France

Your performance
is **our** everyday **commitment**



Tools used in nuclear power plants must be decontaminated, stored, and maintained in classified installations in accordance regulatory requirements

Operations must be carried out in an environment with the highest level of safety, performance, and expertise, while ensuring optimal availability of tools.

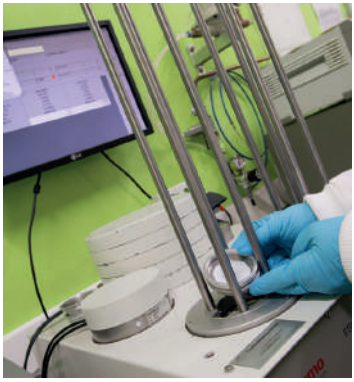
Safe, multi-purpose hot workshops

Our hot workshops, which are subject to rules governing “Installations Classified for Environmental Protection” (ICPE), allows decontamination, and maintenance of tools and equipmentand as well as re-qualification operations for the nuclear industry in France and abroad. Our hot workshops are equipped with every resource necessary to maintain tools and equipment in operational condition and enable all regulatory checks to be carried out at a single location.

We provide temporary storage areas for contaminated equipment.

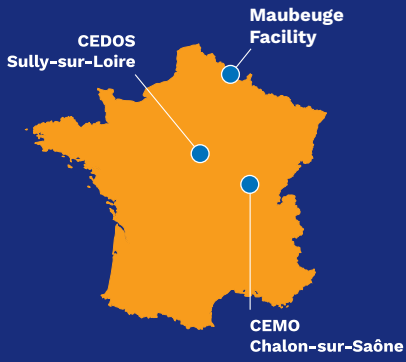
- **Container and bulk storage areas**
- **Maintenance areas**

Our installations are also equipped with regulatory infrastructures required to organise class 7 transportation and to ensure access to waste treatment streams in France and abroad.



3 HOT WORSHOPS

OUR 3 HOT WORSHOPS IN FRANCE



WORKFORCE

CEMO :
12 staff

CEDOS :
100 staff

Maubeuge facility:
51 staff

CEDOS : Sully-sur-Loire Tool Maintenance and Decontamination Center

Created in 1992, CEDOS, is located in Sully-sur-Loire (45), specialises in the storage and maintenance of tools used for maintenance operations in nuclear power plants. This facility is equipped with a pool located in a controlled area, which allows for the testing and re-qualification of tools under real-life conditions.

- Maintenance operations in a controlled area
- Maintenance areas in a controlled area
- Storage areas in a controlled area
- Tool decontamination
- Radiological controls
- Waste management
- Class 7 transport management
- A pool in a controlled area
  - Tool testing and qualification
  - staff training under real-life conditions

CEMO : Tool Maintenance Centre

Created in 1990, CEMO, is located in Chalon-sur-Saône (71), and specialises in the storage and maintenance of tools used in maintenance operations at nuclear power plants.

- Maintenance operations in a controlled area
- Maintenance areas in a controlled area
- Storage areas in a controlled area
- Hot tool decontamination
- Radiological controls
- Waste management
- Class 7 transport management

Maubeuge Facility

Created in 1986, the Maubeuge facility (59) performs repair, maintenance and expert assessment work on nuclear reactor equipment from across the world.

- Maintenance operations in a controlled area
- Maintenance areas in a controlled area
- Storage areas in a controlled area
- Hot tool decontamination
  - EMMAC/ POA chemical process
  - Chemical spraying
  - Mechanical
- Radiological controls
- Testing of hot components and tools
- Dismantling of reactor coolant system components and auxiliary components
- Waste management
- Class 7 transport management

TECHNICAL CAPACITIES

	CEDOS	CEMO	Maubeuge facility
Maintenance activities	Tool systems	Tool systems	Reactor coolant system components and auxiliary components + tools
Main activities	Tool maintenance Decontamination Radiation protection Metrology Training Underwater testing Waste treatment	Tool maintenance Decontamination Radiation protection Metrology Training Storage Waste treatment	Maintenance of reactor coolant system components and tools Machining Balancing Decontamination Radiation protection Metrology Storage Waste treatment
Laboratory activities	Calibration of inspection equipment Measurements and tests Environmental analysis Spectrometry Low background noise swab scanner	Calibration of inspection equipment Measurements and tests Environmental analysis Spectrometry Low background noise swab scanner	Metallurgical expert assessment of new components Preparation of samples (cutting, polishing, engraving), tests of metallurgical quality improvement Hardness tests Micrographic inspections Semi-quantitative chemical analyses Metallurgical, chemical, surface and mechanical characterisations Heat treatments Characterisation of the corrosion resistance of materials Oil analysis Development of R&D mock-ups Scanning electron microscope Low background noise swab scanner
Storage areas	160 containers 20 foot	165 containers 20 foot	150 containers 20 foot
Maintenance areas	800 m²	450 m²	4000 m²
Pool in a controlled area	7x6x6 metres		
Lifting capacities	25 metric tonnes	25 metric tonnes	63 metric tonnes
Hook clearance	13.68 metres	6 metres	11 metres
Radiological capacity	190GBq (beta) (5Ci) / 3.7GBq (alpha) (0.1Ci)	370GBq (0.22Ci) (beta)	8Tbq (Beta) (216Ci) / Alpha activity < 2/1000 Beta
Response	2x8 24/7/365	2x8 24/7/365	3x8 24/7/365

Dedicated resources and equipment

For 35 years, Framatome's hot workshops have been producing safe, flexible and competitive management solutions for contaminated equipment. These hot workshops are equipped with large maintenance and storage areas. Qualified teams are available to assist their clients with their decontamination, maintenance and repair activities as well as organization of any related transport activities.

Hot workshops with all resources necessary to maintain tools and equipment in operational condition, and enable all regulatory checks to be carried out at a single location. Including:

- Maintenance
- Machining
- Decontamination
- Storage
- Waste management
- Transport
- A team of experts: operators, technicians, engineers and inspection specialists
- Multi-purpose laboratories
- Storage areas for hot or cold tools

Framatome is an international leader in the nuclear energy industry and is renowned for its innovative solutions and high-added-value technologies intended for the world's nuclear power plants. Thanks to its global expertise and solid references in terms of its reliability and performance, the company designs, maintains and installs components, fuels and I&C systems for nuclear power plants.

Its some 14,000 staff contribute each day to ensuring that Framatome's customers are supplied with an ever cleaner, safer and more economical low-carbon energy mix.

Framatome is owned by EDF Group (75.5 %), Mitsubishi Heavy Industries (19.5 %) and Assystem (5 %).

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