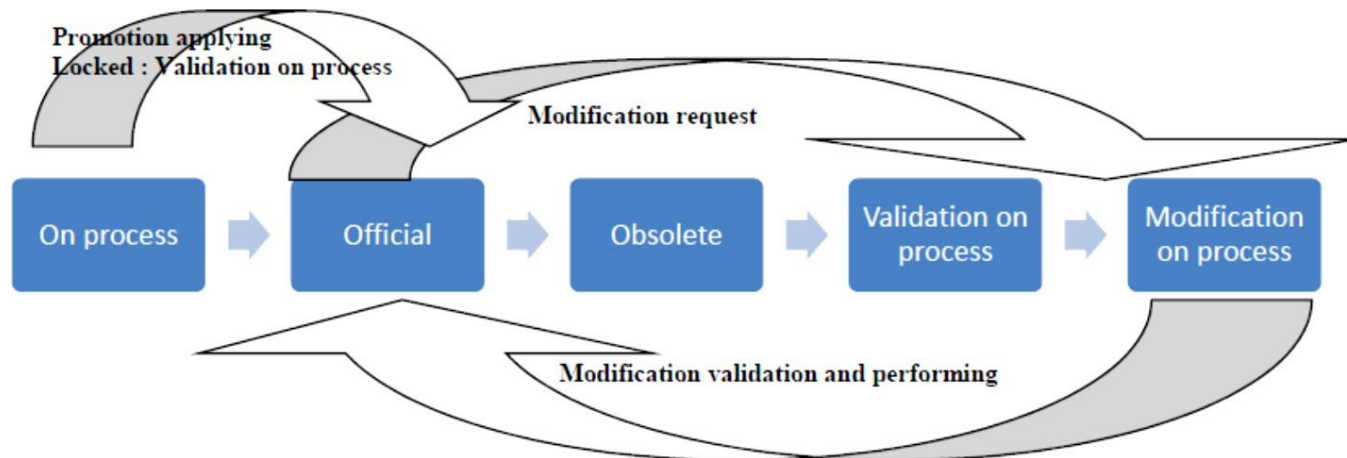


// CMR product life cycle management

CMR offers an end-to-end product life cycle solution and insures the obsolescence management of its products, including all 424 and 425 racks which have been installed in more than 120 power plants from 1980s. CMR offer includes the obsolescence treatment of other products out of our scope of supply on specific request.

CMR Product life cycle management :



// Your global engineering partner

You need an experienced engineering services partner. We provide you with expertise gained through 50 years of global trading. With some of the first patents for marine electronics and groundbreaking technology transfers, CMR Group has consistently delivered you quality and reliable products for decades.

CMR is highly experienced in ensuring the reliable and safe operation of your **nuclear** power plant facilities.

Our customer groups include:

- Designers and manufacturers of capital equipment
- Facility owners of nuclear energy facilities
- Genset packagers

CMR – I&C Nuclear Approved



// CMR qualified partner for nuclear power plant

Specializing in nuclear power plant applications, automation we are certified by our customers, including **EDF**, for nuclear temperature sensor supply, engineering, installation and servicing.

CMR offer includes:

- Electricity
- Instrumentation
- Automation and Control command
- Data Acquisition, Monitoring & Supervision
- System Integration
- Communication Networks

For power plants, our service capabilities are extensive:

- Engineering
- Design
- Qualification
- Project Management
- Installation, Service & Technical Support



// www.cmr-group.com

CMR CHINA
t. +86 512 6289 0311-800
e. cmr-cn@cmr-group.com

CMR GROUP KOREA
t. +82 51 743 3902-3
e. cmr-gkr@cmr-group.com

CMR UK
t. +44 (0) 191 528 5222
e. cmr-uk@cmr-group.com

CMR FAR EAST
t. +65 6268 8311
e. cmr-fe@cmr-group.com

CMR PHILIPPINES
t. +63 2 587 5530
e. cmr-ph@cmr-group.com

CMR USA
t. +1 (724) 452 2200
e. cmr-us@cmr-group.com

CMR GROUP HQ
t. +33 4 91 11 37 00
e. cmr-fr@cmr-group.com

CMR THAILAND
t. +66 2 077 8986
e. cmr-th@cmr-group.com

CMR INDIA
t. +91 (0) 78750 88891
e. cmr-in@cmr-group.com

CMR TUNISIA
t. +216 71 426 978
e. cmr-tn@cmr-group.com

// CMR nuclear sensors

Sensors supply with direct measuring "in situ" of fluid and gas temperatures :

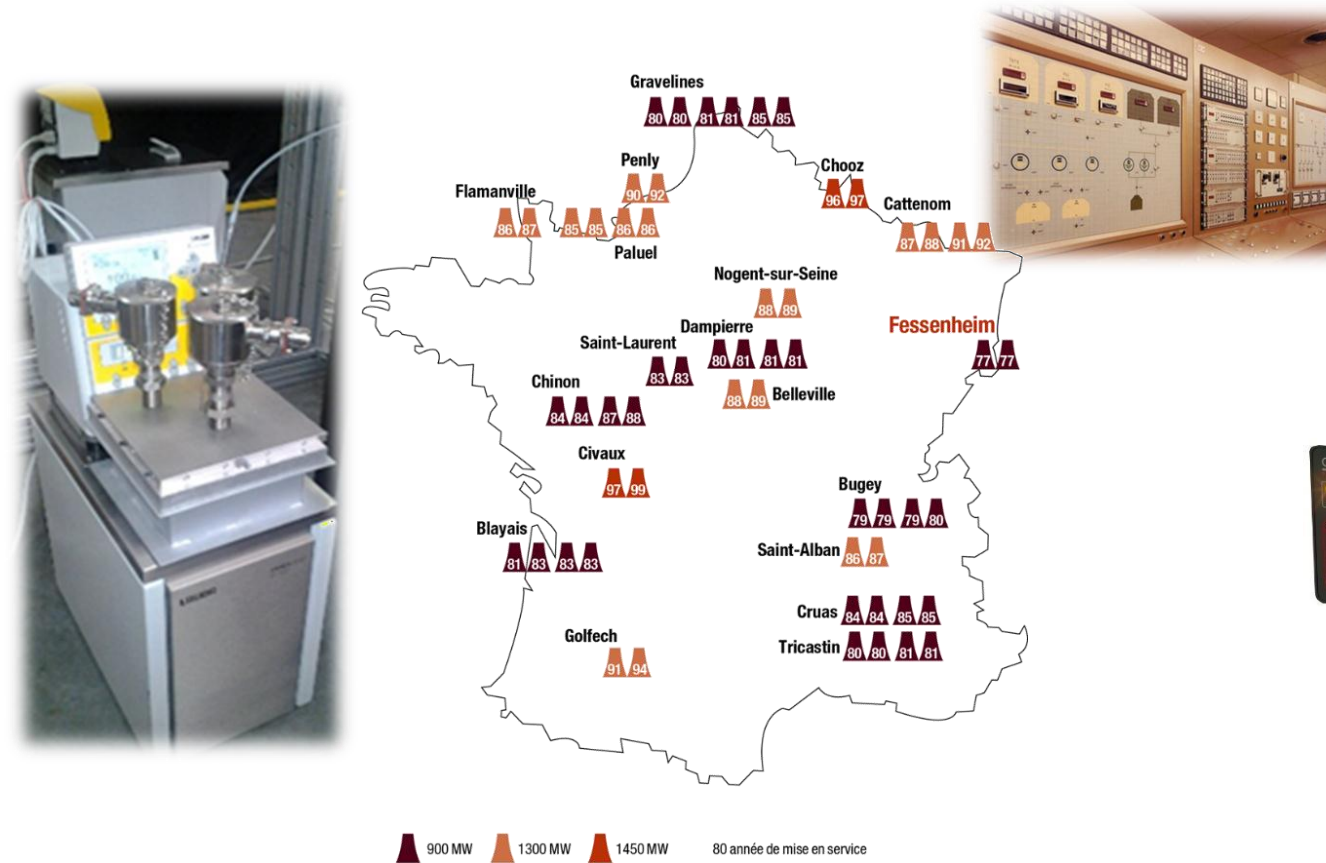
Easy maintenance with interchangeable mountings. Possibility of 360° orientation of head for access to the cable glands. Possibility of integrated a head transmitter. Choice of sensing element : thermocouple (all types) or resistant probe, simplex or duplex.

- **AN series** : Recommended for high pressure fluids for nuclear environment and aggressive gaseous fluids.
- **BC/BS series** : Sensors for alternator, pumps, steam and gas turbine bearings and other rotary machine bearings.
- **AMB series** : conventional, nuclear sensors used for ambient temperature measurements. Also recommended for use in refrigerated atmospheres and ventilation ducts.



// CMR Electronics devices

30 years partnership with Electricité de France and nuclear customers



Electronic devices supply, mounted on engine and on control panels.

Particularly adapted to harsh environment (vibrations, high temperatures, electromagnetics...):

- **S128 & S129 scanners** : 32 analog channel, monitoring units totally configurable. Main functions : calculating the average of n channels, deviations of channels from their average, calculating the gradient of each channel and monitoring deviations from threshold, relay output, alarm collection, several thresholds possible per channel.



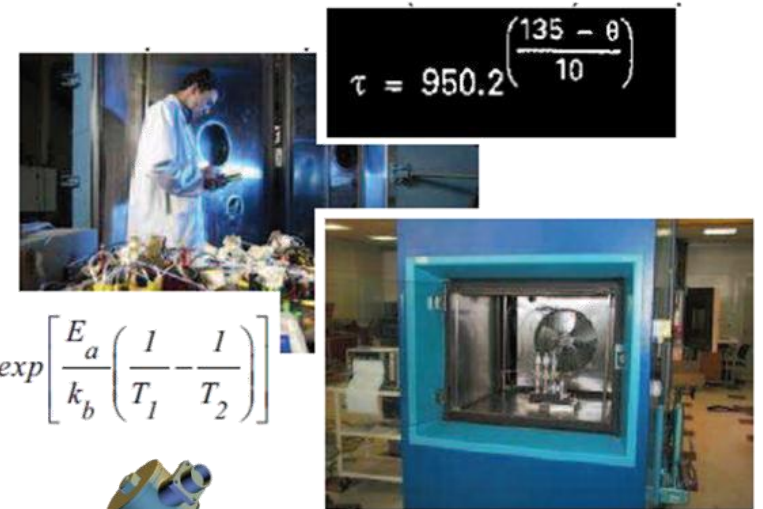
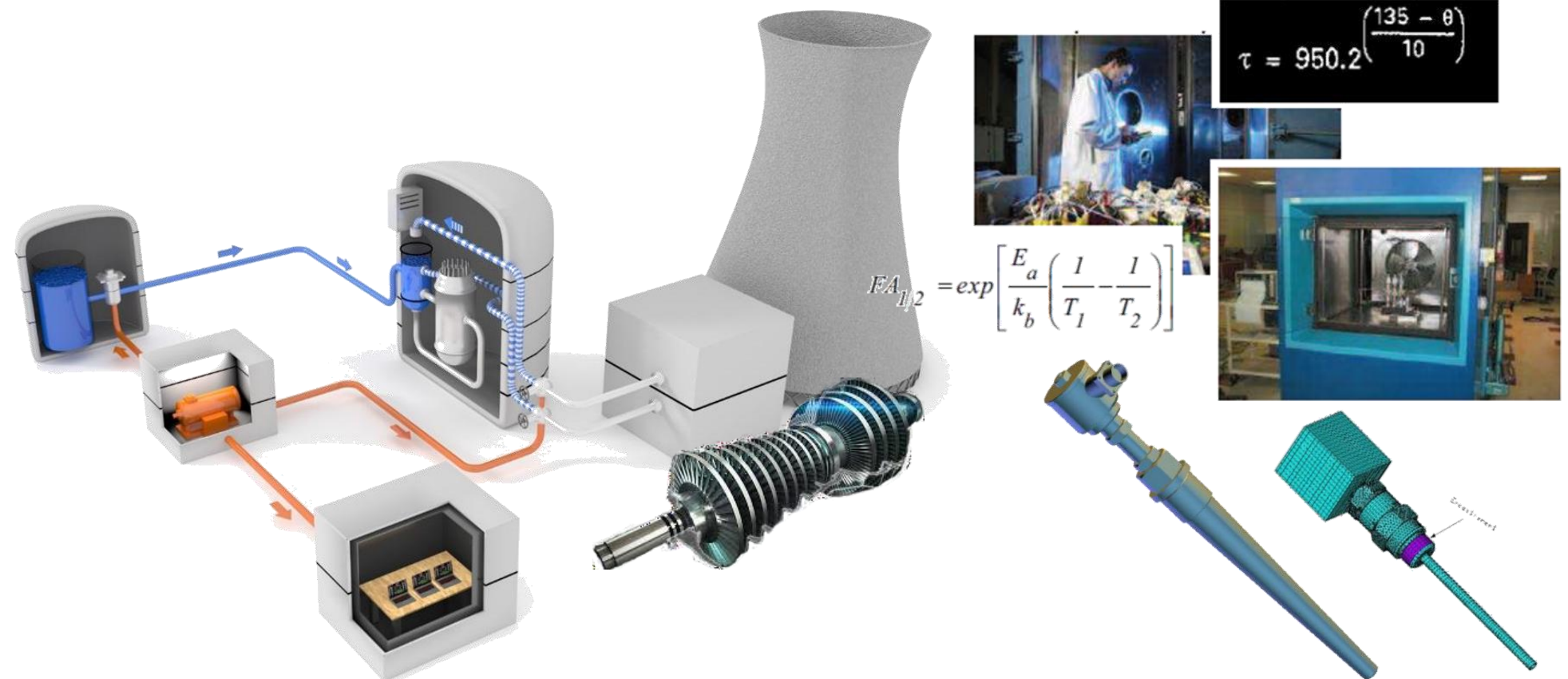
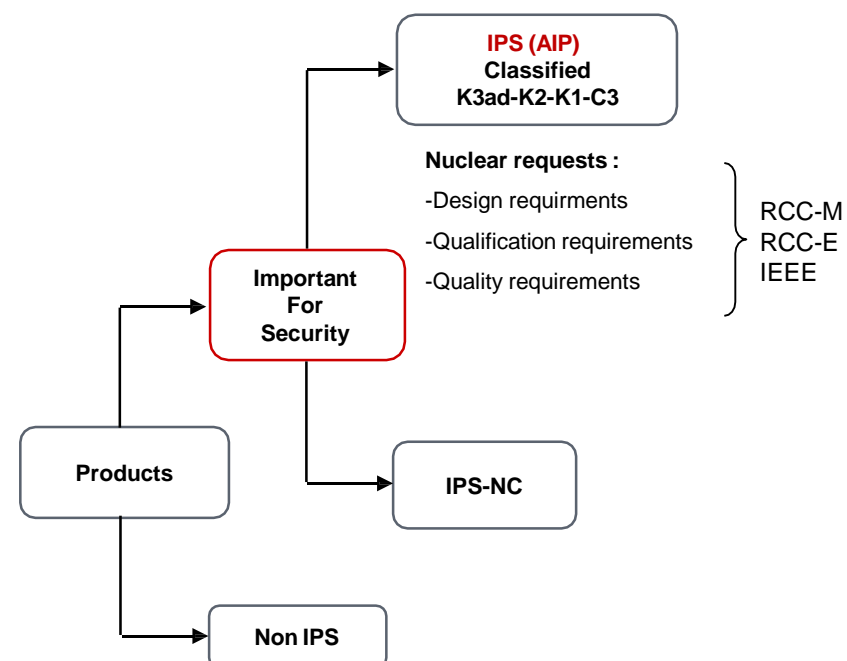
Modular construction based on racks (19 inch).

- **424 & 425 racks series** : Custom made according to specifications, integrating monitoring, security and control. Robust and reliable.

// CMR K3AD qualification

Tests and Analysis according to RCC-E requirements

AIP & EIP (IPS) Materials



AN and BC/BS sensors 3D render