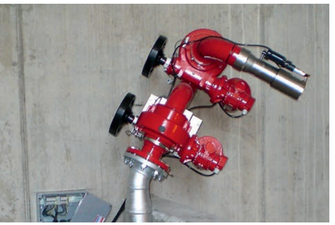
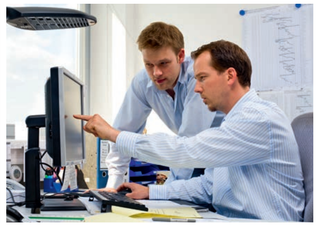
We won't leave you high and dry





Fire monitor extinguishing systems

CALANBAU fire monitor extinguishing systems have proven fire protection credentials for large installations and facilities thanks to the impressive range of their water cannons. They ensure you are able to target the seats of fires in dangerous areas quickly and precisely.

Design and operation of fire monitor extinguishing systems

Fire monitor extinguishing systems get their name from fixed water cannons known as monitors.

They are operated manually or electrically using a remote control device. A fire detection system or infrared camera can also activate the monitors automatically.

The monitors enable seats of fires that are difficult to access to be extinguished precisely by appropriately trained personnel (operators, plant/public fire brigade).

The particular setting determines whether they produce a spray or a full jet. Depending on the type of monitor, they can cover distances of between 20 and 120 metres and can distribute between 1,000 and 20,000 litres of extinguishing water per minute at a pressure of 6-10 bar.

Infrared cameras in action

Infrared cameras are used where conventional fire de-tection systems are not suitable due to their response behaviour or the long distances involved. Infrared cameras monitor the area to be protected by recording and evaluating the heat radiated by the area in question. If a fire is detected, the infrared cameras trans-mit the signal to the extinguishing control centre and sound a preliminary alarm or immediately trigger the extinguishing

process. They can be installed in a fixed position or with a swivel range of approx. 360°.

SCC**
DNV
Certified Company

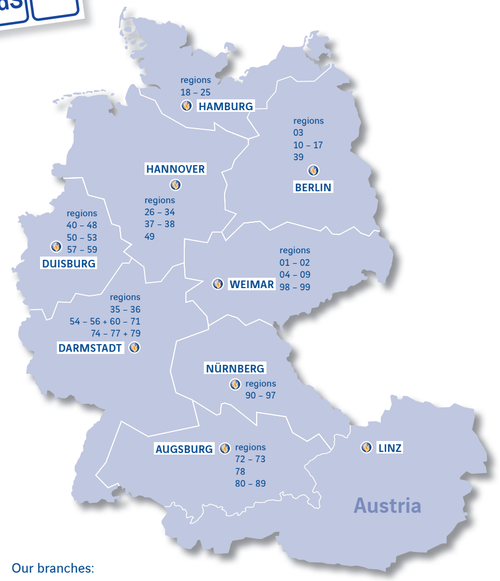
We take customer proximity literally!

Each of our eight branches has all the departments required to implement your safety concepts – including sales, planning, installation and customer services.

CALANBAU prides itself on being an excellent partner, ensuring close cooperation, reliability and top performance. We have already won over a large number of companies.

We're sure that you too will be impressed!

VdS ISO 9001



Our branches:

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31157 Sarstedt

Darmstadt branch
64347 Griesheim

Augsburg branch
86438 Kissing

Weimar branch
99428 Grammetal

Berlin branch
13127 Berlin

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Hamburg branch
22113 Hamburg

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Safety – when it really matters.

Harness our expertise for your power plant.

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Fire protection systems tailored to your specific requirements

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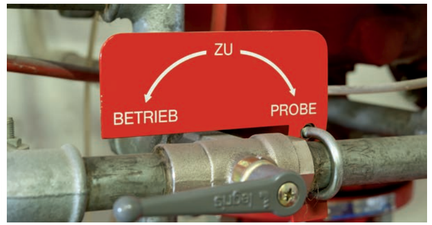


Customised solutions for your safety

Customised solutions are essential for effective, preventive fire protection and this lies at the heart of what CALANBAU experts strive to achieve. Our cutting-edge fire protection systems – planned, supplied and installed from a single source – ensure safety for our customers.

Every fire risk is different, which is why fire protection must be geared to the very precise needs of our customers and take into account factors such as the structural features. This applies, for example, to selecting the extinguishing agent and determining the size of the systems.

Our experts devise solutions that offer maximum safety while keeping an eye on costs – solutions that are reliable, targeted and also prevent secondary damage in the event of a fire.

Close to customers and round-the-clock service

Precise planning and smooth installation procedures are what make us stand out from our competitors. Our Germany-wide presence, service hotline and the fact we are on call 24 hours a day mean we're always close to our customers.

With over 40 years of experience, we are an extremely reliable partner that offers the flexibility and innovative drive of a medium-sized enterprise but can also handle large-scale projects that require sizeable financial strength. This is the basis for our success.

CALANBAU is certified to DIN EN ISO 9001. We use short decision-making channels and flat hierarchies and place responsibility with our local teams. Our know-how and certification as a VdS-approved installer of stationary fire protection systems ensure a quality of system installation, care and maintenance that our customers can rely on.

CALANBAU – a reliable and expert partner

Thanks to the fact that it is part of the VINCI Group, the world's number 1 for concessions and building/building-related services, CALANBAU combines the flexibility of a medium-sized enterprise with the resources and expertise of a global group. This makes the company a supremely reliable and safe partner for large-scale undertakings and projects.

Our team of experts from Hamburg specialises in power plants and offers German and international customers the perfect fire protection solution for:

- Waste incineration plants
- Biomass-fuelled power plants
- Steam and gas turbines
- Coal-fired power plants
- Tank farms
- The petrochemical industry
- Aircraft hangars
- Ship unloading stations
- Coal storage facilities

Reference projects

Waste incineration plants:

- Borlänge (Sweden)
- Delfzijl (Netherlands)
- Leudelange (Luxembourg)
- Kristiansand (Norway)
- MKVA Krefeld (Germany)
- Vaasa (Finland)

Power plants:

- Uddevalla (Sweden)
- Eisenhüttenstadt (Germany)
- Biomass-fuelled power plant in Hamburg (Germany)

Nuclear power plants:

- Brokdorf (Germany)

Coal-fired power plants:

- Staudinger power plant, Hanau (Germany)

Water sprayextinguishing systems

The main structure of a water spray extinguishing system – consisting of a nozzle pipe network, alarm and trigger units and water supply – is similar to a conventional sprinkler system.

However, the extinguishing nozzles are not sealed with a glass bulb but are open. The extinguishing water is released by the main control valve station when the fire detection elements are activated. Fire detection and activation can occur electrically via fire detection systems, pneumatically via activation networks or manually, for example.

The open nozzle-based system discharges the extinguishing water simultaneously throughout the entire design-ated protection zone. This enables fire scenarios with particularly fast propagation to be brought under control particularly quickly. Spraying the whole of a defined coverage area at one and the same time wets and cools the surfaces, holds the combustion heat in check and extinguishes the seat of the fire.

Foam extinguishing systems

Foam extinguishing systems are fixed systems designed as stand-alone foam extinguishing systems or as sprinkler and water spray systems with a foam proportioning system. These types of systems are mainly used for fires involving solids and liquids in fire classes A and B.

As a general rule, a specified, constant proportion of foam concentrate is added to the extinguishing water flow. Air, which is responsible for ensuring foam consistency, is fed into the extinguishing water-foam mixture at the foaming elements. Depending on the application in question, the extinguishing effect can be achieved by cooling surfaces, by cutting off the flow of oxygen to quench the seat of the fire, and by covering the entire areas.

Low-expansion foam systems are mostly induction systems for conventional sprinkler or water spray / semi-stationary systems. Sprinkler heads, nozzles and special low-expansion foam sprinklers with a low foam expansion rate are used in most cases. Storage tanks, their spill containments, flammable liquids, etc. can be protected using low-expansion foam pipes or foam pourers.