

# THE CATALYST

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**JOIFF**

THE INTERNATIONAL ORGANISATION FOR  
INDUSTRIAL EMERGENCY SERVICES MANAGEMENT

## TRAINING FEATURE:

TRAINING FEMALE FIREFIGHTERS

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ELECTRIC VEHICLES -

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H2K Training Provider Profile

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# H2K - ACCREDITED TRAINING PROVIDER PROFILE



Situated in Schiedam (Rotterdam-region), below the chimneys and flares of the largest refineries in Europe, H2K can be found. This family-owned company started in 2006, is specialised in providing firefighting education, training courses and consultancy. Customers are government and in-company fire brigades with Emergency Response Organisations focussing on industrial risks, such as petroleum industry, pharmaceutical, chemical storage, transport, and food processing industries.

Founders of the training agency are brothers De Roos. Peter and Ronald

both have a background in industrial firefighting and won their spurs at the well-known RISC training ground, and as firemen in Dutch firefighting services. It is there they discovered a passion for fire training and education. In the heat of the moment a firefighter needs to perform at the best of his capabilities. To do so he or she must be efficiently trained to take safe, smart and effective choices. H2K aligns every project so that the best possible training is being conducted.

In 2011 the time was ripe for the two to join the company fulltime, and it has rapidly grown ever since. "We used to do everything ourselves", Peter explains, "conducting training, arranging examinations, transporting SCBA, making lunches." "I remember a summer vacation with family at Lake Garda in which evenings were being reserved to compose training programs together", Ronald adds grinningly.

Nowadays the team is extended to 18, situated in a neat office building combined with warehouse. H2K is the largest Dutch provider of firefighting training programs and educational courses. The company has its roots and is strongly specialised in industrial firefighting. Educational courses are accredited by the Dutch Fire Service College (IFV), making them one of only two private parties allowed to do so. Training courses are always conducted in form of tailor-made programs.

Most of the clients are situated in The Netherlands, around seaports. Although an increase in requests from outside the Dutch borders has been noted. With new contacts being established in countries such as Belgium, Cyprus, Estonia, Ethiopia and Malaysia.

*'It is not our goal to have all knowledge in-house'*

The JOIFF-member strongly believes in a networking approach to training and education. It is through partners that they are able to achieve the current portfolio. "It is not our goal to have all knowledge in-house. Instead we rely on a hull of approximately 80 freelance instructors and partner companies", Ronald explains. "Every so often we extend a training program on industrial firefighting and safety with topics on risk and continuity. In Marsh Risk Consulting we find a very valuable partner for doing these specific training programs. And we would never be able to achieve the knowledge they have on this matter," he continues. "A lot of the training programs pay attention to firefighting foam. Although we have plenty of experience there, for more knowledgeable topics we partner up with German foam manufacturer Dr. Sthamer. We believe both parties benefit from this approach. Marsh and Sthamer can make use of our channel for conducting training, and our program profits from their extensive knowledge", Peter adds.

**TRAINING MATHEMATICS**

The success formula for firefighting training is not complicated, though very tricky to execute well. H2K prefers to conduct training as much as possible at the client's location. This means participants are confronted with a known surrounding, known scenarios

## Facts and Figures

Name:  
H2K

Location:  
Schiedam-Rotterdam, The Netherlands

Team:  
18 + 80 freelance instructors

Portfolio:  
± 250 training projects and  
± 35 educational programs in 2019

Specialties:  
Firefighting foam, hydrocarbon  
firefighting, industrial firefighting, tailor-  
made training programs

Web:  
[www.h2k.nl](http://www.h2k.nl) (also in English)

and known firefighting equipment, thus training output will be high. "In practice this always leaves challenges", Ronald states, "first of all the instructor has to be allowed to conduct training on-site and get to know the location. Meaning: entrance checks, vehicle registration, safety briefing, hazop, etc. etc. In addition to that, it demands much capacity from our company's planning and logistics team. Some days our entire operations team is on the road, making sure the training gear is on the right location at the right time".

H2K does not house its own training ground. The reason is simple: flexibility. Having your own location has the benefit of being fully able to set the tone, but the downside is that a certain amount of training will have to be conducted inhouse to cover the costs. "And that does not always lead to the best training possible. We have partnerships or agreements with most industrial training sites in The Netherlands, and locations throughout Europe. This means we can choose the ideal training location based upon the program, selecting relevant training objects that match the training goals", Peter illustrates.

"The final part of the success formula for training is selecting the instructor. The training is only as good as the instructor", Ronald says. H2K only has a few instructors on the payroll, the rest of them is freelancer. "We call this: the best-(wo)man-on-the-job-model. One of our partner-instructors is a specialist on nuclear safety and firefighting. We conduct about 10 nuclear training sessions per year, and always this is our man. But we would not ask him to conduct training on basic firefighting skills. It would do both the instructor and the training course no good. I am very proud of our network of instructors. We value all of them and are grateful for the work they do for us every day", the Managing Director concludes.

## RESEARCH & DEVELOPMENT

Next to training, the Schiedam-based organisation also has a crew for Research and Development. Main focus of the R&D-team is developing tailor-made training programs and educational courses together with clients. As an example, the team is currently composing a safety awareness training about Chlorine in industrial applications. A client uses Chlorine and Chlorine gas in large quantities. Although their safety personnel have been educated in industrial firefighting and incident command, they now request additional training and knowledge on emergency response related to Chlorine.

Similar programs have been composed about anhydrous ammonia, hydrogen, dust explosions and incidents with transformers & substations.

"Theory on these subjects is often available extensively. Our challenge lies in translating the (scientific) literature into a training program that speaks for itself. In addition to this, we want to develop understandable workshops with practical demos. An 8-hour spoken course is usually not the best way to get the message between a firefighter's ears", Peter explains.

New developments in the industry are being monitored continuously by the R&D-team. Because of this they are very well-informed and are frequently asked for issues on firefighting foam, hydrocarbon firefighting, hardware and mobile equipment. Examples are the selection of a new foam concentrate, or the consequences of fluorene free foam for existing vehicles and hardware.

*'An 8-hour spoken course is not the way to get a message between a firefighter's ears*

## THREE-STEPPED TRAINING MODEL

For most of the clients, H2K executes a multi-year programs using a stepped model. Step 1 is basic training or refreshers at the clients' location, next step is small-scale realistic training using an external location in The Netherlands. The final step in the model is to take customers to a real-scale training site. Those locations make it possible to bring your own truck, foam, gear (and sometimes even product), to conduct realistic scenario training. The stepped model helps in making the transition from basic and small-scale training to practicing industrial scenarios in a hyper-realistic environment.

As a result of the model, H2K depends on a variety of partner training sites. Most of them are situated in The Netherlands. Making it ideal for students to travel there for a 1-day training. The training location in Dordrecht, representing a medium Dutch city, is JOIFF-accredited since May 2017. One of the most special training locations is the CNPP-site in Vernon, France. The training centre is situated on the site of a former refinery of which the tank-park, the loading installations, and various process installations are now in use as training objects. H2K mainly uses the site as location for training on firefighting foams, hydrocarbon fires and tank & bund firefighting on realistic scale.

## JOIFF

Since early on, H2K has been member of JOIFF. "For us it is important to be member of an international organisation that aims to share knowledge and expertise on industrial safety. Only by doing so we will become better at responding to industrial incidents in the future", Peter states. Industrial fire training is not as regulated as training for the upstream oil and gas. "This makes it even more important that there is an international partner for training accreditations."

Annually, H2K organises a Foam School in Vernon together with Dr. Sthamer. In addition to this, the company conducts specialist training programs on Integrated Fire Safety of IBC's and Intermodals, Tank and Bund Fires, Transformer Fires and the 5-day course on Advanced Industrial Firefighting. Next to the above standard JOIFF-programs, H2K also provides various in-company JOIFF-accredited programs. Such as a tailor-made Fire Incident Command Course, Fire Officer training and specialised train-the-trainer programs.

2020 promises to become an interesting year for H2K. The pipeline is filling up rapidly with training requests. As long as the chimneys in Port of Rotterdam keep smoking, there will be plenty of training work to do for the two brothers and their team.

