



NCAGE A5009  
CONFORM TO THE QUALITY  
SYSTEM STANDARD AQAP 2110  
and ISO 9001:2015

# CRISTANINI

FD 437

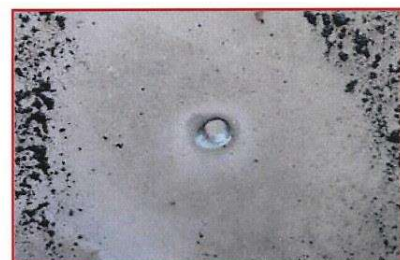
Rev. 04/10/2023



CBRN Magyarország

## WJFE 300 WATER JET FIRE SUPPRESSION SYSTEM

cod. 800040038  
N.S.N. 4210-15-018-4991



EFFECTIVE PERFORATION  
ON EVERY TYPE OF MATERIAL:  
**WOOD, STEEL, PLASTIC,  
GLASS, CONCRETE, ETC.**  
AND POWERFUL  
FIREFIGHTING  
SYSTEM.

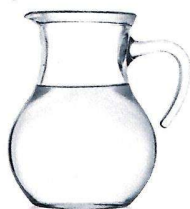




## WJFE 300 – WATER MIST TECHNOLOGY

WJFE 300 **is a revolutionary system for drilling and the first attack on suppressing fires in enclosed environments.** It uses a patented lance employing a mixing system of abrasive and water at the lance, result of the smartest and sophisticated engineering. This is done without entering air, due to the Venturi effect, into the volume where the fire is located.

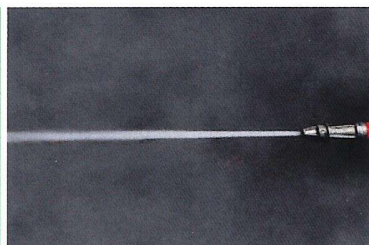
**A drop with the volume of 1 liter of water, at a pressure of 1 bar, has a contact surface with the atmosphere of 0,048 m<sup>2</sup>. 1 liter of nebulised water, at a pressure of 350 bar, generates 238.000.000 droplets, for a total contact surface with the atmosphere of 30 m<sup>2</sup>, which is 625 times bigger than the one generated with 1 bar.**



1 LITER OF WATER

AT A PRESSURE OF:

HAS A CONTACT SURFACE  
WITH HOT GASES OF:



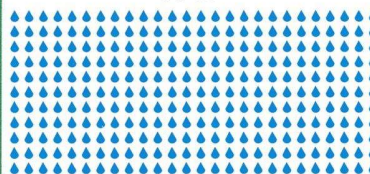
1 BAR

0,048 m<sup>2</sup>



350 BAR

30 m<sup>2</sup>



## WHERE IT CAN BE USED

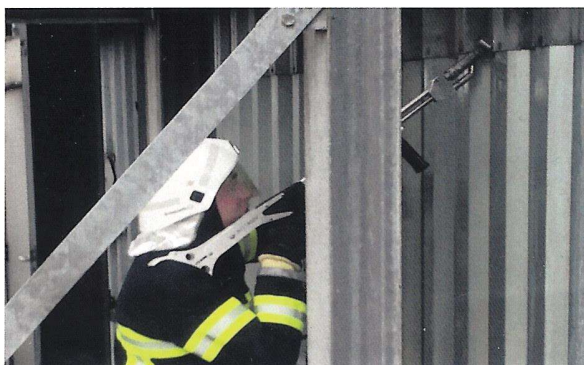
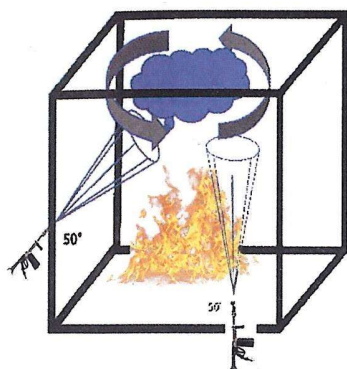
The system is particularly indicated for:

- Enclosed areas, every type of industry, commercial activity, cinemas, theatres, ship engine rooms, etc.
- Potentially explosive areas.
- Environments which require the minimum use of water (limiting the after-fire damages).

The WJFE 300 system, with its high capacity of cooling, containment and control of the flames, makes this type of intervention much more secure, allowing the operator to act immediately from outside the place where the fire developed, in a safe position.

The fire developed inside any infrastructure (both mobile or fixed) needs a delicate and dangerous intervention for the operator and also for the security of the same structure.

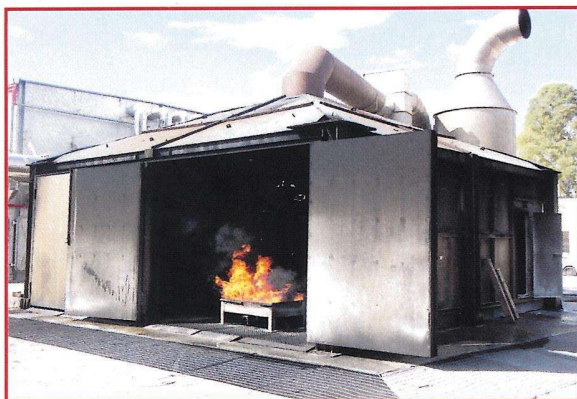
## WATER MIST



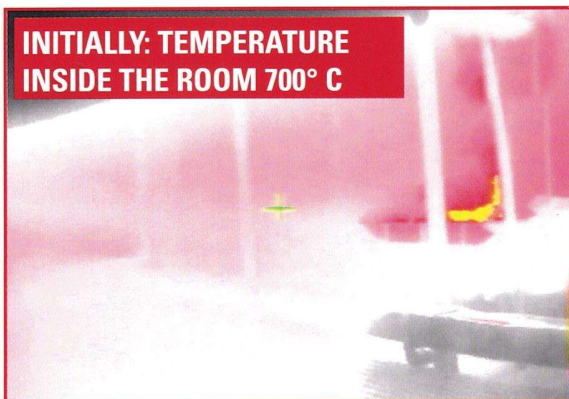


# TEST WITH TERGRAPHIC CAMERA

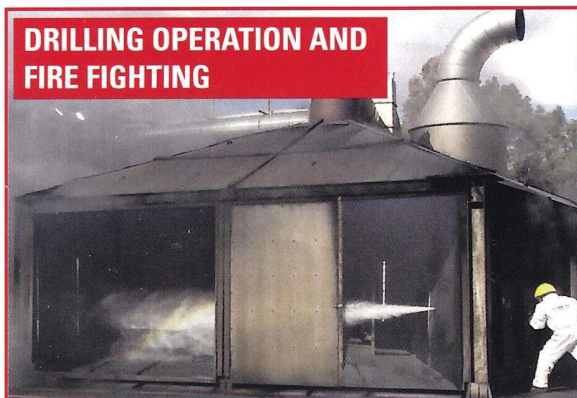
TEST: TEMPERATURE, COOLING TIME AFTER THE DRILLING.



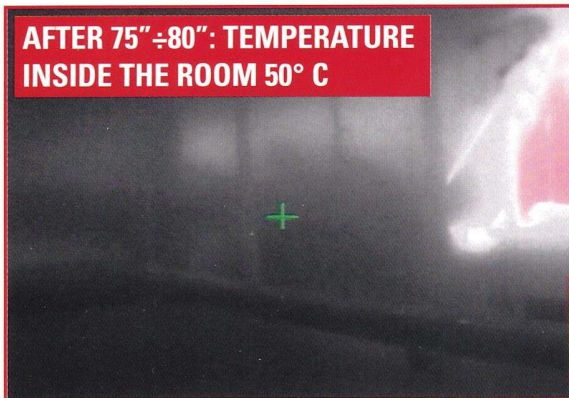
INITIALLY: TEMPERATURE  
INSIDE THE ROOM 700° C



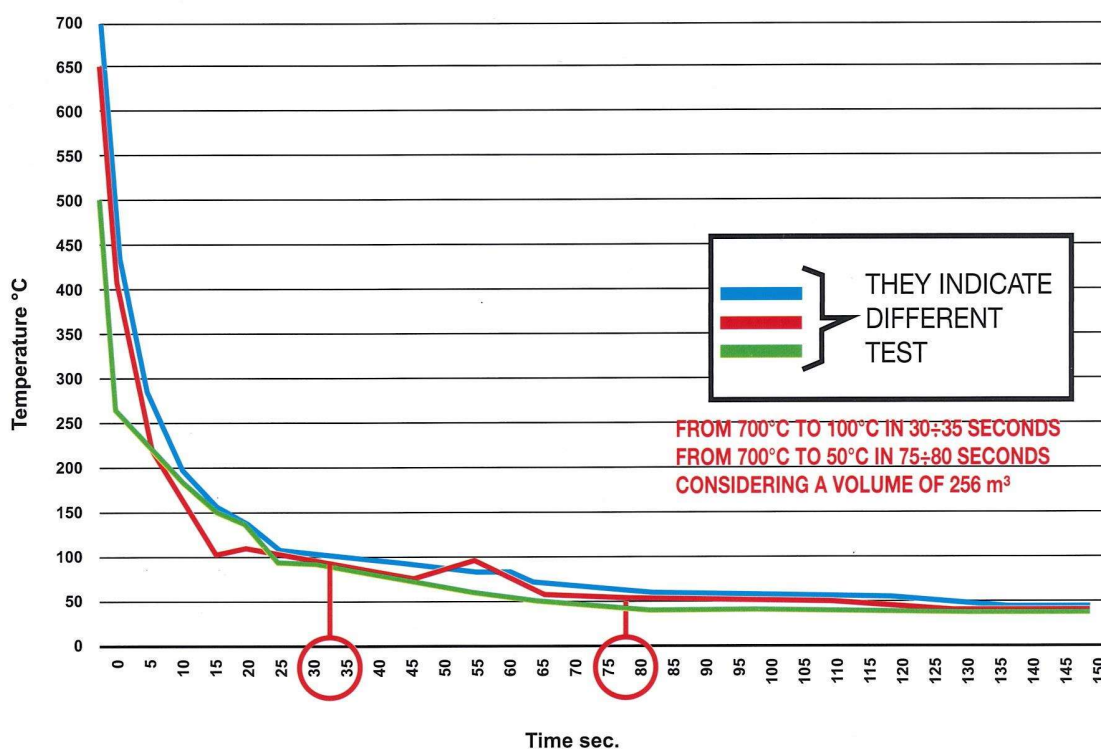
DRILLING OPERATION AND  
FIRE FIGHTING



AFTER 75"÷80": TEMPERATURE  
INSIDE THE ROOM 50° C



## COOLING DIAGRAM





## SOME ADVANTAGES

- 1 The rapid creation of a hole in the concrete or steel, through the use of a special lance, with a high pressure water and abrasive.
- 2 The instantly suspension, if necessary, of the abrasive and water mixing.
- 3 The immediate saturation, with nebulised water (water mist), of the area where the fire developed, that permits a quick reduction of the temperature. This avoids that heat passes and warms fuels and flammable materials inside adjacent areas.
- 4 The dilution of the smoke, as unburned particles present in the smoke are absorbed by the water drops.
- 5 It is quick to switch off and it has the huge benefit for the operator to exposure to contaminated gas only for a very short time.
- 6 It is possible to use the lance (which weights only 7,5 kg) with only one hand.
- 7 Nebulised jet exceed 10 meters.
- 8 The formation of a shield effect, due to the barrier created by the cloud of water, that reduces the heat transmitted by irradiance to the operator.
- 9 Optimal cooling ability as the water drops are much smaller than thus absorbing big heat quantity.
- 10 The big efficacy of the system to suppress hidden fires.
- 11 Extremely restricted water consumption.
- 12 The transportability of the system (2 people) provides big advantages also for intervention in confined areas.
- 13 The possibility to operate with a hose to a distance up to 80 meters (40 meters are optional).
- 14 The very low maintenance requirement of the system.



Steel thickness: 5 mm.  
Drilling time: 22÷24 sec.  
Steel thickness: 10 mm.  
Drilling time 55÷60 sec.



Concrete thickness: 130 mm.  
Drilling time: 31 sec.  
Cement thickness: 210 mm.  
Drilling time: 1 min. e 10/20 sec.

## WEIGHTS OF COMPONENTS

### WJFE 300

Weight: kg 245 (540 lb)  
Dimensioni: 1360x570x800 mm (53x24x31 in)  
Code: 800040038



### LANCE WJFE 300 EQUIPPED CONTAINER

Weight: KG 7,5 (16,5 lb) (without container 5,5 kg - 12,1 lb)  
Length: 1320 mm (51,9 in)  
Code: 958090479



**PATENTED**

### HOSE REEL EQUIPPED WITH HOSE

Total weight: KG 28 (61,7 lb)  
Hose length: 40 mt (1575 in)  
(2nd hose reel with a 40 mt hose: OPTIONAL)  
Code: 958090560



**OPTIONAL**

Magyarországon kizárólagosan forgalmazza:

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