



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

CRISTANINI

FD 437
rev. 11.2018



WJ.FE 300 MODULAR WATER JET FIRE SUPPRESSION SYSTEM

cod. 800040018



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

WJFE 300 WATER MODULAR – WATER MIST TECHNOLOGY

WJFE 300 MODULAR 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 m². 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 m², which is 625 times bigger than the one generated with 1 bar.

1 LITER OF WATER



AT A PRESSURE OF:

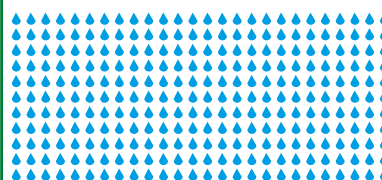
1 BAR

350 BAR

HAS A CONTACT SURFACE
WITH HOT GASES OF:

0,048 m²

30 m²



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 modular 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.

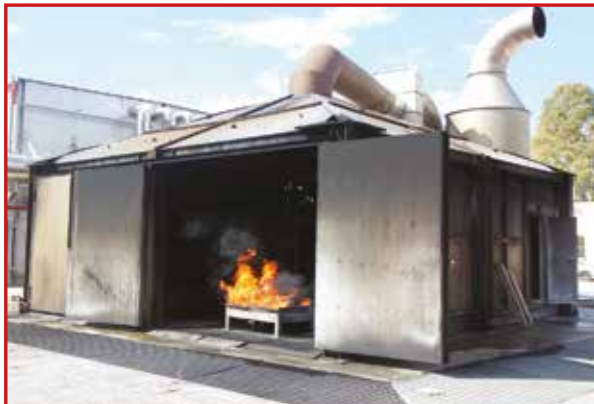
The fire developed inside any infrastructure (both mobile or fixed) needs a delicate and dangerous intervention for the operator and also for the security of the same structure.

WATER MIST



TEST WITH TERGRAPHIC CAMERA

TEST: TEMPERATURE, COOLING TIME AFTER THE DRILLING



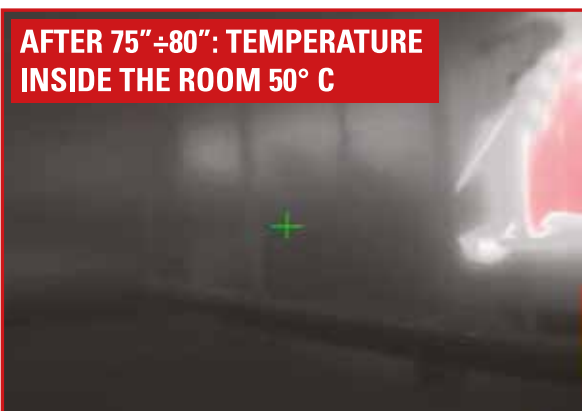
INITIALLY: TEMPERATURE
INSIDE THE ROOM 700° C



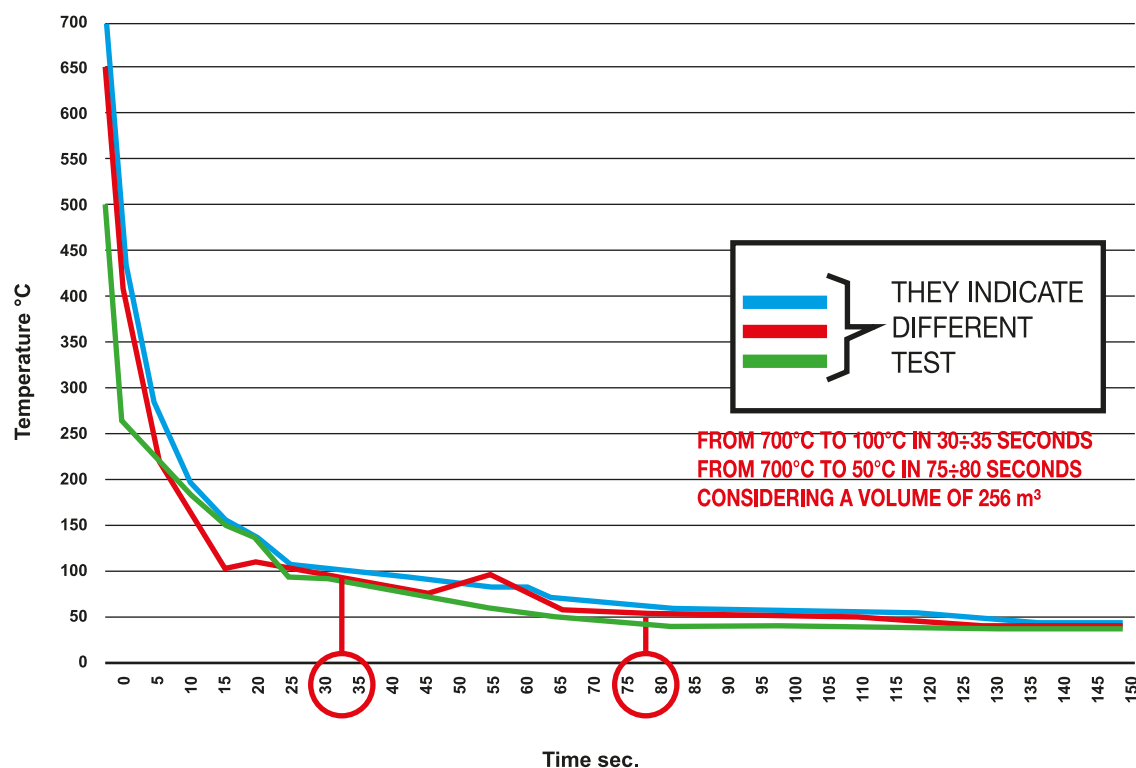
DRILLING OPERATION AND
FIRE FIGHTING



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

WJ.FE 300 MODULAR

Weight: KG 210 (420 lb)
Dimensions: 900x560x600 mm (35x24x22 in)
Code: 800040018



LANCE WJ.FE 300 MODULAR EQUIPPED CARTRIDGE

Weight: KG 7,5 (16,5 lb) (without cartridge 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