

COBRA INFORMATION

SAFER FIRE FIGHTING

EFFICIENT FIRE FIGHTING

SAVING ENVIRONMENT

SAFER FIRE FIGHTING

- **The coldcut™ cobra cuts through any material and cools the fire gases from a safe position from the outside**
- **Together with PPV and thermal camera this method can create a safer environment for fire personnel.**

SAFER FIRE FIGHTING

coldcut systems



SAFER FIRE FIGHTING

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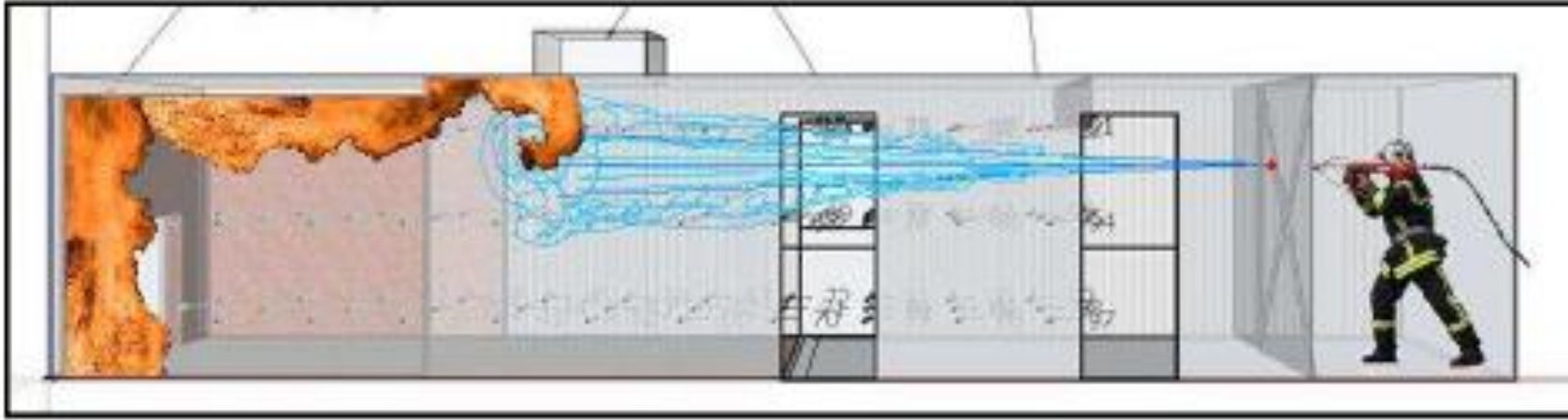
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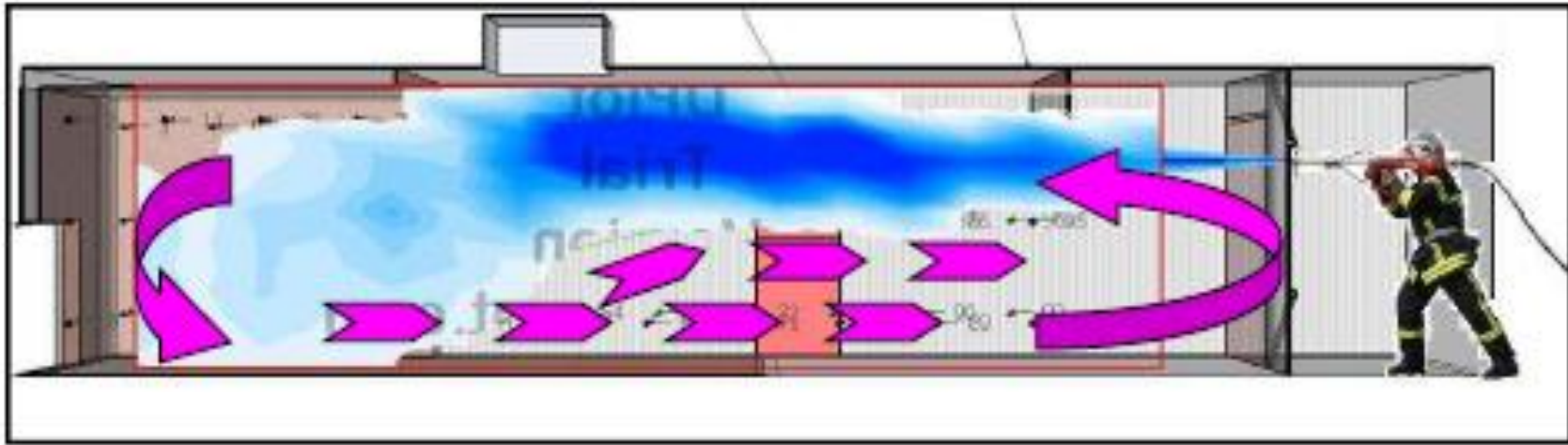
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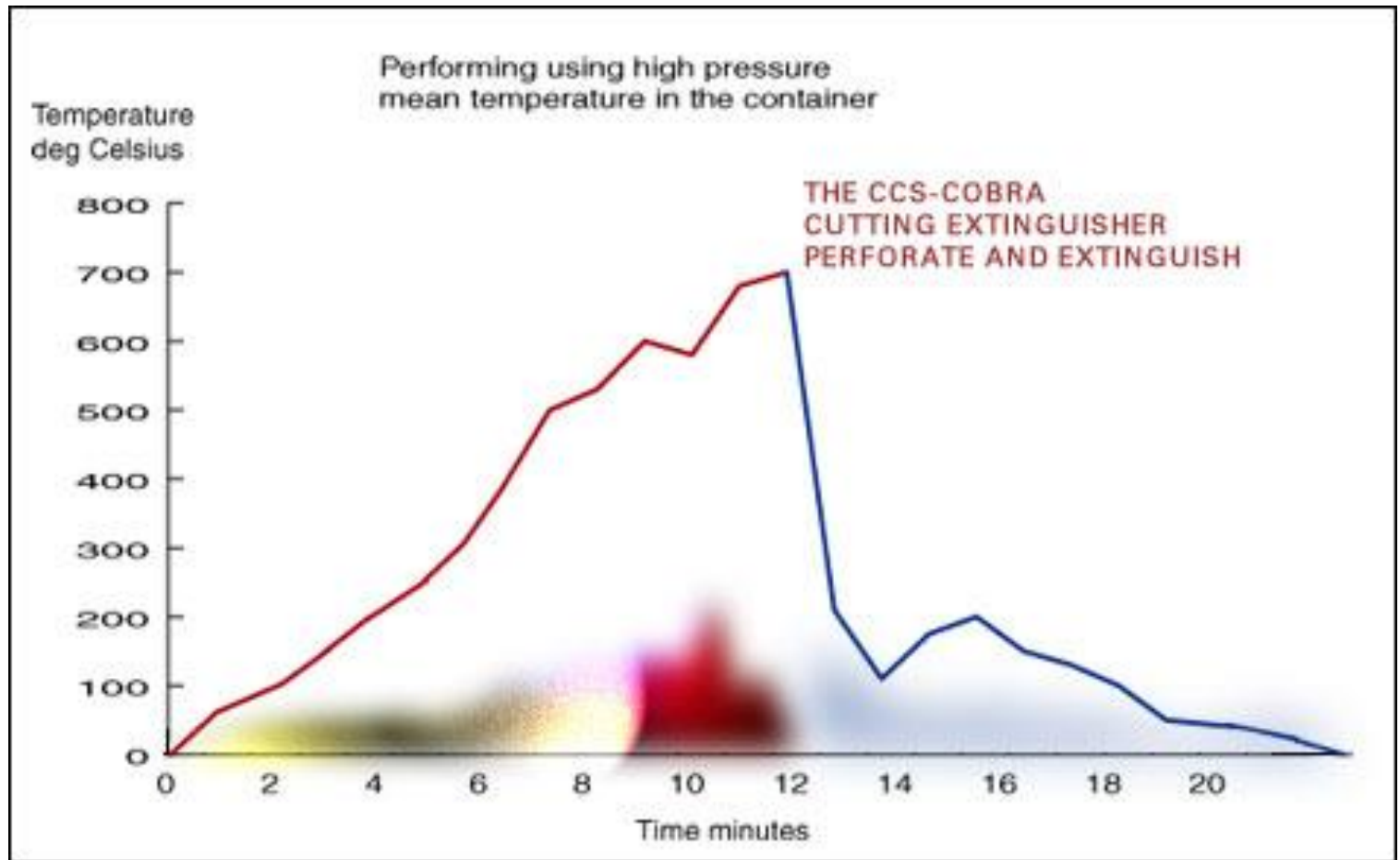
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EFFICIENT FIRE FIGHTING

- **Very small droplets behaving more like an aerosol than traditional droplets from other fire fighting equipment.**
- **Most of the water vaporize when it hits hot gases or hot surfaces.**
- **Very efficient cooling effect that takes down the temperature and inert the fire gases.**

EFFICIENT FIRE FIGHTING



EFFICIENT FIRE FIGHTING

coldcut  cobra

A new dimension of Fire Fighting



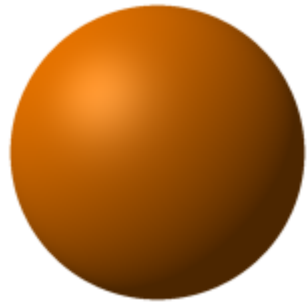
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EFFICIENT FIRE FIGHTING

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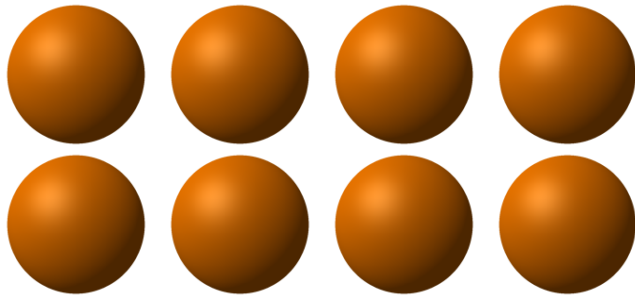
Waterdroplets



Traditional nozzle (10-12 bar)

Y=1,54

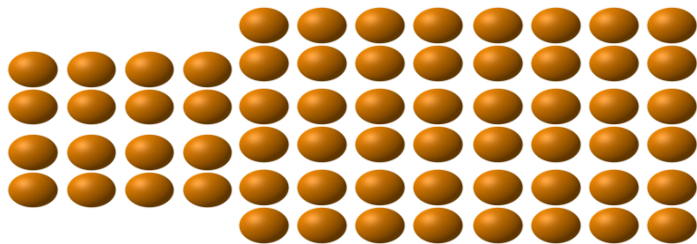
$(Y=4 \times 3.14 \times 0,35^2)$



High pressure (30-40 bar)

Y=3,01

$(Y=4 \times 3.14 \times 0,175^2)$



Cobra (300 bar)

Y=6,14

$(Y=4 \times 3.14 \times 0,0875^2)$

SAVING ENVIRONMENT

- Fire destroys extensive economic values every year. Over 50% of these costs in large fires derive from water damages



SAVING ENVIRONMENT

- The coldcut™ cobra uses 30-60 liters of water per minute and most of the mist evaporates.



DEMOFILM BBC

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FIRE IN THE BASEMENT

VENTILATED FIRE

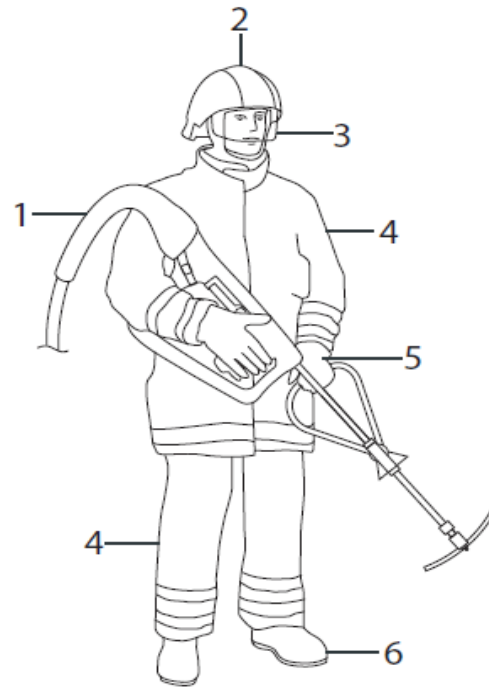


EFFICIENT FIRE FIGHTING

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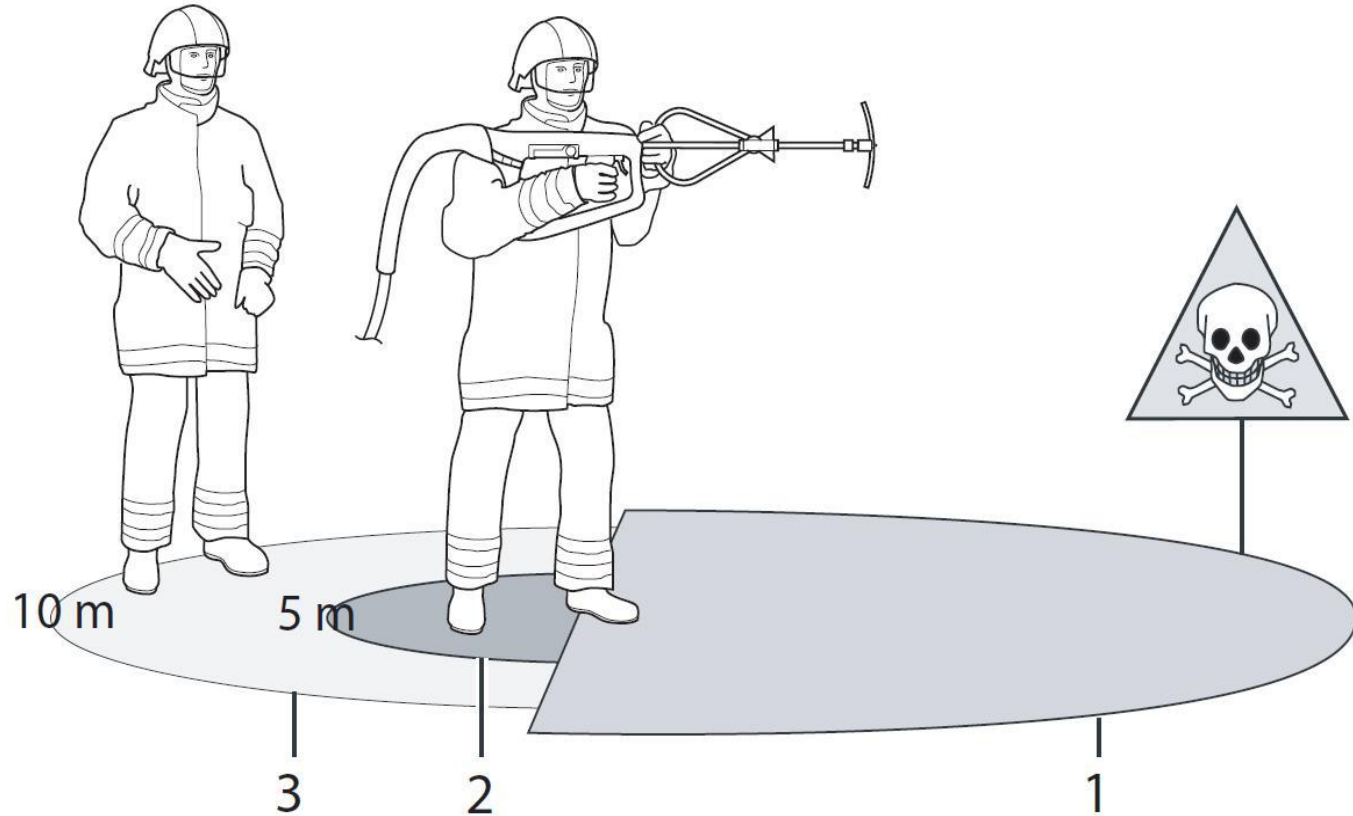


SAFETY AND SECURITY



- 1. Protective cover
- 2. Helmet
- 3. Visor or safety goggles
- 4. Protection suit
- 5. Protection gloves
- 6. Protection boots

SAFETY AND SECURITY



1. Make sure no people are in the front-safety zone.
2. 5 meter distance to persons with protective gear.
3. 10 meter distance to a to unprotected person.

SAFETY AND SECURITY

- In certain situations the firefighter how handles the lance can be supported by a assisting firefighter.
- The assisting person must always stay behind the lance- man. He must be trained and wear protective gear.



coldcut™ academy

Training program

- **Basic training** **2 days**
- **Tactical training: *officers course*** **1 day**
- **Instructor course: *train the trainer*** **3 (5) days**
- **Service course** **1 day**



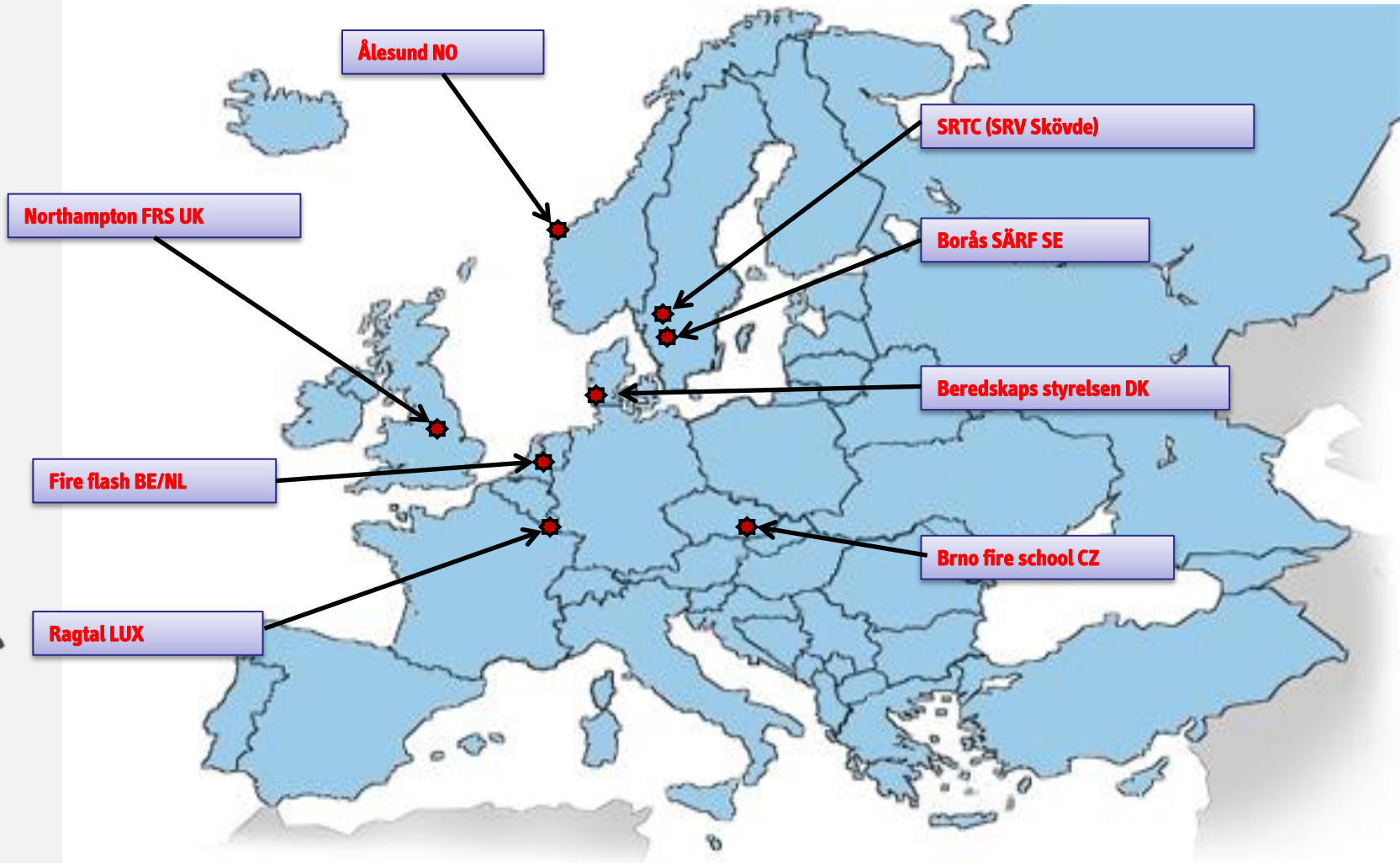
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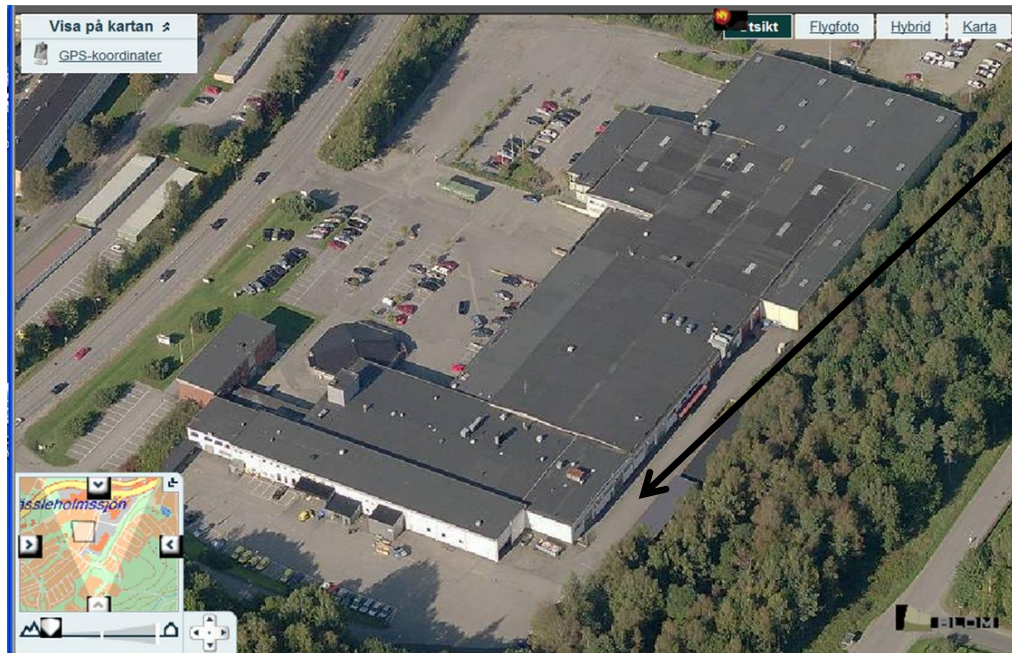
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Warehouse fire in Borås 2008

- Totally 10 000 m²
- Sectioned in smaller parts
- 15 different companies



Starting point

Warehouse fire in Borås 2008

- Arson fire in cars outside warehouse



Warehouse fire in Borås 2008

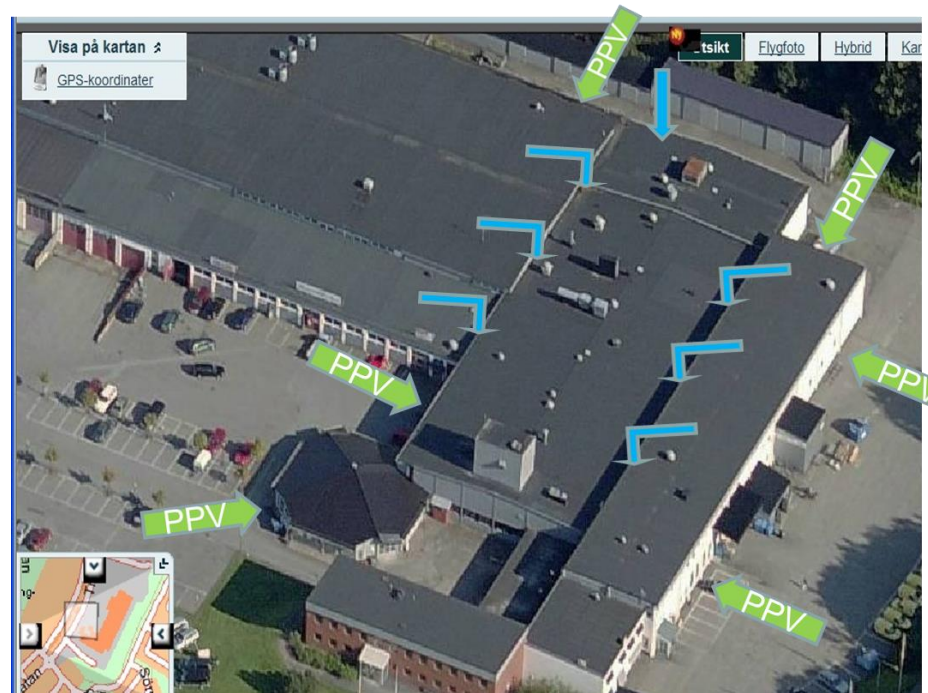
- Fire spread in to the building
- Early decision: No inside fire fighting.
Stop the fire spread into other parts of the building.



Warehouse fire in Borås 2008

Chosen methods

- PPV
- Cobra
- IR- technique
- Aerial platforms



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Warehouse fire in Borås 2008

- 11 PPV fans was used
- 6 Cobra was used
- 1 200 m² was totally burnt out
- 2 500 m² was smoke damage



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Warehouse fire in Borås 2008



Warehouse fire in Borås 2008

- Estimated savings according to insurance company
10 million €





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