

Fire in a motor cycle shop - Ulricehamn

Coldcutsystems AB. Based on 2010 MSB report 'Cutting Extinguishing Concept', SERF & SP



The fire was in the motorcycle shop in front but it threatened the much larger building to the right.

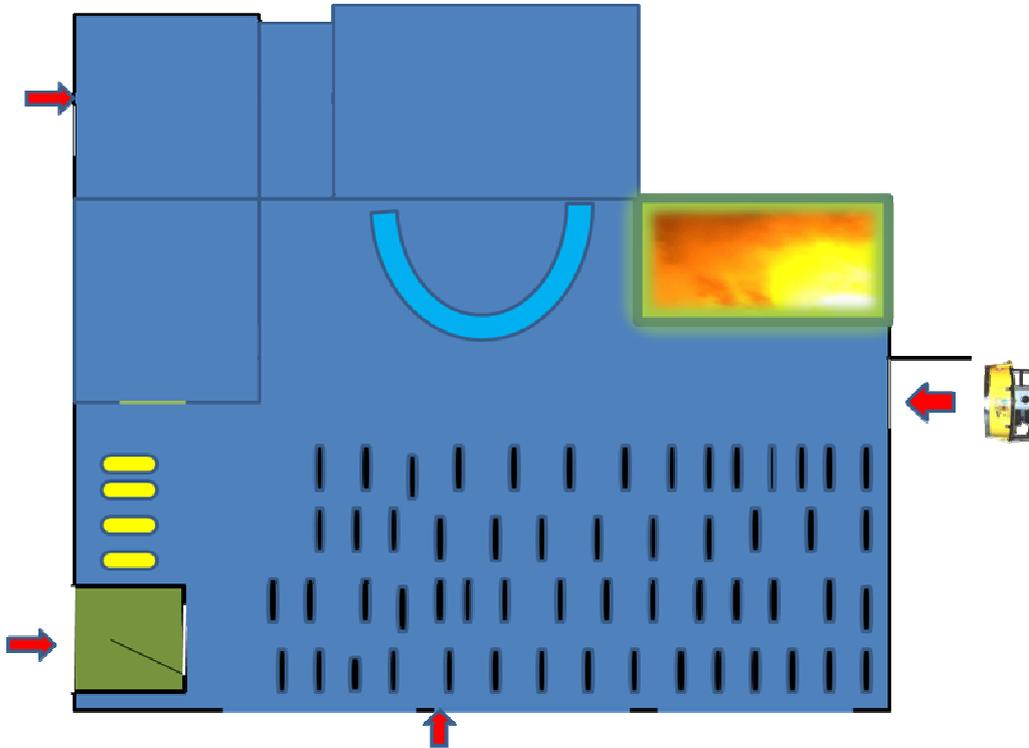
A fire is found early in the morning in a motor cycle shop which is directly connected to a much larger shop selling building materials. The windows in the MC shop are all black from smoke and the metal sheeting on the wall of the adjacent building is also blackened by fire gases. The first fire unit arrives seven minutes after the alarm with a Cobra™ cutting extinguisher, an IR camera and a PPV fan. A skylift and tanker soon also arrives. There is obviously a big risk of the fire spreading to the much larger shop next door.

There is no indication of any people inside the MC shop but it is full of motor cycles weighing up to 250 kg each. As the temperature in the fire room is very high and visibility is limited it is decided to cool down the fire gases from the outside using the Cobra™ cutting extinguisher rather than mounting a risky BA attack. The Cobra™ is first applied from the front side and then subsequently on the gable and finally through the blue double doors on the backside of the shop. Meanwhile measures are also taken to secure the inside of the bigger building material shop but the fire has not spread to here yet.

When the fire gases have been cooled down the door is opened to the shop and a PPV fan in combination with the Cobra™ is used to improve visibility inside by blowing out steam and fire gases. The Cobra™ is then turned off as the BA-team is ordered in to take care of remaining embers in the roof and elsewhere. This is 25 minutes after the operation started.

Another unit with a Cobra™ cutting extinguisher arrives on the scene and it starts to clear the roof above the shop. They are supported by an IR-camera and also have foam in the Cobra™ to prevent re-ignition. The complete extinguishing operation takes 70 minutes but the object will be monitored for a bit longer.

This drawing shows the fire-affected compartment, which is about 15 x 8 meters, at the motor cycle shop. The red arrows indicate where the cutting extinguisher was deployed. The short black lines are the motorcycles.



Experiences:

The fire in the motor cycle shop in Ulricehamn demonstrates how the cutting extinguisher can be used in conjunction with PPV high pressure ventilation to alter the conditions in the fire compartment. PPV ventilation can be used by itself but in combination with the cutting extinguisher it makes subsequent indoor firefighting considerably safer as the cutting extinguisher drastically lower the temperature of the fire gases. This incident also demonstrates how an IR camera can be used to efficiently locate where to apply the cutting extinguisher. This fire is a good example for illustrating the benefits that can be obtained from combining these three methods and tools to achieve efficient and safe firefighting before a BA team enters a fire compartment.