

Primetech expands options for rapid intervention fleets - MultiPod with new MistTech collision-drop misting system

Primetech has announced the groundbreaking new MistTech collision-drop misting system, expanding the options for rapid intervention fleet vehicles using MultiPod. The MistTech system, using unique collision-drop technology, provides a more consistent droplet size for higher efficiency mist. Together with the Ultra Compact Cobra system, it is one of two lightweight fire fighting solutions for use in the Primetech MultiPod on utility style vehicles



At a recent demonstration, observers were impressed by a live demonstration of the MistTech system. The rapid fire suppression effects were demonstrated on both a car fire and a domestic structural fire scenario, using lower than normal levels of water

Primetech, a leading pioneer of technologies supporting fire and rescue services, is excited to introduce the new MistTech range, specially designed for rapid intervention vehicles.

What makes the MistTech system unique is the way that it uses the patented collision-drop system to produce fine mist at the branch or nozzle head. This method gives firefighters the advantage of a cooler working area close to a fire and improved fire suppression capabilities. This is achieved by two jets of water coming out of the branch or nozzle head and colliding at carefully calibrated angles resulting in a highly efficient mist droplet fire fighting capability.

At a recent demonstration at a fire and rescue service training centre, observers were impressed by a live demonstration of the MistTech system. The rapid fire suppression effects were demonstrated on both a car fire and a domestic structural fire scenario, using lower than normal levels of water. This is due to the more effective fire fighting power of mist.

Primetech's Sales Manager, former firefighter Wayne Porter, explains, "Unlike other systems, MistTech is designed with numerous pairs of holes, which are strategically located around the end of the branch or lance. These holes are

designed to create two streams of water at low pressure, which collide with each other and break apart. Water droplets are created, at that point.

"This technology uses low pressure, but acts in a high-pressure capacity. The angles and size of these holes are very important, as it is this design that produces the unique misting quality."

Highly versatile

The MistTech system is highly versatile and can be adjusted according to the type of misting environment required for the specific fire scenario being encountered. It will deliver water as droplets at a maximum flow of up to 130/140 litres per minute (in jet mode), but the system

will also operate at much lower pressures if required. The larger the droplets, the bigger the surface area and distance covered; the smaller they are, the greater the surface area cooling effect, but with a lesser 'reach', thus taking the heat out of the fire more quickly. In addition, the water droplet mist forms directly at the end of the branch, which provides a heat protection barrier for the firefighter against the fire.

The branch head has dual functionality in that it can operate in a traditional manner, by producing a fire fighting jet, or produce the revolutionary misting effect by a twist of the branch.

The system has been designed so that the QR Quick Release version of the MistTech branch allows firefighters to convert quickly and easily between the branch spray option and the lance option, depending on operational requirements.

With a swift bayonet release movement, misting system branches can be simply swapped at the end, meaning that with one body on the vehicle, the system can operate several different pieces of equipment, used



The MistTech branch head has dual functionality in that it can operate in a traditional manner by producing a fire fighting jet, or produce the revolutionary misting effect by a twist of the branch



With a swift bayonet release movement, MistTech misting system branches can be simply swapped at the handle, meaning that with one body on the vehicle, the system can operate several different pieces of equipment, used at different stages during fire fighting



The MistTech system is one of two highly effective lightweight fire fighting solutions for use in the Primetech MultiPod on utility-style vehicles, delivering rapid intervention capability

at different stages during fire fighting. In addition, there is an option for an attachment to deal with chimney fires and fires within confined spaces.

The equipment can use both water and foam. Misting/CAFS fire fighting equipment can operate as a misting system only, producing high efficiency water mist, or switched over to foam, if required, which produces CAFS. With the MistTech range of fire fighting systems, the water turns to steam, therefore there is less entrained air and the user has greater thermal protection. There is minimal collateral damage and no flooding risk. In short, misting is a high efficiency method for combating fires that uses minimum amounts of water and foam to deliver positive fire fighting outcomes.

Primetech believes that in many circumstances this is the way forward in the future of fire fighting and is a sound solution where water supply is limited, such as in remote areas of the UK.

Fire fighting effectiveness

In practical terms, the move to faster, more varied fleets of emergency response vehicles means that different types of vehicles will be sourced for different types of incidents. Primetech can offer a solution to utilise dormant vehicles more precisely, effectively and in a more versatile manner. These can be deployed to different types of fires and for other, more collaborative, multi-agency roles.

Even when larger appliances are required, rapid intervention vehicles can travel faster - sometimes getting past traffic congestion along the way - and arrive earlier to start tackling fires in advance of the arrival of the larger vehicles in the fleet. Speed of attack, initial fire

fighting power and agility are the keys to successful fire fighting.

Fire fighting effectiveness is a prime consideration with this new approach to rapid intervention response. The equipment carried on rapid response vehicles needs to be capable of delivering the kind of high-powered fire suppression capability, which can have a decisive early effect, delivering the initial 'stop-the-clock' impact required.

Primetech has two proven solutions for portable fire fighting - MistTech, its lower cost option, is a high spec Misting System, or the Ultra Compact version of the Cold Cut Cobra lance-based cutting system. Both systems can be installed in the latest upgraded version of the Primetech MultiPod.

'What makes the MistTech system unique is the way that it uses the patented collision-drop system to produce fine mist at the branch or nozzle head. This method gives firefighters the advantage of a cooler working area close to a fire, and improved fire suppression capabilities.'

MultiPod

Primetech's MultiPod system is a unique lightweight demountable body system for use on utility vehicles for which no vehicle modifications are required. It can be easily and quickly mounted on any standard utility vehicle, giving fire and

rescue services a lower cost option for deploying to incidents quickly. MultiPod is capable of being carried on sub 3.5 tonne utility vehicles, such as the Ford Ranger, Isuzu DMAX and Toyota HiLux. However, MistTech or Ultra Compact Cobra can also be supplied without the MultiPod.

The Ultra Compact Cobra system is an ultra-lightweight version of the popular and proven Cobra lance-based fire fighting cutting and extinguishing system specially developed by Primetech in collaboration with Cold Cut Systems. It provides fire and rescue services with a powerful new rapid intervention capability for suppressing fires quickly and effectively. The Ultra Compact Cobra is an affordable option for smaller vehicles, rather than the conventional Cobra, and can be enhanced with the addition of a multi-purpose misting nozzle if required.

MistTech misting system together with CAFS (Compressed Air Foam System) provides misting and foam-based fire fighting capability where the full power of the Cold Cut Cobra high pressure/aggregate lance-based system is not required.

Benefits

In both cases, the power of water mist delivers the fire suppressing power. It is well documented that water mist is the only method in the world to extinguish most classes of fire using only water and no additives, ensuring a truly environmentally-friendly solution.

The system has been generating high levels of interest because it supports the drive for lighter, faster, more flexible approaches and fleets, and increased levels of collaboration between the emergency services. It also helps to improve public safety in an era of tighter budgets, and supports the drive for diversified, expanded and more effective use of service resources.

The MultiPod can also be used to carry the MultiNet Comms family of modular, integrated incident ground communications solutions housed in a series of portable, ruggedised cases. MultiNet, using both mains and battery power, delivers Ka-band mobile satellite broadband plus video, voice and internet access over a COFDM MESH WiFi network along with 3G/4G, and private cellular networks and interoperable communications, plus live-streamed body-worn, tripod and drone imagery. MultiNet Comms supports enhanced situational awareness and improved multi-agency interoperability.

To provide fire and rescue services with reassurance, Primetech is ISO 9001 certified, therefore quality assurance is guaranteed.

www.primetech.co.uk

Authors: Henry Walker and Wayne Porter. Henry Walker is a Director of Primetech UK Ltd and former firefighter Wayne Porter is UK/Europe Sales Manager for Primetech.