

## DISINFECTION SYSTEM SERIES

# THE DS SERIES

The HNE Disinfection System (= DS) series consists of four high-performance systems. Each one has a different field of use, but all share the same high HNE quality!

Carbon DS A portable device for disinfection with 13 litres capacity.

Carbon DS Light A portable device for disinfection with 6 litres capacity.

**MFU DS** A motorized foam unit for disinfection for installation on vehicles.

**Steam DS** A hot steam disinfection system with up to 120°C steam temperature.



- higher efficiency, due to smaller droplet size
- $\cdot$  the high pressure of our systems increases physical efficiency
- high physical impact -> deeper penetration of surfaces
- our systems are easily refillable no tools necessary
- high-quality materials make them highly resistant against corrosion
- option for variable output, making it adaptable for any situation
- $\cdot$  large area of coverage, more than 10 m<sup>2</sup> per litre

# CARBON DS

Aq2 ST3

3N

## PORTABLE DISINFECTION SYSTEM

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# PORTABLE DISINFECTION

The Carbon DS is a portable high-performance disinfection system that can be used in multiple areas.

#### DISINFECTION

The **Carbon DS** is a portable device for disinfection and decontamination. Its high capacity of 13 litres and low weight due to its carbon body make it ideal for mobile use.

While large, motorized systems are good for stationary use, the **Carbon DS** is the ideal device for inside and hard-to-reach areas.

The high working pressure of the **Carbon DS** helps to reach further and to clean deeper than comparable devices. 38 bar are unprecedented in a portable device like this!

The system comes with a carrying handle and equipped with a backpack.

With the swivel gun you can switch between a broad spray nozzle and a more focused spray nozzle for maximum versatility!





# PERFORMANCE

#### **HIGH PRESSURE**

Pressure vessels made of CFRP (carbon fiber reinforced polymer) are much lighter than metal vessels!

#### LOW WEIGHT

Our portable systems show high performance at a low weight. In spite of its 13 litres of volume the **Carbon DS** weighs only 25 kg when filled and ready to use!

With 12 kg the Carbon DS Light is even lighter than that!

#### HIGH STABILITY

Besides their high stability, carbon vessels – unlike traditional materials – also have the advantage of resisting corrosion!

The carbon vessels have an inner coating so you can use a large variety of disinfection chemicals with it. For suggestions and advice please contact us.

#### QUICK REFILLING

The system can be refilled in two minutes without any tools! Just open the top, refill it with water, foam agent or other chemicals and close it back up. Add a new compressed air bottle if needed and you are ready to go again.



### CARBON DS Light

## PORTABLE DISINFECTION SYSTEM

# LOW WEIGHT HIGH POWER

The Carbon DS Light is a portable high-performance disinfection system. It is a permanent pressure device.

#### **DS** Light

The **Carbon DS Light** is a portable device for disinfection and decontamination. It is a similar system to the **Carbon DS**, but is even lighter and can be refilled in a couple of minutes.

Due to its light carbon vessel, no need for a compressed air bottle while in use and its capacity of six litres it weighs only 12 kg! Therefore it is extremely light and easy to carry, even over a longer period of time.

With a single 300 bar, 6.8 litres standard air cylinder you can recharge the system over 15 times! Since it is a permanent pressure system, you reload it before use with a refilling adapter.

The system comes equipped with a backpack.

With the swivel gun you can switch between a broad spray nozzle and a more focused spray nozzle for maximum versatility!





### **TECHNICAL SPECIFICATIONS**

TECHNICAL SPECS	Carbon DS	Carbon DS Light
Filling Volume	13 Litres	6 Litres
Propellant	Air, 300 bar/ 2 l	Compressed Air
Working Pressure	38 bar, constantly	38 bar, pre-filled
Throwing Range (water)	up to 12 m	up to 12 m
Duration Nozzle 1	app. 1:10 min	app. 0:40 min
Duration Nozzle 2	app. 5:00 min	app. 2:30 min
Range of Temperature*	–25°C to 60°C	–25°C to 60°C
Distance to Electricity	min. 2 m / max. 1000 V	min. 2 m / max. 1000 V
Weight (empty)	app. 12,5 kg **	app. 6 kg
Weight (filled)	app. 25,5 kg **	app. 12 kg
Height	670 mm	670 mm
Diameter	210 mm	180 mm
* with frost-proof foam agent or chemicals	** incl. swivel gun, compressed air bottle and handle; no backpack	

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## MOTORIZED DISINFECTION SYSTEM

### MOTORIZED DISINFECTION

The MFU DS is a motorized high-performance decon and disinfection system for vehicles like pick-up trucks or small transporters.

With the petrol engine, the pump reaches an enormous throwing range and a very high flow rate.

You can switch between two different chemicals that are stored in two separate reservoirs inside the **MFU DS**. Switching merely takes a second by pushing one button.

You can vary the admixture of foams and chemicals with a stepless knob up to 6%.

With the Disinfection System **MFU DS** you can create a large area foam blanket to cover potentially hazardous or infectious surfaces and objects.

The system is also available with an extended hose on an electric or manual reel.

It is designed for operation by a single person.



MFU DS in custom colour grey

The MFU DS is a highly flexible system. It can be used for almost any disinfection or decontamination scenario, depending on the chemicals you use with it.

#### PHYSICAL

Its high-pressure jet with up to 50 bar of working pressure can remove hazardous material by force

#### **CHEMICAL**

When pure water is not sufficient, you can use different chemicals for disinfection and decontamination.





MFU DS used by Korean Fire Department





The Decon Systems for the Korean Fire Department were a result of a cooperation with OWR.

### **TECHNICAL SPECIFICATIONS**

TECHNICAL SPECS	MFU DS
Throwing Distance	up to 32 m
Foaming Distance	up to 10 m
Flow Rate	40–130 l/min
Max. Performance (Pump)	170 l/min at 50 bar
Working Pressure	50 bar
Gasoline Engine	2-cylinder / 4-stroke, 627 ccm
Engine Power	23 PS (hp) at 3600 r/min
Gas Tank Volume	7,5
Chemical Tank Volume	2 x 25 l
Max. Suction Height	app. 2,5 m
Range of Temperature	–25°C to 50°C
Weight (empty)	app. 240 kg
Height	68 cm
Width	120 cm
Length	103 cm
Hose Length	30 m

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### BARRACUDA DS



## MOTORIZED DISINFECTION SYSTEM

# MOTORIZED DISINFECTION

The Barracuda DS is a motorized system for vehicles. It can be used for firefighting, disinfection and as a cleaning device.

The **Barracuda DS** is a versatile system that can use both water and chemicals. Extinguishing agents, disinfectants and detergents are all usable. Switching between pure water and a water-chemical mix only takes one second.

The admixture of chemicals and concentrates can be adjusted with a stepless knob.

When using the **Barracuda DS** for disinfection, you can create large amounts of foam to cover potentially infectious or hazardous areas and objects.

The system can create a focused high-pressure jet or a spray jet for covering larger areas, offering more flexibility in every situation.

The controls are designed for easy use by a single person.



Barracuda DS used for extinguishing a carfire

The greatest strength of the **Barracuda DS** is its versatility. You can use it for almost any disinfection scenario, as a cleaning device or for firefighting, depending on the agent you use it with.

#### FIREFIGHTING

When used with foam agent, the system shows its full potential. Up to 40 bar of working pressure and the possibility to use both pure water or CAFS foam make it a powerful firefighting device!

#### DISINFECTION

In cases where pure water does not suffice for removing hazardous materials, you can use different disinfectants and concentrates. Feel free to contact HNE for any questions or recommendations of disinfectants.

#### CLEANING

The **Barracuda DS** can also be used as a cleaning device for large objects or areas. Its high pressure and the option to use different cleaning agents and detergents offer a wide field of use!



Spray mode of the Barracuda DS

Compact installation on a trailer behind a quad

### **TECHNICAL SPECIFICATIONS**

TECHNICAL SPECS	BARRACUDA DS
Range of Action	30 m Hose
CAFS Propellant	Air, 300 bar/ 6,8 l
Performance (Pump)	50 l/min at 40 bar
Range (Water)	up to 19 m
Range (CAFS)	up to 15 m
Suction Height	app. 2 m
Output (Water)	app. 48 l/min
Output (HiCAFS)	up to 300 l/min
Foam Tank Volume	10
Range of Temperature*	-25°C to 60°C
Water-to-Foam Ratio	up to 1:12
Starter	Electrical or Starter Rope
Weight (filled)	app. 120 kg
Starter Battery	12 V maintenance-free
Fuel Tank Volume	4.1
Length/Width/Height	980/565/590 mm

\* with frost-proof foam agent

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### HEATED STEAM DISINFECTION SYSTEM

The **Steam DS** is a high-pressure unit for decontamination and disinfection using cold or hot water.

Being safe and simple to use, the **Steam DS** is the perfect decontamination and disinfection tool.

The system is equipped with a hot-water control unit with an automatic switch-off and an electric thermostat.

The high-power engine comes with built-in dry run protection and fire protection for maximum safety.

You can use various chemicals with the system. Please note that some chemicals can be flammable when heated!

TECHNICAL SPECS		Steam DS
Operating Pressure		200 bar
Flow Rate		18 l/min
Jet Temperature		80°C
Operating Pressur	e (Superheated Steam)	40 bar
Flow Rate	(Superheated Steam)	8 l/min
Jet Temperature	(Superheated Steam)	app. 120°C
Weight		275 kg
Dimension		1400 x 700 x 1100 mm
Engine Type		Diesel Engine with E-Start
Engine Power		6,6 kW (9 hp)

The unit comes with:



### **DISINFECTION CHEMICALS**

HNE offers both hand sanitizers for disinfection forces and disinfectant to fill the disinfection systems with!

#### RECOMMENDATION

For our portable disinfection systems, we recommend active substances for disinfection, which are based on peroxyacetic acid and / or hydrogen peroxide and can be added to water or water-based cleaning fluid. Foam additives (anionic or non-ionic surfactants) can also be advantageous in special applications because they enhance the wetting of surface.

Additives with so-called "active oxygen" are particularly suitable as disinfectants for killing viruses and bacteria.

Please, note that mixtures of acids and alkaline (alkaline solutions) are not stable over the long term (owing to neutralization reaction) and should be used immediately before application. The guidelines specified by the manufacturer when preparing the mixture must be followed strictly!

#### ATTENTION

• Alcohols such as isopropanol (2-propanol), ethanol, propanol, methanol and others are also good disinfectants in high concentrations, but due to the formation of explosive aerosols when spraying large areas, they must not be contained in higher concentrations in disinfectant solutions.

· Do not spray acids in concentrated or diluted form

• Only use additives from corresponding disinfectant and cleaning agent manufacturers for the respective specified applications.

• Always wear the correct protective equipment (glasses, head and face protection, protective suit and shoes) when using the substances!

For further information on what chemicals to use, please contact us!

Don't use any chemicals you are not certain about!

#### **IMPORTANT NOTICE:**

Do not use hydrochloric acid, nitric acid, formic acid, etc., due to following hazards!

Such acids can destroy HNE devices and pose a big threat to the user and the environment! Thus, they are not suitable for disinfection!





For further information and inquiries, please contact us:

info@hne.ag

or

+49 (0)821 / 720 47-70



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