

OERTZEN® HDL

The Compact Revolution

Rapid fire extinguishing by atomisation of water

The Principle

The high-pressure extinguishing process is created by atomising water. Minute water droplets are generated, resulting in an increased water surface. The cooling effect of the water is very efficient in removing the energy from the fire (energy extraction), whilst the expansion of steam starves the fire of oxygen.

Manner of Work

The water flow is pressurised to 250 bar (3600 psi) ensuring that the water emerges from the atomisation nozzle at high velocity. The moist mist even reaches difficult areas of a fire, such as roof timbers, wooden wall panels or intermediate ceilings.

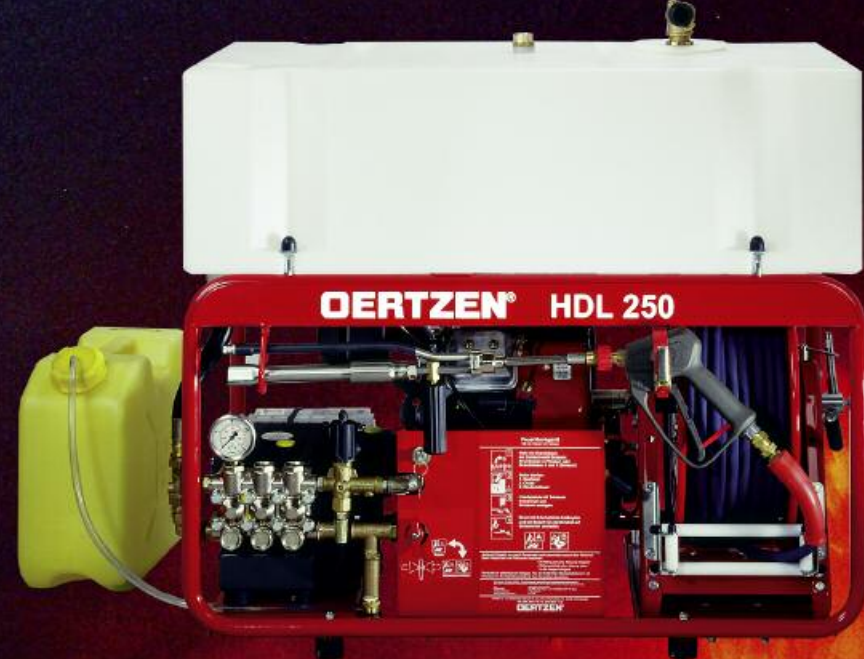
The fire rapidly loses considerable amounts of energy by evaporation which reduces the oxygen level below critical limits, resulting in suffocation of the already weakened fire. The synergetic effect of these two processes creates an incredibly effective extinguishing action.

Applications

The high-pressure fire extinguisher HDL is suitable for both class A and class B fires. For class A (burning solids) the traditional extinguishing agent is normally water. It is possible to quickly and easily switch the rollover valve of the gun from water to foam which is most suitable for extinguishing class B fires (burning liquids). The foam will also prevent the re-ignition of burning solids.

Conclusions

Fire Brigade statistics show that more than 80% of all fires are small and medium size fires. These fires can successfully and quickly be extinguished with the HDL system, allowing faster access to the fire and avoiding water damage.



HDL 250 installation unit with 125 liter tank
Approval No. P3-1/01

HDL 250 mobile with chassis, foam agent container holder and 125 liter tank



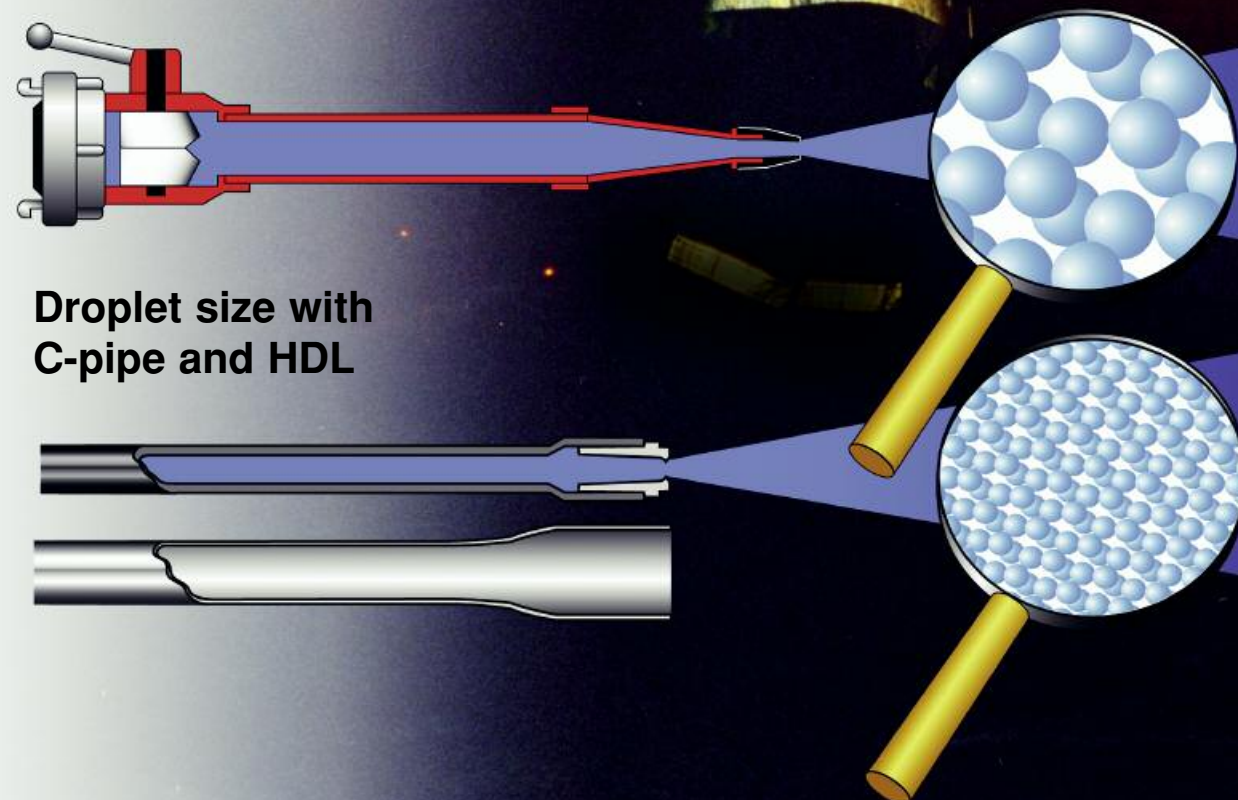
Extinguishing Capacity

The extinguishing capacity of the HDL unit is most impressive in its minimal use of water. This method of extinguishing a fire is to cool it down and to starve it of oxygen rather than drowning it by water. The site therefore remains completely dry without any contaminated water. Hundreds of practical experiments, under realistic conditions, and thousands of fires extinguished have achieved the following economies in water consumption:

Cars : fully ignited including tyres	15-30 l
Cars : early stages of burning	9 l
Tyres : burning up to 50 tyres (per tyre)	0,5-1 l
Pallets : burning (10 pallets)	5-20 l
Rooms : burning	10-50 l



HDL 250 as compact installation unit installed in a small car with 125 liter tank in front of it.



Droplet size with C-pipe and HDL

HDL 170 universal unit with 100 liter tank for fixed installation
Approval No. P3-3/02



TECHNICAL DATA	HDL 170	HDL 200	HDL 250	HDL 250-32
Dimensions (LxWxH mm)	760 x 570 x 840	760 x 670 x 840/520	980 x 560 x 960	980 x 580 x 560
Weight	94 kg with tank	99/82 kg w./wo. tank	156 kg with tank	148 kg without tank
Drive (4 stroke petrol engine)	1-cyl. 9.6 kW	1-cyl. 9.6 kW	2-cyl. 13.2 kW	2-cyl. 13.2 kW
Start	recoil rope starter*	recoil rope starter*	electrically, recoil rope	electrically, recoil rope
High pressure plunger pump	3-cyl. 21 l/min.	3-cyl. 22 l/min.	3-cyl. 23 l/min.	3-cyl. 32 l/min.
Extinguishing pressure max.	170 bar	200 bar	250 bar	200 bar
HP extinguishing hose	60 m (300 bar)	60 m (300 bar)	60 m (500 bar)**	50 m (500 bar)**
Water tank	100 l	100 l	125 l	125 l
Foam agent injection	serial	serial	serial	serial
Extinguishing pistol	Rapid attack pistol with DUPLEX Attachment for spray and low expansion foam			
	* optional electric start			
	** optional 100 m hp hose			
SPECIAL ACCESSORIES:	TRIPLEX Attachment for spray, throw and low expansion foam, Medium Expansion Attachment for 40 - 100 fold foam expansion rate, tank kits 175 and 360 l, electric hose reel drive for HDL 250			
SPECIAL DRIVES:	Electric motor (option: explosion proof design), diesel or hydraulic, P.T.O. For more accessories and customized versions of HDL ask for Original Accessories leaflet.			

Amazing Facts

OERTZEN® HDL

The Highlights

- ▶ No set-up time
- ▶ Most effective in reducing the fire's energy by cooling
- ▶ Suffocation of fires by steam generation
- ▶ Extremely fast extinguishing terms
- ▶ Long distance throw
- ▶ Low gun recoil
- ▶ Minimal water consumption – max. 23 l/min.
- ▶ Avoids water damage and spillage of contaminated water
- ▶ Injection of foam agents is possible if required – standard feature
- ▶ Minimum space and weight requirements when installed in vehicles

more standard / special design versions of HDL



HDL 200
Installation unit with tank



HDL 250-32
Hydraulic motor unit



HDL 250-50
P.T.O. unit



HDL 250 D
Special design diesel unit

HDL installations in Multicar, van, pick-up, electromobile, Unimog, standard car, trailer



HDL 250
Fire Brigade Split, Croatia



HDL 250
Fire Brigade Haifa, Israel



HDL 250
Fire Brigade Kastav, Croatia



HDL 250
Plant Fire Brigade
Bad Oldeslohe, Germany



HDL 250
Exercise vehicle
Ammersbek, Germany



HDL 250
Fire Brigade Akersberga
Sweden



HDL 250
Special trailer, UAE



HDL 250
Fire Brigade Mexico
Mexico

OERTZEN FIRE-TEC high pressure fire extinguishing units fit perfect each customer's demand due to their compact modular design.

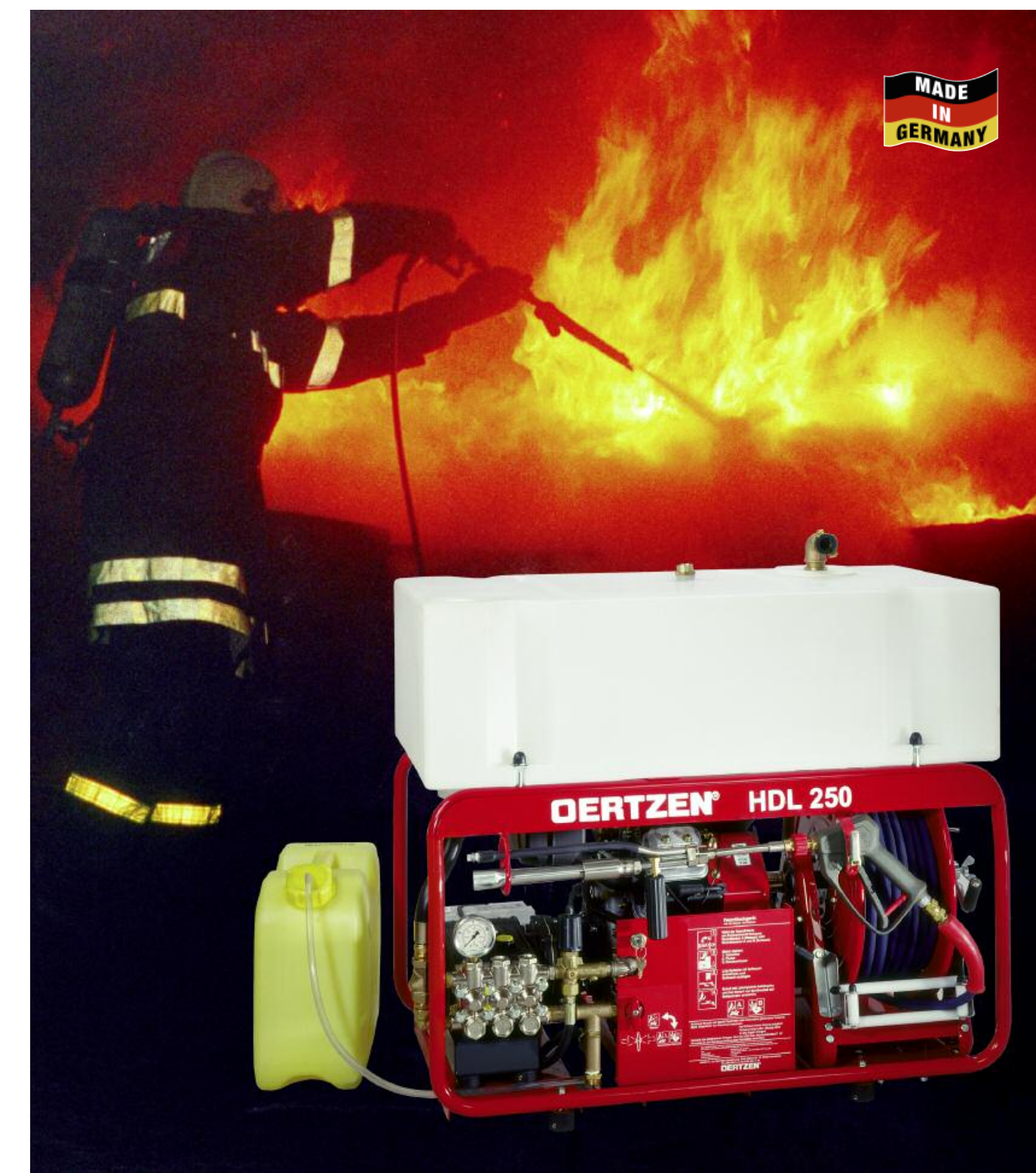
HDL high pressure pumps are fed by own water tanks (125/175/360 l) or by tanks installed in fire fighting vehicles. Hose reels (standard: 60 m, option: 100 m) are HDL integrated, but can as well be mounted separately (upright or overhead).

Automatic hose reel drive (option) makes it easy to coil up extinguishing hose after operation.

Standard drive motor of high pressure pump is 13.2 kW petrol engine (HDL 250) - other kinds of drive motors or bigger hp pumps are available on request (s.o.). All components of HDL are first class quality products, that can save lives in case of emergency.

OERTZEN® FIRE-TEC

High-Pressure Fire Extinguisher HDL Fire Fighting with High-Pressure



Rapid fire extinguishing without set-up time!