



FIREFIGHTING AND RESCUE WITH DYNASET

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FIREFIGHTING AND RESCUE WITH DYNASET

ABOUT THE WEBINAR



FIREFIGHTING AND RESCUE WITH DYNASET

WHOS IS DYNASET?

- Family owned factory in Finland
- 35 years old
- Hydraulic know-how
- Extra compact products for mobile machinery in many industries...

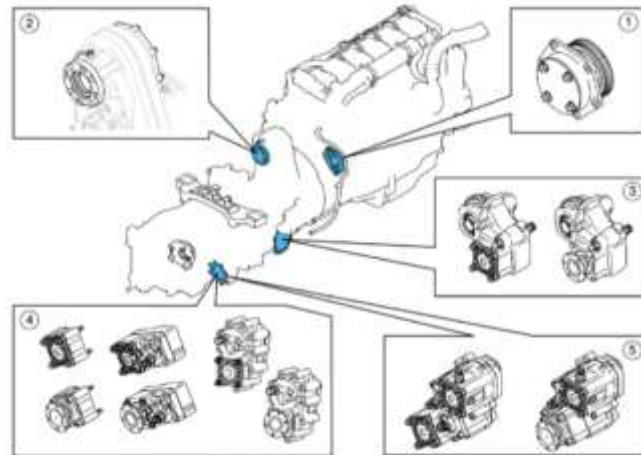
... also in the field of firefighting and rescue!



FIREFIGHTING AND RESCUE WITH DYNASET

MOBILE POWER SOURCE

- Hydraulic power needed
- Power Take Off (PTO) (or Dynaset HPTO)



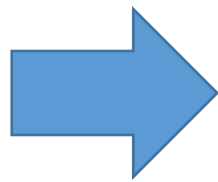
- Operates a hydraulic pump



FIREFIGHTING AND RESCUE WITH DYNASET

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Power source available on Board!!

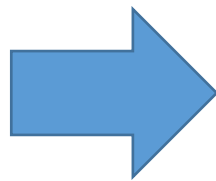


FIREFIGHTING AND RESCUE WITH DYNASET

MOBILE POWER SOURCE

Hydraulic system:

- Hydraulic Pump
- Hydraulic oil tank
- Oil cooler
- Regulating and distribution valve block



Up and running!

FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING OPERATIONS

- HPW WATER PUMPS
- SPECIFIC HPW FIRE TOOLS
- FP PENETRATOR EXTINGUISHER
- HPP FIRE PUMPS
- HCF HIGH FLOW AIR BLOWER
- HSP HIGH FLOW WATER TRANSFER PUMPS
- HKR AIR COMPRESSORS
- HPU Hydraulic Power Units



FIREFIGHTING AND RESCUE WITH DYNASET

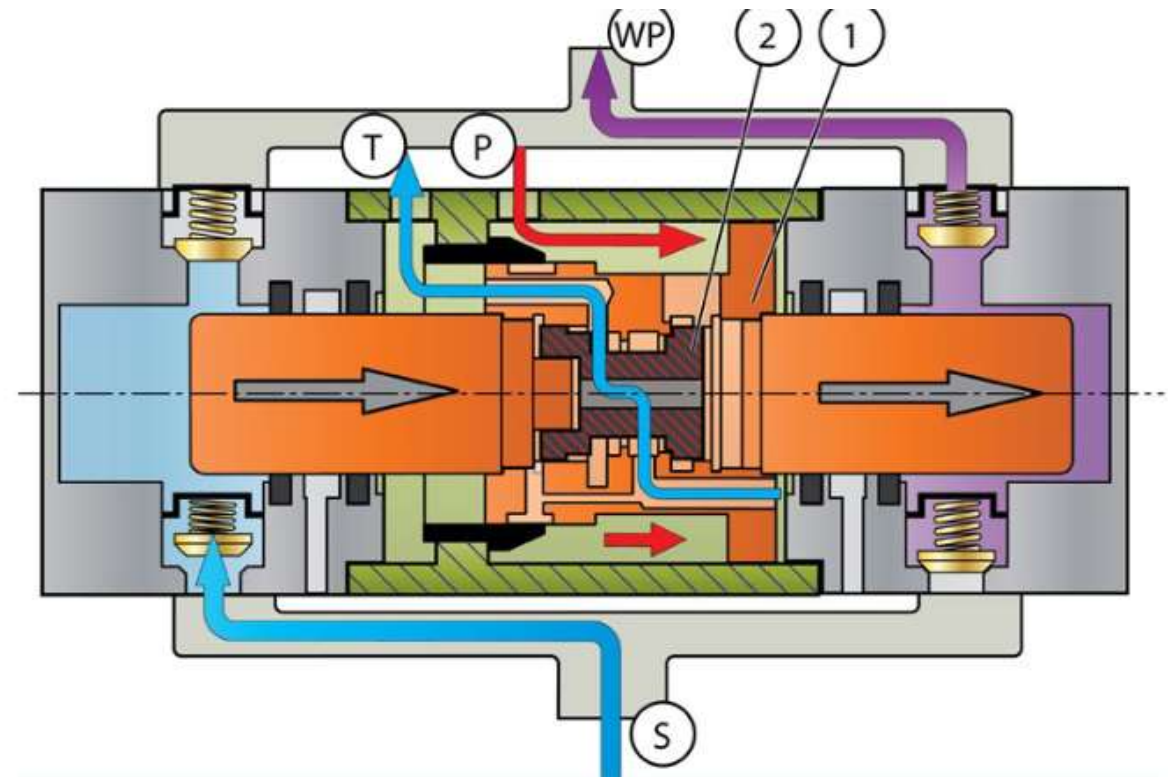
FIREFIGHTING with High Pressure - Lower Flow

- Higher pumping pressure means finer spray pattern
- Finer spray pattern efficiently cools down the premises
- Finer spray pattern allows for lower water flow
- Lower water flow saves water which means
 - Longer firefighting autonomy with the same water tank
 - Less water damage to property
 - ...



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW

- Best power-to-size ratio in the world: extremely compact!
- Maintenance free
- Field serviceable
- Self priming: can run dry
- VERY WIDE RANGE OF MODELS

A DYNASET GEM!



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW

The HPW, high pressure pumping heart being in place, it provides pumping function for the following product: HPW FIRE



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW FIRE set



30 l/min@200 bar

50 l/min@220 bar

90 l/min@80 bar

Very agile in
confined spaces



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW FIRE set

- Direct Jet Function :



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW FIRE set

- Direct Jet Function : See the whole video at Youtube or through the webinar recording!
<https://www.youtube.com/watch?v=CfyIHdNUheU&t=90s>



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW FIRE set

- Wall piercing function:



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW FIRE set

- Wall piercing function: See the whole video at Youtube or through the webinar recording!

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FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW FIRE set

- Water mist fogging function



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW FIRE set

- Water mist fogging function: See the whole video at Youtube or through the webinar recording!
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FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW FIRE set

- Foam gun function



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING/ HPW FIRE set

- Foaming gun
(non CAF): See the whole video at
Youtube or through the webinar
recording!

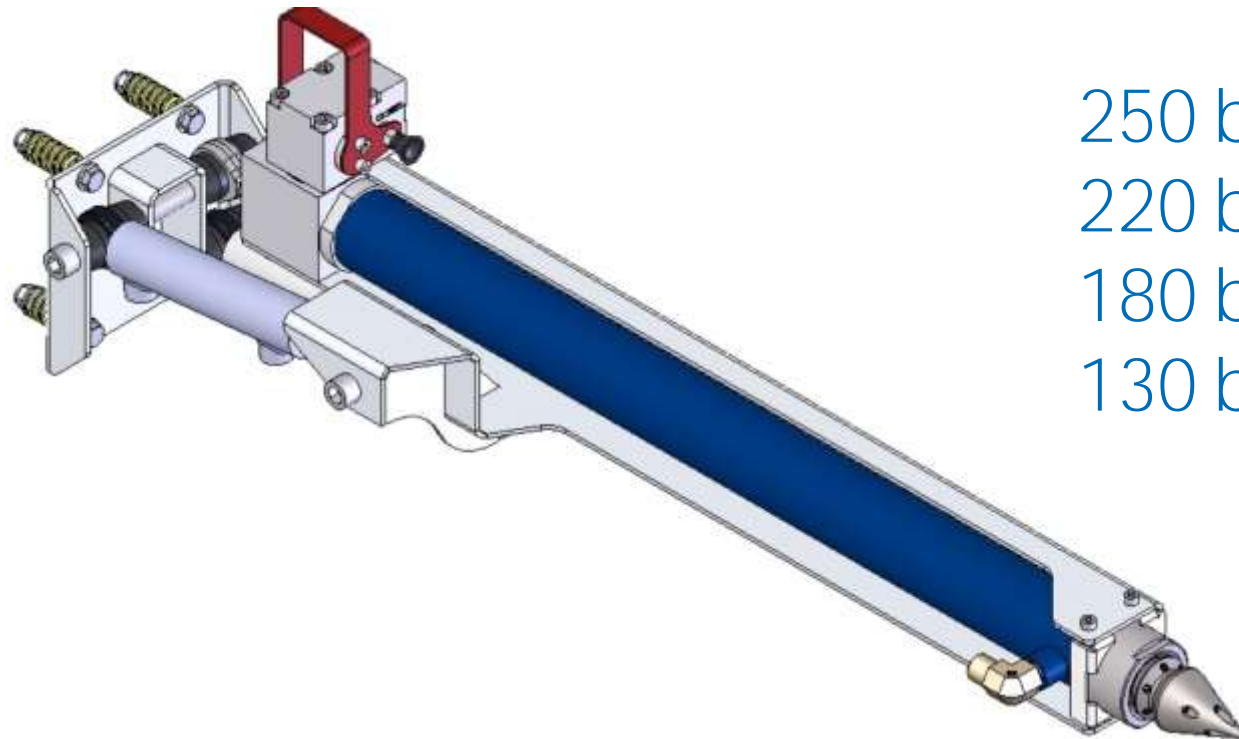
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FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / FP perforator

- Remote and automated extinguishing and cooling operations . No additionnal oxygen input...

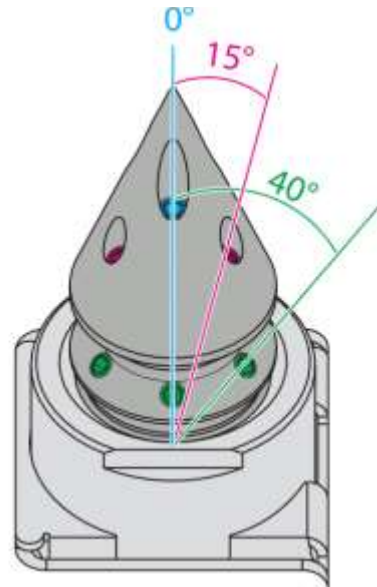
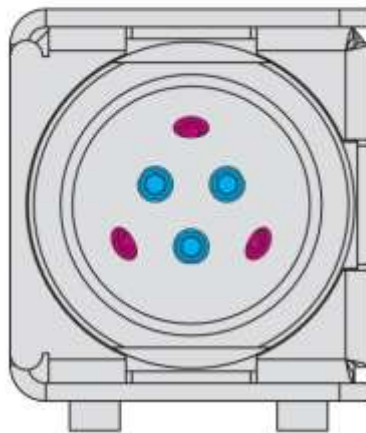
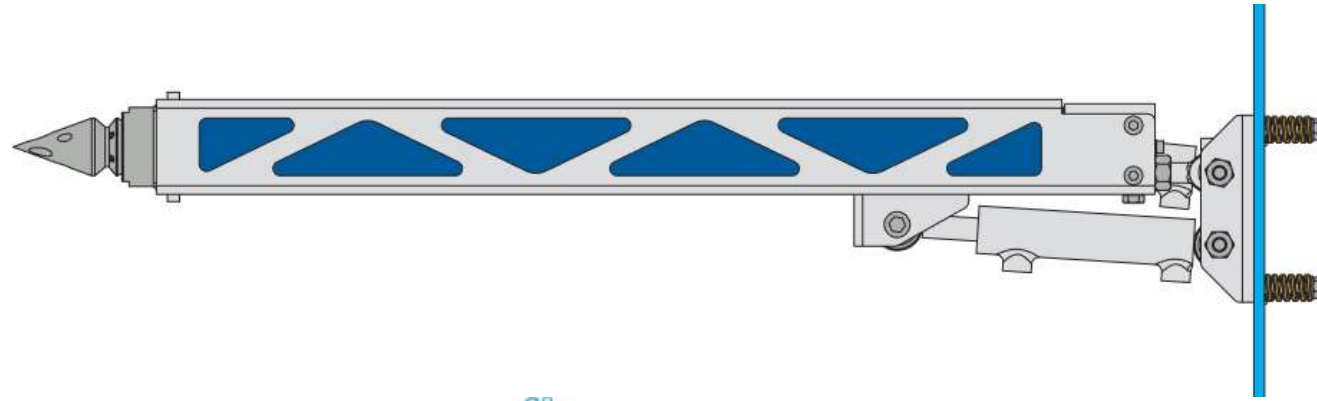


250 bar / 30 l/min
220 bar / 50 l/min
180 bar / 90 l/min
130 bar / 180 l/min



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / FP perforator

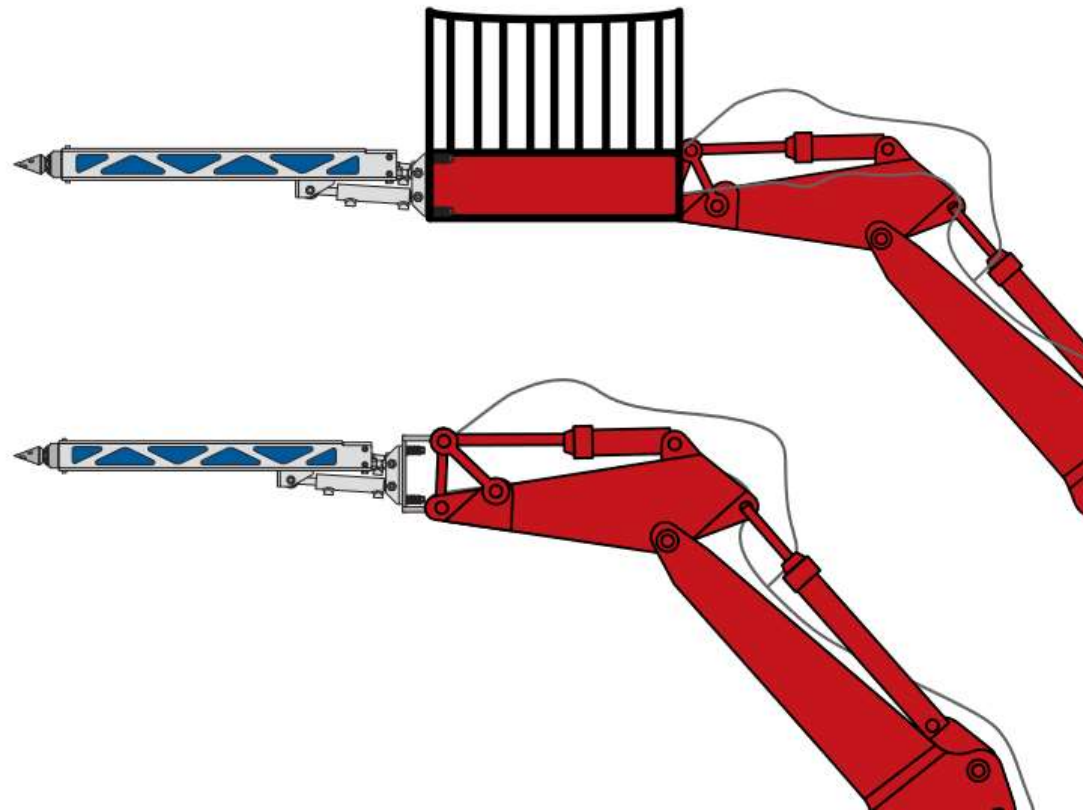


$L = 920 \text{ mm} +$
Stroke 550 mm



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / FP perforator



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / FP perforator

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FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPW

With a High Pressure pumping facility on board like the HPW, it becomes rather simple to install a **self protection** device on forestry fire trucks such as this one:

A series of HP water misting nozzles installed around the truck body will allow for

heat protection of the whole truck in extreme and hazardous Forest fire situations, making the truck a safe haven for the firemen.



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPP Fire pumps

- "Traditionnal" centrifugal fire pump for fire engines, hydraulically driven



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / HPP Fire pumps

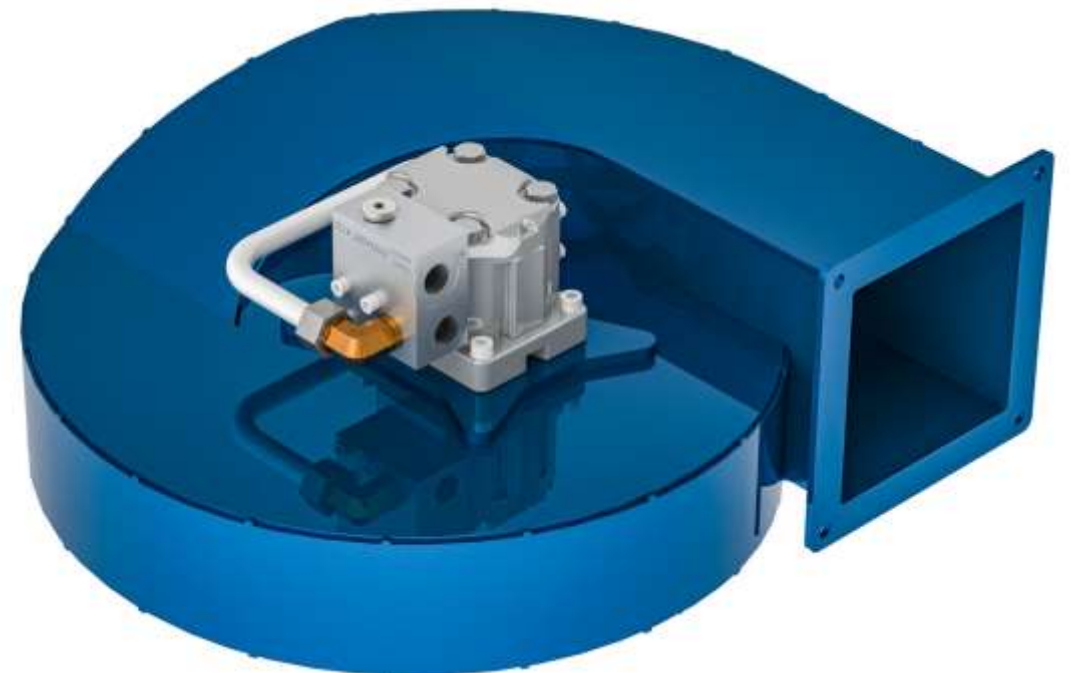
	HPP 1500/10	HPP 1200/15	HPP 600/35
l/min (gpm)	1500 (396)	1200 (317)	600 (158)
l/min (gpm)	1500 (396)	1000 (264)	400 (105)
kW	50	23	10
bar (psi)	17 (245)	15 (218)	12 (175)



FIREFIGHTING AND RESCUE WITH DYNASET

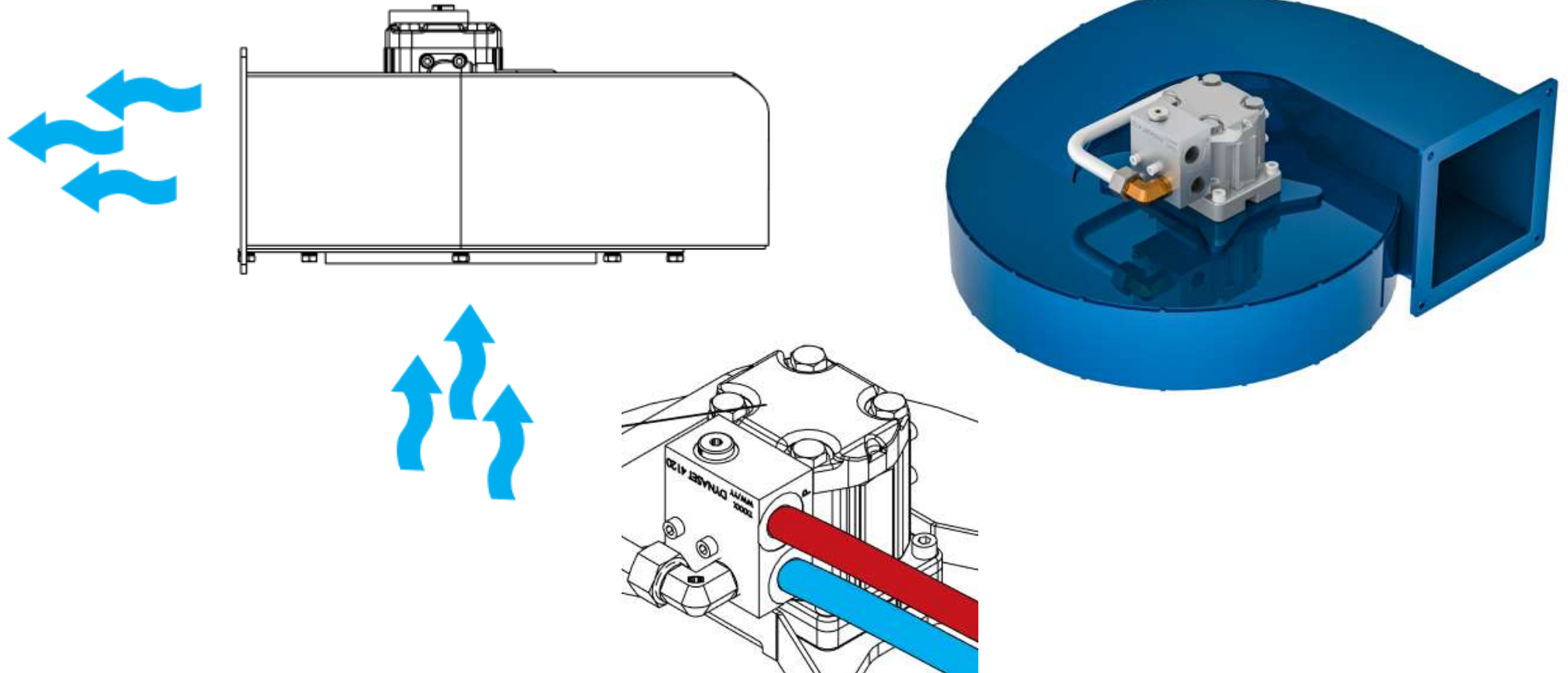
FIREFIGHTING / smoke extraction

- High air flow production with the HCF centrifugal blower



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / smoke extraction



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING/ smoke extraction

A nice product range developed by Dynaset R&D for OEM developers

HCF MODEL		HCF-800-40	HCF-1500-50	HCF-3400-90
OUTPUT CHARACTERISTICS				
Max air vacuum	kPA	-11	-9	-8
Max air flow	m³/s	0,8	1,5	3,4
HYDRAULIC CONNECTION				
Pressure line P	P	BSPP 1/2"	BSPP 1/2"	BSPP 1/2"
Return line T	T	BSPP 1/2"	BSPP 1/2"	BSPP 1/2"
HYDRAULIC POWER REQUIREMENTS				
Flow max.	l/min (gpm)	40 (10.6)	50 (13.2)	90 (23.8)
Pressure max.	bar (psi)	150 (2200)	210 (2500)	250 (3600)



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / Water transfer or refill with HSP

- Submersible centrifugal heavy duty transfer pumps
- Adequate to refill a water tank from a lake or river or swimming pool
- Extremely durable, can run dry with no consequence.
- Light and compact: one man operation on most models



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / Water transfer or refill with HSP

Wide product range

HSP 600 /5-38	HSP 1500 /5-40	HSP 2600 /5-50	HSP 4000 /5-100	HSP 7000 /5-169	HSP 10000 /5-200	HSP 16000 /5-317
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OUTPUT CHARACTERISTICS

		HSP 600 /5-38	HSP 1500 /5-40	HSP 2600 /5-50	HSP 4000 /5-100	HSP 7000 /5-169	HSP 10000 /5-200	HSP 16000 /5-317
Discharge max.	l/min (gpm)	800 (211.2)	2000 (528.3)	3000 (792.5)	5000 (1320)	8000 (2113)	12000 (3170)	20000 (5283)
Pump head max.	m (ft)	30 (98.4)	25 (82)	35 (114.8)	30 (98.4)	35 (114.8)	35 (114.8)	35 (114.8)
Discharge at standard head of 5m	l/min (gpm)	600 (158.5)	1500 (296.3)	2600 (686.8)	4000 (1057)	7000 (1849)	10000 (2642)	16000 (4227)
Output connection	in	2	3	3	5	5	6	8



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / Water transfer or refill with HSP: See the whole video at Youtube or through the webinar recording! <https://www.youtube.com/watch?v=CfylHdNUheU&t=90s>



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / Pneumatic power for CAF with
HKR air compressors

Compressed Air Foam production
needs High Pressure water + Compressed Air
+ foaming agent in order to produce the
desired sticky and thick firefighting foam.



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / Pneumatic power for CAF with HKR air compressors

Now that you know about the **HPW** you only need an **air compressor** to produce the desired **foaming conditions for CAF Foam generation.**



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / Separate Hydraulic Power Unit
HPU-D for stand alone setup



Stand – alone LP pumping
station!



FIREFIGHTING AND RESCUE WITH DYNASET

FIREFIGHTING / Separate Hydraulic Power Unit
HPU-D for stand alone setup



HYDRAULIC POWER OUTPUT CHARACTERISTICS

Output Pressure max.	bar (psi)	350 (5100)	350 (5100)
Output flow max @ 210 bar	l/min (gpm)	150 (39.6)	210 (55.4)

Fully stand alone, diesel engine, air transportable, quick set-up, **electric start... perfect hydraulic power source!**



FIREFIGHTING AND RESCUE WITH DYNASET

RESCUE OPERATIONS

- HSP HIGH FLOW WATER TRANSFER PUMPS
- HPW and KPL WASHING APPLICATIONS
- HRU RESCUE power source unit
- HG ELECTRIC GENERATOR
- HK-HKR AIR COMPRESSORS



FIREFIGHTING AND RESCUE WITH DYNASET

RESCUE / Water transfer with HSP



- Submersible centrifugal heavy duty transfer pumps extremely durable, can run dry with no consequence, made to pump mud....
- Adequate to empty flooding areas, flooded basements, evacuate unwanted chemicals ...



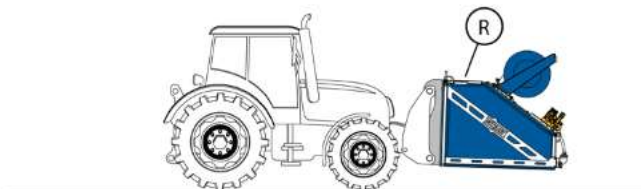
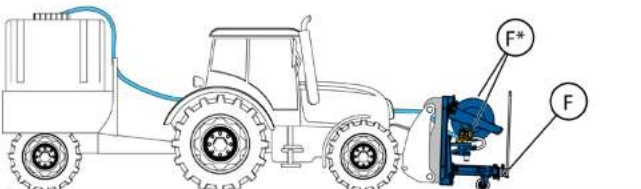
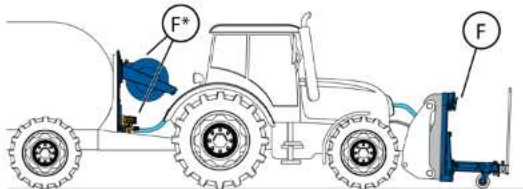
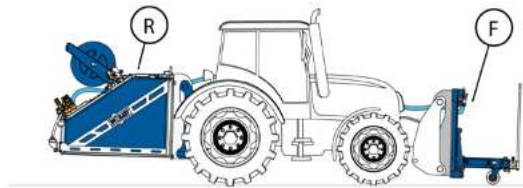
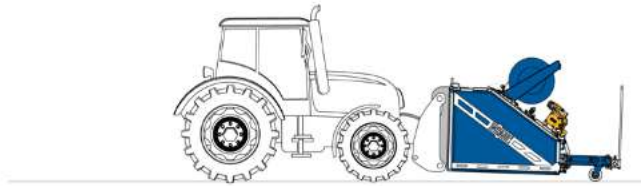
FIREFIGHTING AND RESCUE WITH DYNASET

RESCUE / HPW and KPL High Pressure washing operations

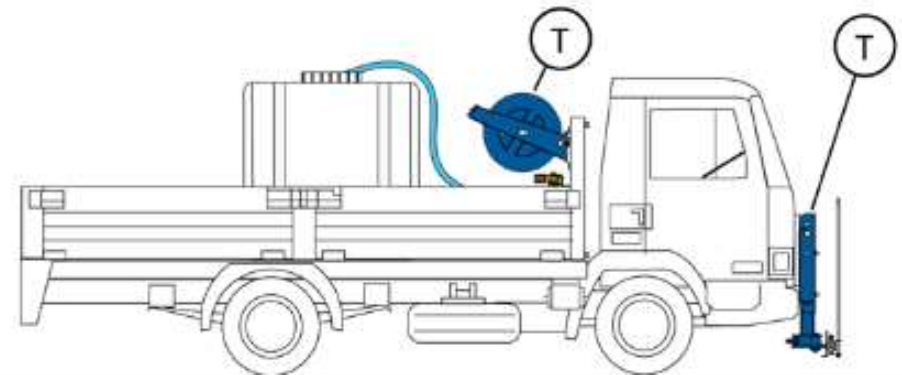


FIREFIGHTING AND RESCUE WITH DYNASET

RESCUE / HPW and KPL High Pressure washing operations



Ideal for spreading chemicals or disinfectants



FIREFIGHTING AND RESCUE WITH DYNASET

RESCUE / HRU Rescue Unit

For High Pressure Hydraulics generation,
used to power *Jaws of life*



Output

2 x 5 l/min or 1 x 10 l/min

@ 800 bar

- Contains its own dedicated secondary hydraulic circuit
- Extremely compact and easy to set up into a truck



FIREFIGHTING AND RESCUE WITH DYNASET

RESCUE / HRU Rescue Unit



FIREFIGHTING AND RESCUE WITH DYNASET

RESCUE / HG electric current generator



To power
any electric
appliance
needed...



... from 3,5 to 80 KVA, 50 – 60 Hz, IP23 or IP54...

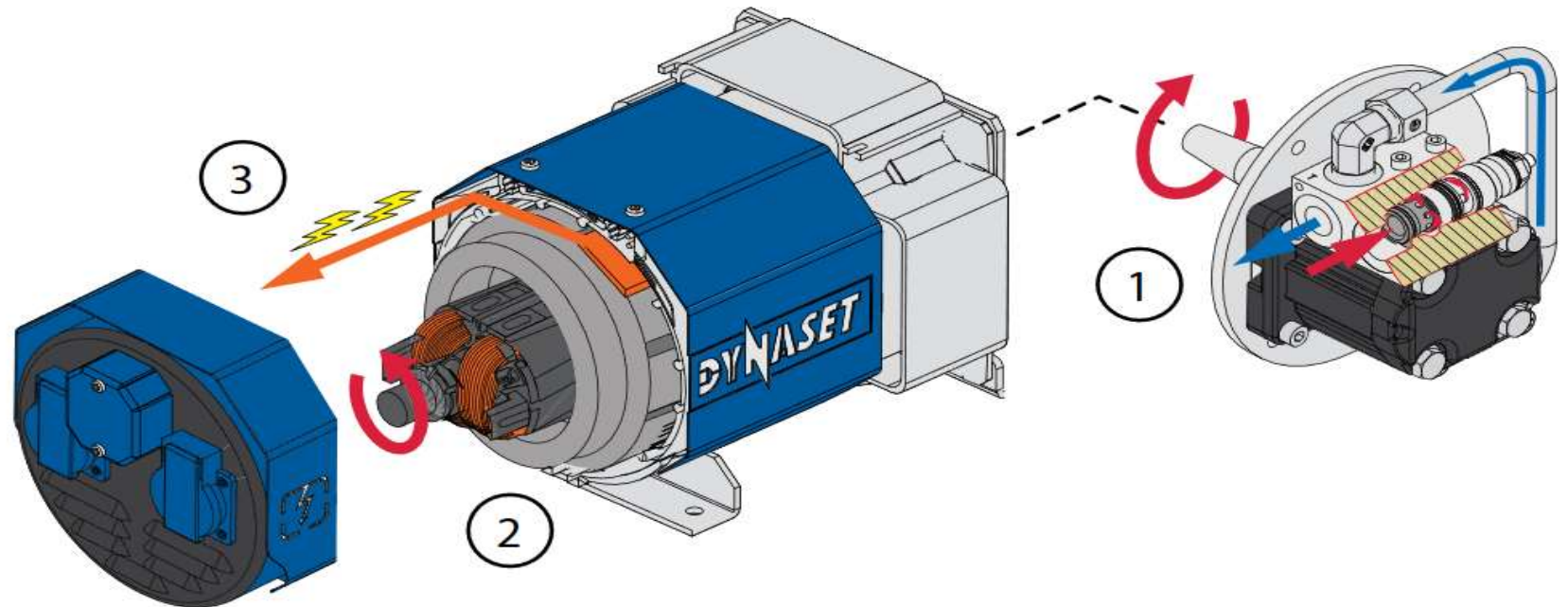
... make your pick!



TRANSPORTATION WITH DYNASET

RESCUE / HG electric current generator

Electricity available on board for any purpose you can think of



FIREFIGHTING AND RESCUE WITH DYNASET

RESCUE / HG electric current generator

Power tools, floodlighting,
emergency power supply...
need electric power? You have it.



FIREFIGHTING AND RESCUE WITH DYNASET

RESCUE / HK & HKR Air Compressors



Piston, for
intermittent use



Screw, for longer use



FIREFIGHTING AND RESCUE WITH DYNASET

RESCUE / HK & HKR Air Compressors

- 500 to 7500 l/min output (and even more)
- 10 to 12 bar Output pressure
- Perfect for Lifting cushions
(rescue bags)
- Perfect for air tooling

Anywhere you need
pneumatic power



FIREFIGHTING AND RESCUE WITH DYNASET

SUMMARY

- All HP / LP / High Flow Water applications
 - Specific Firefighting solutions
 - Compressed Air applications
 - High Flow Air Blowing applications
 - Electricity generation
 - Power boosting capacity
 - Hydraulic Power generation
- Feel free to invent your rescue application!



FIREFIGHTING AND RESCUE WITH DYNASET

DYNASET CAN PROVIDE!





Q & A

FOR MORE INFO PLEASE
CONTACT YOUR DYNASET
DEDICATED CONTACT, DEALER
OR AREA SALES MANAGER

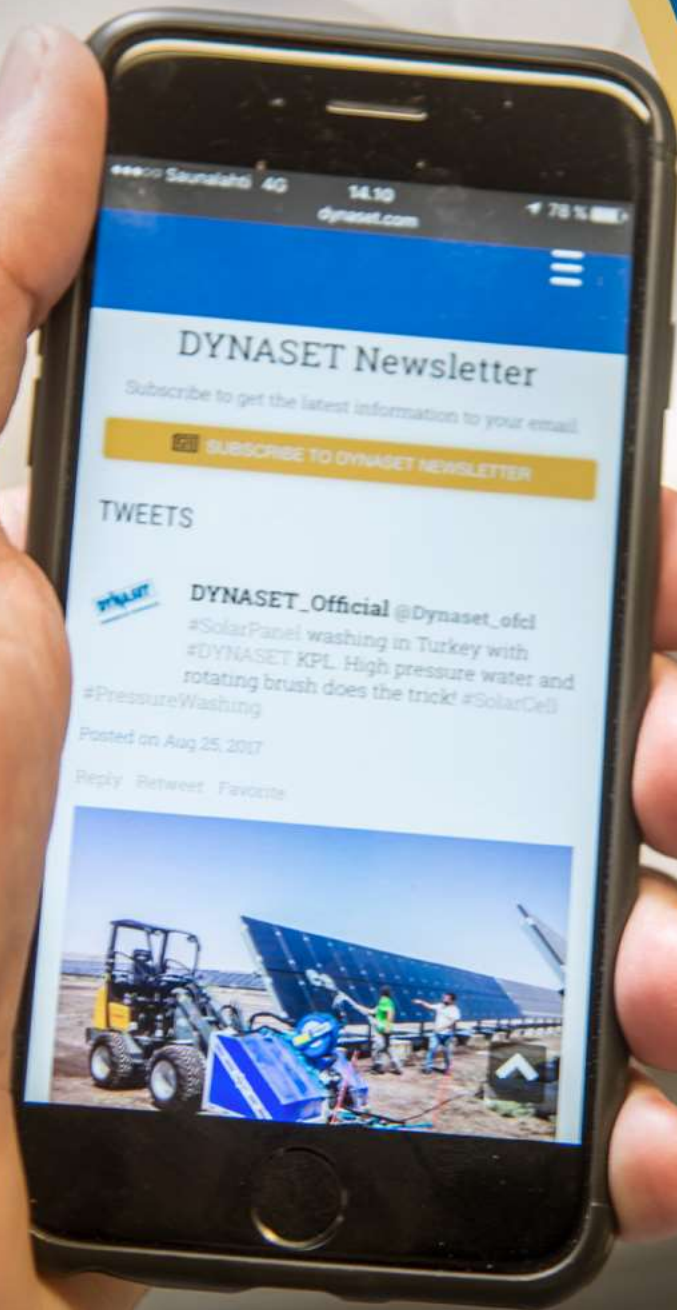
<https://dynaset.com/contact/>

Zoom in...





THANKS FOR
WATCHING!



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