## As variable as your cleaning applications



HDP 500 Diesel driven pump unit with manual 3 speed transmission only uses that energy needed for the job to be done.



**3rd Gear**Full pump power as typically employed for tank cleaning



**2nd Gear**Medium pump power for pipe and tube bundle cleaning



**1st Gear**Low pump power for manual blasting gun work

This pump unit enables to you adapt the flow rate to suit the work you are doing. The 3 transmission ratios 1:1, 1:2 and 1:6 cover the most important areas of industrial cleaning.

The biggest benefit for you is the reduced diesel fuel consumption as you only generate the power you actually need

For manual blasting gun work the high pressure pump shaft only rotates at 1/6 th of maximum engine speed thereby saving up to 54 litres of fuel per hour.\*

The low speed reduces wear on the pump and engine by operating in the partial load range

- The environmental benefits include lower CO<sup>2</sup> and noise emissions
- Lower torque on the engine in gears 2 and 3 at the same pressure
- No hot overflow water to be returned to tank
- Each gear is simply selected when the engine is not running

## \*Example

HDP 500 fuel consumption, Piston/Plunger-Ø 50 mm, with VOLVO TAD 1672 VE TIER 4 FINAL and 3 speed manual transmission

Engine speed rpm	Gear	Pump speed rpm	Pump power rating kW	Q I/min Flow rate	P bar Operating pressure	Specific fuel consumption g/kW hour	Motor power rating kW	Fuel consumption l/hour
1800	3	1800	500	262	1040	205	520	125
1100	3	1100	305	160	1040	193	315	72
1800	2	900	250	132	1040	210	265	65
1100	2	550	152	80	1040	200	165	39
1800	1	300	83	44	1040	250	95	28
1100	1	183	51	27	1040	240	62	18

Fuel saving with transmission when working with a manual blasting gun 54 l/hour CO₂ reduction 140 kg/hour



## Series HDP 500 Diesel driven high pressure pump unit with manual 3 speed transmission



Type overview

• \$ 1100 - 50 to 1040 bar

• S 1600 - 50 to 1630 bar

Aquajet<sup>®</sup> 50 to 3000 bar

All "S Class" and "Aquajet" units are complete with :

- Rigid base frame with anti vibration mounting feet
- Insulated spiral silencer installation (32 dB(A) reduction) with exhaust and rain cap, particle filter or Ad Blue
- ES 2 electronic control and monitoring system with digital display for pump and diesel engine
- Pneumatic system with shaft driven compressor, air tank and bypass control
- Pneumatic pressure regulating valve or bypass valve
- Stainless steel suction side installation with boost pump and water filter ("S Class": 200μ & 10μ "Aquajet": 1 μ)

There are optional extras available which include pump head lifting device, heating systems, water tanks and fuel tanks.



The following data table shows just a few examples of maximum performance combinations from the wide range

Unit Type	Pump Typ	Op. pressure [bar]	Flow- rate [l/min]	Power rating [kW]
S 1100 - 50	HDP 502	1040	262	
S 1600 - 50	HDP 503	1630	166	500
3 1000 - 50	HDP 503	1290	212	
Aquajet® 50	HDP 504	3000	77	450

Rod force: 210 kNStroke: 100 mm

Mean piston speed at n<sub>2</sub>
315 rpm = 1.06 m/sec
380 rpm = 1.27 m/sec
465 rpm = 1.54 m/sec





"S Class" and "Aquajet" units can be built into 20 ft. or 25 ft. sound damped containers, sound damped aluminium truck bodies or trailer containers (BDF).



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