## As variable as your cleaning applications

HAMMELMANN

HDP 400 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

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.


## 2nd Gear

Medium pump power for pipe and tube bundle cleaning

For manual blasting gun work the high pressure pump shaft only rotates at $1 / 6$ th of maximum engine speed thereby saving up to 49 litres of fuel per hour.*

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


## 1st Gear

Low pump power for manual blasting gun work

- The environmental benefits include lower $\mathrm{CO}_{2}$ 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 400 fuel consumption, Piston/Plunger- $\varnothing 50 \mathrm{~mm}$, CAT C15 TIER 4 FINAL 3 speed manual transmission

## Technical Data

| Engine speed | Gear | Pump - |  | Flow rate | Operating pressure | Specific <br> fuel consumption | Motor power rating | Fuel consumption |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | speed | power rating |  |  |  |  |  |
| 1800 1/min | 3 | $18001 / \mathrm{min}$ | 400 kW | $2181 / m i n$ | 1000 bar | 205 g/kw h | 425 kW | $1031 / h$ |
| $11001 / \mathrm{min}$ | 3 | $11001 / \mathrm{min}$ | 246 kW | 1331/min | 1000 bar | $210 \mathrm{~g} / \mathrm{kw} \mathrm{h}$ | 260 kW | $631 / \mathrm{h}$ |
| $18001 / \mathrm{min}$ | 2 | $9001 / \mathrm{min}$ | 202 kW | 109 1/min | 1000 bar | $215 \mathrm{~g} / \mathrm{kw} \mathrm{h}$ | 215 kW | $541 / \mathrm{h}$ |
| $11001 / \mathrm{min}$ | 2 | $5501 / \mathrm{min}$ | 123 kW | $671 / \mathrm{min}$ | 1000 bar | $220 \mathrm{~g} / \mathrm{kw} \mathrm{h}$ | 130 kW | $351 / \mathrm{h}$ |
| $18001 / \mathrm{min}$ | 1 | $3001 / \mathrm{min}$ | 67 kW | $361 / \mathrm{min}$ | 1000 bar | $242 \mathrm{~g} / \mathrm{kw} \mathrm{h}$ | 71 kW | $201 / \mathrm{h}$ |
| $11001 / \mathrm{min}$ | 1 | $1831 / m i n$ | 22 kW | $221 / m i n$ | 1000 bar | $263 \mathrm{~g} / \mathrm{kw} \mathrm{h}$ | 43 kW | $131 / \mathrm{h}$ |

Series HDP 400 Diesel driven high pressure pump unit with manual 3 speed transmission Type overview


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

| Model | Plunger $\varnothing$ | Operating pressure | Flow rate | Engine power | Pump power |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AQUAJET 40 | 28 mm | 3000 bar | $651 / \mathrm{min}$ | 450 kW | 400 kW |
|  | 35 mm | 2000 bar | 1031/min |  |  |
| S 1600-40 | 40 mm | 1600 bar | 1371/min |  |  |
| S 1100-40 | 50 mm | 1000 bar | 2181/min |  |  |

## Technical data

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

- Rigid base frame with anti vibration mounting feet
- Insulated spiral silencer installation (32 $d B(A)$ reduction) with exhaust and rain cap, particle filter or Ad Blue
- ES 3 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": $200 \mu \& 10 \mu$, Aquajet": $1 \mu$ )

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

The series 40 „S Class" and „Aquajet" units can be built into 20 ft . or 25 ft . sound damped containers, sound damped aluminum truck bodies or trailer containers (BDF).


