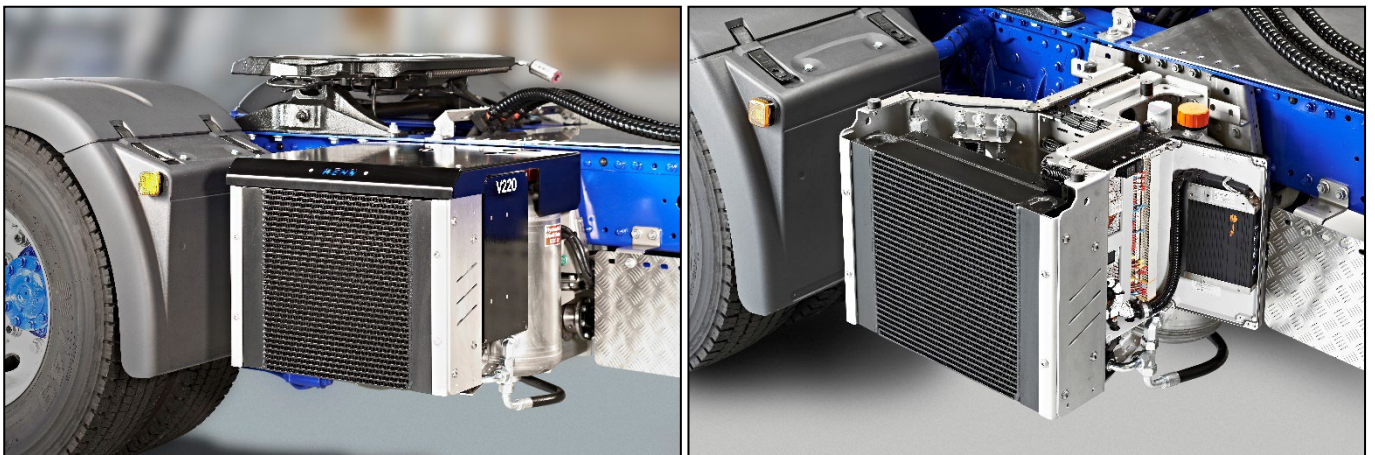


## HPT-unit (Hydraulic Power Train)

The HPT unit has been designed for highest performance and a maximum service life. Our long-standing experience in this field has been used here to develop a compact and powerful drive unit for universal applications.

The system is equipped with an electronically controlled variable displacement pump of a well-known manufacturer that is operated in a closed circuit. The system can be combined with a speed limit control and functions, such as Diesel start-stop from the operator panel as well as coupling and uncoupling the power take-off, so as to ensure optimal and viable operations.



### Technical data:

- all mechanical console parts are made of stainless steel or aluminum,
- operating pressure up to 380 bar, maximum pressure 420 bar, variable flow rate ranging between 0 and approx. 200 l/min, freely adjustable by the variable displacement axial piston pump, suitable for controlled and uncontrolled systems,
- energy-efficient thanks to the variable flow rate and the limit control
- automatic volume reduction in the event of exceeding the maximum pressure (mechanical overload protection),
- filtration of both the return and leakage oil in a filter fineness of 10 µm in each case,
- return and leakage oil filters with electronic monitoring of the degree of contamination,
- 20-l aluminum oil tank with electronic filling level control; very low quantity of oil reserve required thanks to the closed-circuit operations,
- heat exchanger with a cooling capacity of approx. 19 kW and power-operated ventilator, cold start function for a better start-up performance at very low temperatures,
- customized system control, flexibly adaptable to vehicles of various manufacturers; parameterizable CAN-compatible control for a flexible range of applications,
- all electric fuses of the system are housed in the control,
- various operating and display options for the driver's cabin and the operator panel possible,
- the drag hoses to the trailer are extremely abrasion-proof and additionally equipped with a scoring protector,
- hydraulic test ports leading to the outside (high pressure, feed pressure and control pressure),

- coupling holder for safely fastening the hydraulic hoses during empty runs
- vehicle-specific cover of the frame and cardan shaft protection

**The advantages of the controlled and closed hydraulic system:**

- weight reduction thanks to the compact design
- very low oil reserve required
- very high purity in the oil circuit will maximize the components' service life
- energy efficiency: low fuel consumption thanks to the controlled oil volume & the limit control
- compliance with the required drive performance and with the safety limits
- adjustable and re-usable in the event of a vehicle change thanks to its modular design
- designed for a high performance and availability

The entire power train will be designed in accordance with the expected mission profile. This is necessary to protect the drive side (vehicle transmission/power take-off) against being overloaded on the one hand and to achieve the required performance and functions on the consumer side (e.g. pump drive), on the other.

The frame structure is composed of stainless steel components, with the cooler and oil tank as well as return and leakage oil filters being integrated. The filters are electronically monitored to detect a possible contamination. The oil temperature and the filling level in the oil tank are also continuously assessed. The integrated control acts as interface between the structure/application control, the vehicle control equipment and the HPT unit. The CAN-bus compatibility and the free parameterability make it possible to use the system most flexibly for the most different applications.

Please get in touch with us if you need any further information.

Wehn Fahrzeugtechnik GmbH