

Hatz H series: Innovation meets reliability

A groundbreaking downsizing approach was adopted in the development of the Hatz 4H50. The outcome is an extremely compact, turbocharged 2-litre engine that reaches a maximum power output of 62 kilowatts, setting the benchmark in its performance class with its low weight. The engine fulfills the stringent exhaust emission limits in the EU and the USA even without the use of a diesel particulate filter (DPF).

Conservative-innovative engine for a long service life

All mechanical components were designed and developed with a conservative-innovative approach. The Hatz 4H50 therefore has two valves per cylinder, which achieves high efficiency, mechanical robustness and functional simplicity. This – as well as the exclusive use of premium products for all important components – leads to the long service life customary from Hatz.

Maintenance-friendly

A maintenance interval of 500 hours means the engine scores top points with regard to customer friendliness and reliability. The extended intervals are attributed to hydraulic valve play compensation and large sized filters. The engine also has a sensor-controlled engine protection system which switches off the engine in an emergency to prevent major damage.

BOSCH common rail system for maximum fuel efficiency

One of the key factors for the high performance compactness of the Hatz 4H50 is the common rail system. Hatz has decided upon the off highway CRS from Bosch with 1800 bar. It works with three precisely dosed injections per working cycle: a pre-injection, main injection and post injection. In conjunction with the other ideally matched Bosch system components, the perfect balance is reached between dynamics, quiet combustion noise, low emissions and economy.

In terms of fuel efficiency, the newly developed engine with a specific consumption of just 210 grams per kilowatt hour sets new standards at the maximum efficiency point. The innovation here is that consumption values are achieved which lie close to the optimum operating point across a wide load and speed range. This makes the Hatz 4H50 the most efficient engine in its class.

Engine variations		4H50TIC DPF	4H50TIC	4H50TI
Cylinders		4	4	4
Displacement [ccm]		1,952	1,952	1,952
IFN rating according to ISO 3046-1 max. [kW @ 2800 rpm]		55	55	55
Weight [kg]		195	173	152
Certification	EPA 4 final	—	19-56 kW	—
	EU IIIA	19-56 kW	—	19-37 kW
	EU IIIB	37-56 kW var.	37-56 kW var.	—
	EU II	—	—	37-75 kW
Feature		EGR, DOC, DPF	EGR, DOC	—