

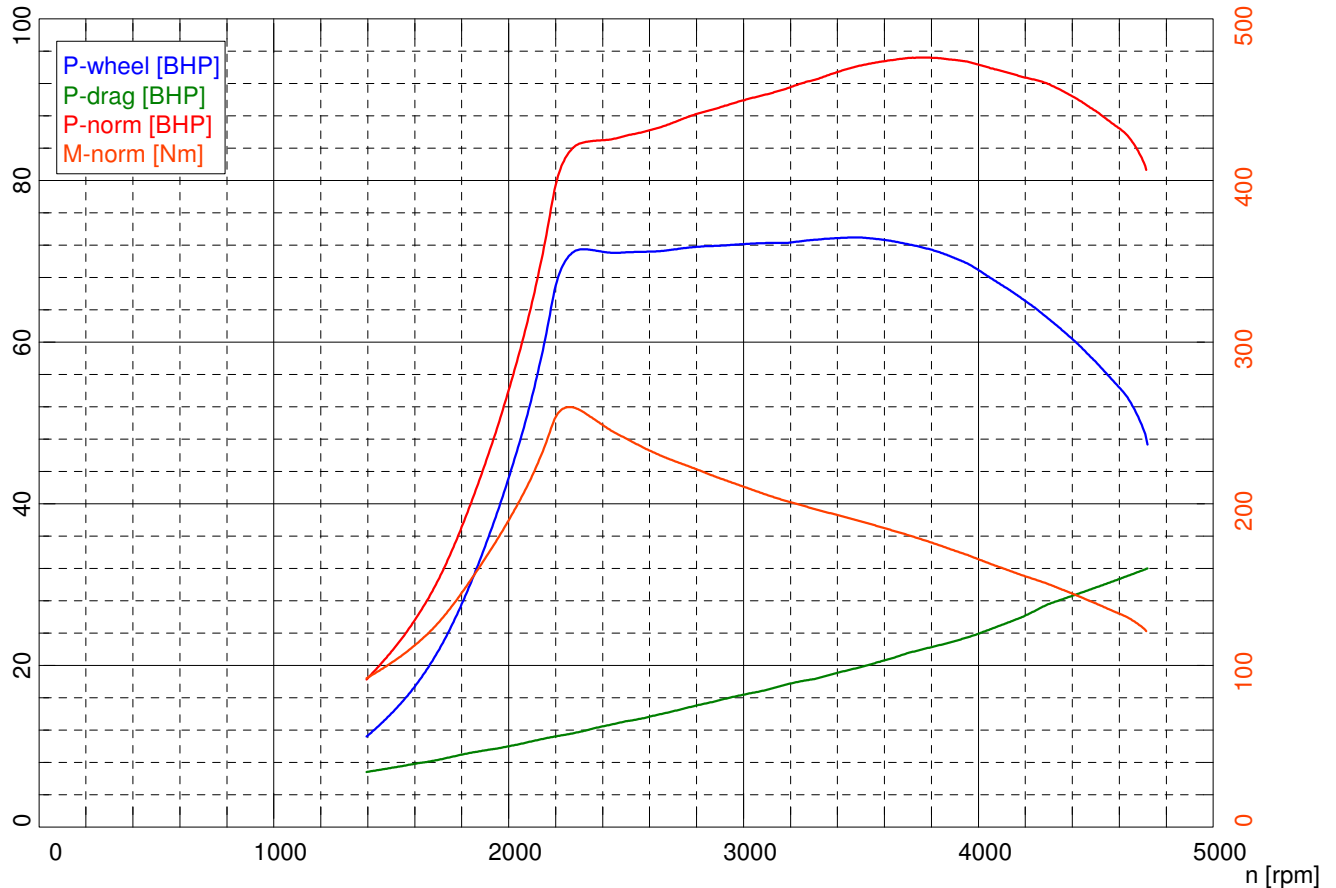
Vehicle type: Opel Astra H 1.7CDTI 95PS
 License plate: BT4502AK
 Inspector: Nikolay Nikolov

Diesel-Motor / Turbo charger (air-cooled)
 Manual transmission

Chip tuning

Measurement date: 17.04.2015 (14:13)

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Power data

Corrected power 1)	P_{Norm}	95.2 BHP / 70.0 kW
Engine power	P_{Eng}	93.6 BHP / 68.9 kW
Wheel power	P_{Wheel}	71.7 BHP / 52.7 kW
Drag power	P_{Drag}	22.0 BHP / 16.2 kW
Max. power at		3765 rpm / 124.4 km/h
Torque 1)	M_{Norm}	259.7 Nm
Max. Torque at		2260 rpm / 74.6 km/h
Max. attained RPM		4720 rpm / 156.1 km/h

1) Correction acc. to DIN 70020
 Correction factors: $Q_v = 0.00 \%$

Ambient data

Ambient temperature	$T_{Ambient}$	23.2 °C
Intake air temperature	$T_{Intake\ air}$	21.9 °C
Relative humidity	H_{Air}	41.9 %
Air pressure	p_{Air}	993.1 hPa
Steam pressure	p_{Steam}	11.9 hPa
Oil temperature	T_{Oil}	---- °C
Fuel temperature	T_{Fuel}	---- °C

Slip

Speed no load	$V_{no\ load}$	---- km/h
RPM no load	$n_{no\ load}$	---- rpm
Speed full load	$V_{full\ load}$	---- km/h
RPM full load	$n_{full\ load}$	---- rpm
Slip		---- %

Rotating mass

Average delay run down 1	a_1	---- m/s ²
Average Brake force run down 1	F_1	---- N
Average delay run down 2	a_2	---- m/s ²
Average brake force run down 2	F_2	---- N
Force of the rotating mass	$F_{rot-total}$	---- N
Rotating total mass	$m_{rot-total}$	310.0 kg
Rotating test stand mass	$m_{rot-dyno}$	250.0 kg
Rotating vehicle mass	$m_{rot-vehicle}$	60.0 kg