



Fuel consumption of cars

Part 2a / Exercise 7

→ Definition of terms

Standard consumption

Fuel consumption of cars is most commonly measured in litres of fuel which are used on average per 100 kilometres (l/100 km).

The standard fuel consumption is determined not on public roads, but on test stands using identical test cycles for all vehicles.

(Real-life) Average consumption

The average consumption of cars is determined on public roads and depends strongly on traffic conditions and driving style.

Comparison of standard and average consumption

A German automobile newspaper compared standard consumption (for 100 common car models) by looking at the consumption of test drives on public roads. The newspaper found that the real-life consumption is approximately 25 % higher than the standard consumption.¹

Correspondingly, many people believe that it is not possible to reach standard consumption in real traffic. However, experience shows that drivers can not only reach standard consumption but achieve a fuel consumption that is about 20 % below the standard consumption when adopting Eco-driving principles.²

¹ The great consumption lie. Source: www.autobild.de

² The Austrian Ecodriving Initiative. Source: Austrian Energy Agency (2011)



→ *Standard consumption of different car types (examples):*



Source: Matthias93

Type of the car Microcar
Segmentation A-segment (minicar)
Brand of the car Smart Fortwo

Standard fuel consumption 4.5l/100 km (52 kW version, petrol)



Source: Rudolf Stricker

Type of the car Subcompact car / Supermini
Segmentation B-segment (small car)
Brand of the car Renault Twingo I

Standard fuel consumption 5.1l/100 km (55 kW eco version, petrol)



Source: OSX

Type of the car Compact car/small family car
Segmentation C-segment (medium car)
Brand of the car VW Golf VI

Standard fuel consumption 5.3l/100 km (77 kW version, petrol)



Source: S 400 HYBRID

Type of the car Midsize car/large family car
Segmentation D-segment (large car)
Brand of the car Opel Insignia

Standard fuel consumption 7.0l/100 km (132 kW version, petrol)



Source: IFCAR

Type of the car Full-size car
Segmentation E-segment (executive car)
Brand of the car Mercedes E-Class

Standard fuel consumption 7.4l/100 km (185 kW version, petrol)



Source: Rudolf Stricker

Type of the car Luxury car
Segmentation F-segment
Brand of the car Audi A8

Standard fuel consumption 9.1l/100 km (213 kW version, petrol)



Source: Matti Blume (MB-one)

Type of the car Sports car
Segmentation S-segment (sport coupés)
Brand of the car Porsche 911 Carrera

Standard fuel consumption 10.6l/100 km (254 kW version, Carrera 4 M6, petrol)



Source: Lothar Spurzem

Type of the car SUV - Sport utility vehicle
Segmentation J-segment
(incl. off-road vehicles)
Brand of the car VW Tiguan

Standard fuel consumption 8.6l/100 km (132 kW version, petrol)