

Product test – Brake pads.



Comparison of Mercedes-Benz StarParts.

For internal use only within Daimler AG
and for authorised service partners

Mercedes-Benz
The best or nothing.



Mercedes-Benz StarParts.

For new business. For older model series.

The growing market of vehicles in segment II+ is of particular interest to retailers thanks to the increasing scope for maintenance and repair. Yet as their vehicles get older, customers are increasingly looking to independent workshops. With the new and affordable parts line Mercedes-Benz retailers and independent workshops have a further opportunity to be successful in this lucrative segment.

WHICH MERCEDES-BENZ STARPARTS ARE AVAILABLE?

With Mercedes-Benz StarParts a broad range of products is available to you. The parts include brake pads, brake disks, wiper blades, interior air filters, engine air filters, oil filters, batteries, spark and glow plugs. The range of parts is constantly being expanded - meaning you can count on an even broader range in the future.



MERCEDES-BENZ STARPARTS ARE AVAILABLE FOR SELECTED MODELS OVER 5 YEARS OLD.*



COMPACT CLASS

A-Class, B-Class



EXECUTIVE SEGMENT

C-Class, R-Class, CLS-Class, CLK-Class, E-Class



SUV/SPORTS CARS

M-Class, GL, SLK

Which brake pads test the best?

Brake pads have a huge influence on the safety and driving characteristics of a Mercedes-Benz. In the brake test carried out by the independent testing institute DEKRA, on behalf of Daimler AG, five brake pads by various suppliers were tested. The tests were conducted according to the German automotive magazine „Auto Motor & Sport“ for fit accuracy during installation, cold behaviour, warm behaviour, high-speed behaviour and wear. The external condition was assessed once again after completing the tests. The test vehicle was a Mercedes-Benz C220 CDI T, year of construction 2009.

RESULT

Brake pads from Mercedes-Benz StarParts attained the best result overall. The worst brake pad tested was by Ferodo, predominantly because of the inadequate braking power.



NOTHING IS MORE CONVINCING THAN TESTED QUALITY AT AN ATTRACTIVE PRICE. WITH THIS IN MIND, MAKE USE OF THE TEST RESULTS WHEN ADVISING YOUR CUSTOMERS.

TEST CRITERIA

- Fit accuracy during installation
- Cold behaviour at 100 km/h and 130 km/h
- Warm behaviour at 130 km/h
- High-speed behaviour at 200 km/h
- Wear
- Condition after test

TEST PRODUCTS - BRAKEPADS COMPARED WITH MERCEDES-BENZ STARPARTS



Mercedes-Benz StarParts



TRW



ATE



FERODO



TEXTAR

Fit accuracy

and cold behaviour at 100 km/h and 130 km/h.

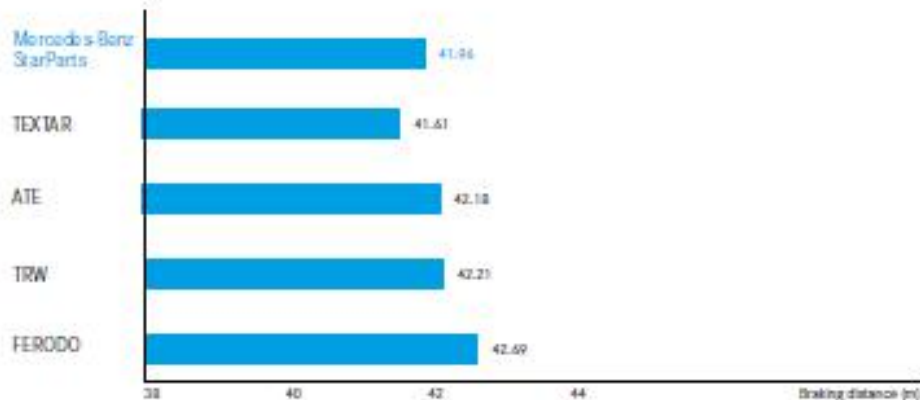
FIT ACCURACY DURING INSTALLATION

All brake pads were compared using a digital vernier calliper and angle gauge.
The fit accuracy of the tested products during installation is good overall.
The pads from Mercedes-Benz StarParts and TEXTAR performed the best.
With TRW, the screws for the brake calliper included in the delivery were stiff due to the solid bolt lock. The installation process was significantly delayed because of it.



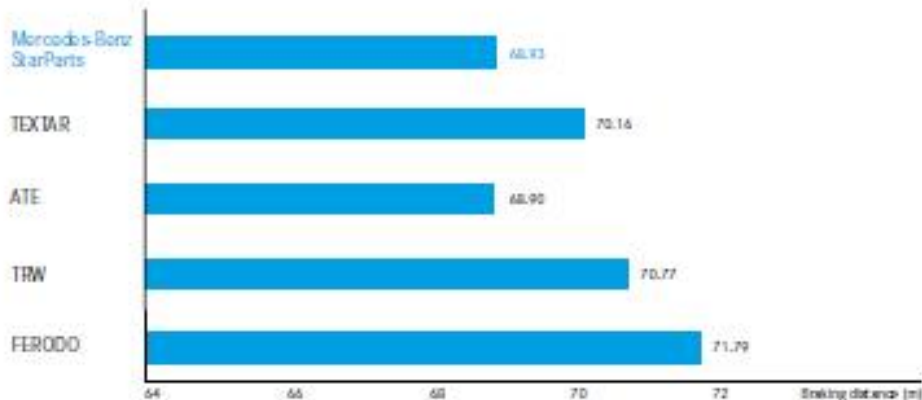
BRAKING DISTANCES AT 100 KM/H

The cold tests were made up of five stop brake applications per product. During braking at 100 km/h there were hardly any differences in the braking characteristics.



BRAKING DISTANCES AT 130 KM/H

At a test speed of 130 km/h the differences were greater. The shortest braking distance was 68.90 m (ATE) and the longest was 71.79 m (Ferodo) – a difference of approx. 3.3%.



Warm behaviour at 130 km/h: a clear winner.

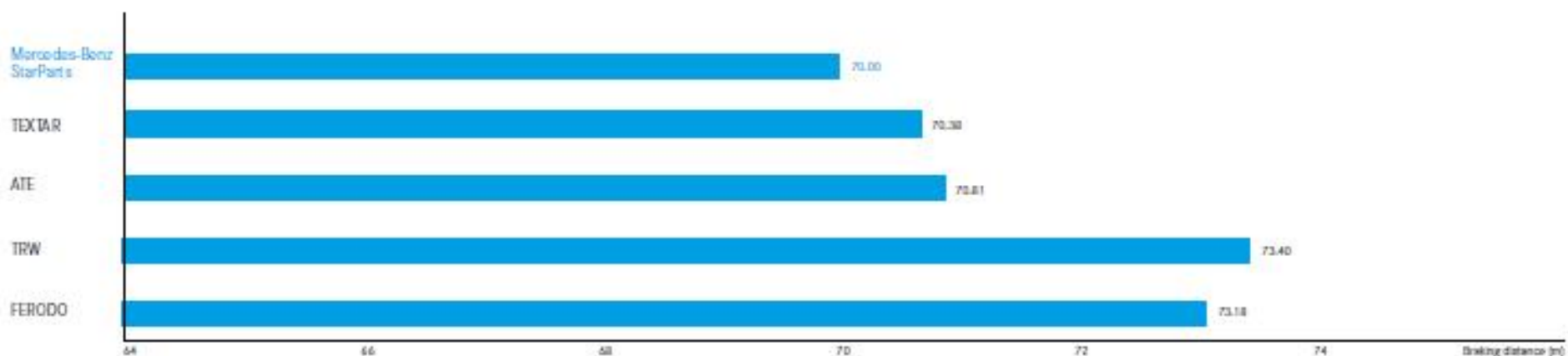
THIS WAS THE TESTING

For the brake tests with a warm brake system, ten successive brake applications from a speed of 130 km/h to a standstill were carried out over two runs. The brake temperature was at more than 100 °C at the start of each run.



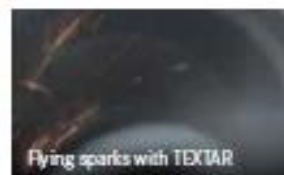
SIGNIFICANT DIFFERENCES IN BRAKING DISTANCE

At 130 km/h and with warm brakes there are significant differences in braking distance. The shortest braking distance was 70.00 m and the longest 73.40 m - a 4.2 % difference. Here the test winners were the pads from Mercedes-Benz StarParts.



High-speed braking at 200 km/h: almost 10 m difference.

Five brake applications were carried out at a speed of 200 km/h to a standstill for each tested product. The brake temperature was at less than 100 °C at the start of each brake application. During the brake application the brake pedal was applied with maximum force.

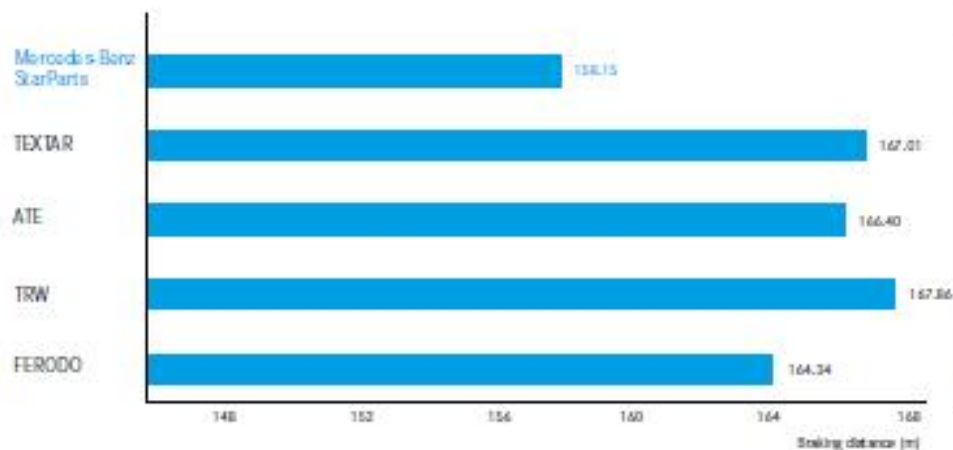


FLYING SPARKS

During the high-speed brake applications there were a great deal of flying sparks with the pads from TRW, ATE, FERODO and TEXTAR. Only with Mercedes-Benz StarParts were the high-speed brake applications almost spark-free during the test.

SIGNIFICANT DIFFERENCES IN BRAKING DISTANCE

The Mercedes-Benz StarParts pads brought the vehicle to a standstill after 158.15 m. The braking distances of the other test participants were between 164.34 m and 167.86 m. This made the braking distance with Mercedes-Benz StarParts 5.8 % shorter.



WEAR

Mercedes-Benz StarParts experienced only 1.2 mm wear over the entire test cycle. At 2.39 mm, the brake pads by Ferodo showed almost twice as much erosion. The conditions after the test also differed greatly. The spectrum ranged from slight material damage (TRW) to partially burnt pad surfaces (TEXTAR).



Mercedes-Benz StarParts tested the best.

The brake pads from Mercedes-Benz StarParts achieved the best overall result.

Alongside safe braking characteristics with short braking distances and almost spark-free high-speed brake applications, Mercedes-Benz StarParts were also convincing after the tests with overall even erosion and low wear.

OVERALL TEST RESULT OVERVIEW

TEST	MERCEDES-BENZ STARPARTS	TEXTAR	ATE	TRW	FERODO
Installation test	++	++	+	-	+
Braking distance from 100 km/h Cold brake in m	41.96	41.61	42.18	42.21	42.69
Braking distance from 130 km/h Cold brake in m	68.93	70.16	68.90	70.77	71.79
Braking distance from 130 km/h Warm brake in m	70.00	70.38	70.81	73.40	73.18
Braking distance from 200 km/h In m	158.15	167.01	166.40	167.86	164.34
Wear in mm	1.20	0.78	1.62	1.23	2.39
State after test	+	-	--	0	0
Overall rating by grade (1 = very good, 5 = deficient)*	1.6	2.1	2.6	3.6	3.9