

100% Testing

Testing Services from Porsche Engineering

____ Every single development, from the smallest component to the overall vehicle, needs to be tested until it is ready for series production. The testing services offered by Porsche Engineering combine unique resources like the Nardò Technical Center in southern Italy with expertise and experience from sports car series development. All over the world the testing contains varied course profiles as well as comprehensive trials and includes all the requisite evaluations. Join us as we test the new Porsche 718 Boxster.

*By Nadine Guhl
Photos by Steffen Jahn*



718 BOXSTER

Fuel consumption (combined): 7.4–6.9 l/100 km
CO₂ emissions (combined): 168–158 g/km





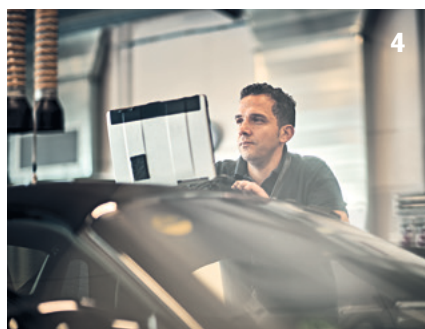
1 Start Giancarlo Vella, who is in charge of the upcoming test of the new 718 Boxster, picks up the car from the customer to drive it to Nardò. The task: to perform long-distance, customer-specific endurance testing including predetermined trials on defined course profiles in a very short period of time. After checking the vehicle and handling all the formalities, it's time to set off.

2 Ride As a long-distance drive, the 1,600-kilometer ride from Weissach to Nardò represents the first major stage of the customer-specific endurance trials. It marks the start of simulating the vehicle aging process in order to test it under different conditions.



3 Arrival and check-in at Nardò Technical Center Security regulations and confidentiality agreements require driver and vehicle registrations for the proving ground to be done in advance. The relevant test courses are also reserved beforehand.

4 Preparation A preliminary check is done at the workshop and the car is prepared for the next stage. High-speed tests are run on the 12.6-kilometer circuit. In the course of what is called a “federal freeway replacement program,” the car is driven at its maximum speed—in this case 275 km/h. This job is done by a professional test driver. Racing gear and helmet are mandatory. >



5 Communication Drivers can contact the test supervisors or safety personnel at any time via radio, for example to pass on information or warnings.

6 Car circular track entry A transponder has been installed in the vehicle to identify it for entry onto the circular track. The barrier rises. The car now faces a drive at very high speeds with all the corresponding intensity and strain.

7 Car circular track The degree of banking on the circular track enables the car to be driven at 240 km/h on the outermost lane without needing to steer inwards. Supreme concentration on the part of the driver is always demanded. Physicians check the drivers' health and fitness at regular intervals.

8 High-speed drive conclusion When this test stage is over, the results are saved and a first summary is drafted. The driver reports all details to the test manager and hands over the car.





9 Additional tests Various operational and driving processes are carried out as part of the endurance test, for example on the Rolling Tracks and Dynamic Platform.

10 Planning the next day While with the upcoming night shift the next stage of testing starts, Giancarlo Vella is planning the details for the next day. “Precise preparation and planning are essential in order to complete the full scope of the customer’s test program within the allotted time frame,” he says. >





11



12



13

11 The next day After the night shift further testing starts at an early hour of the morning. Today's program consists of country roads and city drives. After checking out at the gate, the Porsche 718 heads out onto the roads of Apulia ...

12 Country roads As the sun rises, the test car sets off toward the north. "Of course we are also interested in poor road surfaces," says Vella. "We run a number of tests to examine precisely how the car operates in that type of extreme situation."

13 Mountain roads in southern Italy Challenging mountain roads in Apulia demand a good deal from the clutch, brakes, chassis and tires. A flock of sheep crosses the road, requiring deceleration in what is otherwise a very concentrated and strenuous drive.



14 Break The refueling stop is also used to open and close the top, windows and luggage compartment, and to document the results of the drive thus far—always in accordance with the customer's requirements and specifications.

15 On tour The speed is reduced while driving through villages, but the largely straight sections of highway segments on the specified routes offer good opportunities to test the car's driver assistance systems.

16 The day is nearly over After completing the test unit, the car heads back to the Nardò Technical Center. When the new shift takes over, the drivers and test directors get together to discuss the results. Additional drives—on both proving grounds and public roads—still need to be run before the test program is completed as specified by the customer. When all the tests have finally been performed and evaluated, the results are handed over to the customer in Germany together with the car. ■

