

# M A C A N

*In the wild, it's an SUV.  
In its lines, a coupe.  
In its handling, a sports car.  
In everything, a Porsche.*

By Jürgen Zöllter





# S P E E D

The first Porsche in the compact SUV segment sets new standards in terms of driving dynamics and pleasure



# SPACE

The basic geometry for agility: Low center of gravity, 2,807 mm wheelbase, 1,655 mm front track width, and rear track width a fraction narrower at 1,651 mm

**B** rake, take the corner, hit the gas, and accelerate out of the curve at full throttle. If you countersteer before the apex of the curve to keep the somewhat drifting rear-end under control, you've graduated from the Porsche school for rear-wheel-drive sports cars. Like Hans-Jürgen Wöhler, the longtime head of the Boxster and Cayman mid-engine model lines who is now responsible for that tingling and ferocious feeling in sporty, yet family- and terrain-friendly, Porsche models. Wöhler knows all about controlled driving pleasure—he lives and breathes it. But today he's not driving a mid-engine Boxster with rear-wheel drive ...



The model-line director juggles the latest model from Porsche on the curvy test-track, a compact, coupe-esque, catlike SUV: the Macan. Hans-Jürgen Wöhler drives it like a sports car, and that's really the whole point. More precisely, it's the rite of passage at the end of the usual rigorous development process. Wöhler's relentless scrutiny of the car's higher driving dynamics ends in confirmation that, once again, the result is a Porsche through and through.

The uninitiated would be forgiven for wondering whether this just 4.70-meter-long SUV with increased ground clearance, all-wheel drive, and excellent day-to-day usability is moving the company into a different world, but Wöhler calmly sets things aright: "Not at all! We're moving within the clearly defined borders of Porsche-world—we've just added a new feature in the landscape."

The Macan. The word means "tiger" in Indonesian, and no doubt will soon be synonymous with the first vehicle that truly deserves the name of compact SUV. With the Macan, Porsche has added another independent new model line to its range of exceptional vehicles.

With a low center of gravity more typical of sports cars, the Macan makes drivers feel as if they're driving a true sports station-wagon rather than an SUV. And the Macan fulfills its promise with tiger-like grandeur. It bounds around corners with agility that is unprecedented in its segment. The otherwise typical body roll has been reduced to a minimum.

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Porsche DNA—born in the 356, sharpened in the 911, refined in the SUV, Gran Turismo, and mid-engine segments, and matured to a state of sustained efficiency in the 918 Spyder—gives this tiger its typical character. The drivetrain, stability control system, chassis with steel-spring or air suspension, and the finely-tuned precision steering received best marks for longitudinal and lateral dynamics even in initial test prototypes. The Macan's organs work in time with the Porsche heartbeat. The V6 engine originally developed for the Panamera Gran Turismo was planted in the Macan S, where the displacement was increased from 3.0 to 3.6 liters for the Turbo version.

In the 294 kW (400 hp) Macan Turbo, you can feel the difference. With two turbochargers adding oomph, the incredibly responsive V6 engine springs into action with verve. In Sport and Sport Plus driving modes, the seven-speed Porsche double-clutch transmission (PDK) selects the ideal gear for putting up to 550 newton-meters of torque on the pavement. Fast, smooth, and precise. When the clutch grabs, the Macan propels us forward with uncommon vehemence, accompanied by an emotional sound from the exhaust tract, interrupted only by the dry roar of an upshift. In corners, it suffices to hold the steering wheel still to let the Macan rip through the curve with élan. "Sports-car steering," say the developers laconically, referring to the high steering precision for exceptional cornering for which Porsche

# POWER

In the Macan S, a three-liter V6 bi-turbo engine puts out 250 kW (340 hp); the Macan Turbo provides 294 kW (400 hp)



*When the clutch grabs, the Macan propels us forward with uncommon vehemence, accompanied by an emotional sound interrupted only by the dry roar of an upshift.*

cars are known. In conjunction with the Porsche Traction Management (PTM) active all-wheel-drive system and standard mixed tires, the steering is primed for sporty driving.

The Macan sounds just like you would expect the tiger in Porsche to sound, thanks to its design in the right rear silencer. For engine speeds below 2,500 rpm, the so-called comfort flap remains closed. But over that and under load, it opens and enables the tuning flap to generate a hammering staccato that is uniquely captivating and unmistakable, well beyond the ranks of modern cats of prey.



The Macan also has managed to achieve the rear-oriented setup so prized among sports-car enthusiasts. The limits to which the Macan can be pushed with the gas pedal are beyond the frontiers of the known SUV world. This mastery of sport driving technology is predicated on a fine-tuning of the chassis that only engineers with the corresponding driving predilections can provide—like the technicians at the Porsche Development Center in Weissach.

Optional features include the well-known Sport Chrono Package with the Launch Control race-start function, which controls rapid accelerations at the limits of tire traction capabilities in Sport Plus mode—enabling sprints from a standstill that heretofore seemed unattainable in this vehicle class.



Hans-Jürgen Wöhler, director of the SUV model series:  
 "The new Macan delivers an outstanding level of driving pleasure"

The level control in the optionally available air suspension chassis boosts the Macan's off-road capabilities to new heights: after all, the ground clearance can be raised by 40 millimeters at the press of a button. The loading floor, by contrast, can be lowered by 40 millimeters at the press of a button to make loading and unloading easier on the joints.

The Macan has met all of the development goals: it smells, sounds, and moves like a Porsche, savoring unparalleled driving dynamics while sipping fuel. The proven coasting and start-stop functions ensure efficiency in the

fuel consumption department. True to its nature, even beyond the realm of dynamic motion, the tiger is always ready for the hunt, but much too intelligent to waste its energy.

**MACAN TURBO**  
 Engine: V6 bi-turbo  
 Displacement: 3,604 cc  
 Power: 294 kW (400 hp)  
 Maximum torque: 550 Nm at 1,350–4,500/min  
 0–100 km/h: 4.8 sec.  
 Top track speed: 266 km/h (164 mph)  
 CO<sub>2</sub> emissions: 216–208 g/km\*  
 Fuel consumption  
 City: 11.8–11.5 l/100 km\*  
 Highway: 7.8–7.5 l/100 km\*  
 Combined: 9.2–8.9 l/100 km\*  
 \* Versatility depending on the tire set used

# Technology for the Tiger

*The Macan sets new standards. It is the Porsche in its segment. An all-rounder on and off the road, thanks to the engineering acumen in Weissach.*

By Jürgen Zöllner

**W**hat distinguishes the compact SUV from Porsche? How did it manage the typical Porsche panache? How did the Macan get its characteristic authority and its outstanding driving dynamics and comfort qualities?



For the market launch, two gasoline engines and one diesel are available as driving forces. Thanks to bi-turbo-charging, the 3.0-liter V6 in the Macan S delivers 250 kW (340 hp) and up to 460 newton-meters of torque. In the top model, the Macan Turbo, a 3.6-liter V6 bi-turbo engine puts out 294 kW (400 hp) and a maximum torque of 550 newton-meters. Even the Macan S Diesel with its 3.0-liter V6 diesel engine and an output of 190 kW (258 hp) can scout its territory with feline swiftness, thanks to its elaborate SCR

technology (Selective Catalytic Reduction with urea injection). This technology enables the diesel, like the gasoline variants, to fulfill the Euro 6 emissions standard.

In order to fit these turbocharged V6 engines under the especially streamlined hood, certain prerequisites had to be created for the engine space, such as a special air guide on the intake side. The cooling headwind enters the forward area of the engine compartment through the wide air intakes in the front end and is then partly routed through specially designed channels in the hood to the air filters and ultimately the turbochargers.

The power of all three engines is transferred and apportioned by a seven-speed Porsche double-clutch transmission (PDK).

As in the Cayenne and Panamera, a hang-on power divider with an electronically



**3**  
 liters of displacement is the minimum among the three engines offered at the market launch; the Turbo sports a 3.6-liter engine



6

is the European emissions standard voluntarily met by all Macan models thanks to efficient drive technology

controlled multi-plate clutch developed especially for the Macan ensures torque distribution between the front and rear axles in the dynamic Porsche style. In normal driving conditions, the active all-wheel-drive system distributes the lion's share of the drive torque to the rear axle and can direct up to 100 percent of the torque to the rear or front axle as conditions require. To optimize the pace in corners, an electronically controlled rear-axle differential lock enables variable torque distribution between the inner and outer wheels in the corner.



And for all of its attractiveness, even the pure form never loses sight of its functional role. A flat and low roof line reminiscent of a coupe combines with a low-sitting body to create a highly dynamic appearance. The low sitting-position for the vehicle class adds an additional touch of sportiness. With optimal side support, the seat system ideally integrates passengers and, together with the tri-spoke sport steering wheel with shifting paddles from the 918 Spyder, gives the driver an especially intimate sense of connection with the Macan—a feeling enhanced by the direct electric steering and the chassis.

Standard for all variants of the Macan is a steel spring suspension that works in conjunction with vibration dampers to ensure good contact with the road. The Macan Turbo comes standard with active variable dampers (PASM) that enable a sophisticated spread between comfortable gliding and highly engaged driving.

An optional air suspension is available for the Macan. It makes it possible to completely insulate Macan passengers from the vicissitudes of the road surface or allows, if desired, the opportunity to feel the road in all of its detail. The air suspension also offers a leveling system that enables the Macan to raise its ground clearance by 40 millimeters for off-road use. If the terrain allows it, you can drive the Macan at this level at up to 120 km/h. Of course, Porsche Stability Management (PSM) then switches into a less severe mode; and to simplify the dosing of power, the gas pedal setup has a longer pedal travel setting.

The Macan is unmistakably a child of Weis-sach, and is truly “made in Germany.” For the species-appropriate rearing of the tiger, Porsche expanded its Leipzig plant to include a completely new production line with an investment of €500 million. ●

# 7

gears without interruption: The Porsche double-clutch transmission comes standard in the Macan



#### MACAN S

**Engine:** V6 bi-turbo  
**Displacement:** 2,997 cc  
**Power:** 250 kW (340 hp)  
**Maximum torque:** 460 Nm at 1,450–5,000/min  
**0–100 km/h:** 5.4 sec.  
**Top track speed:** 254 km/h (156 mph)  
**CO<sub>2</sub> emissions:** 212–204 g/km\*  
**Fuel consumption**  
 City: 11.6–11.3 l/100 km\*  
 Highway: 7.6–7.3 l/100 km\*  
 Combined: 9.0–8.7 l/100 km\*

#### MACAN S DIESEL

**Engine:** V6 turbo diesel  
**Displacement:** 2,967 cc  
**Power:** 190 kW (258 hp)  
**Maximum torque:** 580 Nm at 1,750–2,500/min  
**0–100 km/h:** 6.3 sec.  
**Top track speed:** 230 km/h (143 mph)  
**CO<sub>2</sub> emissions:** 164–159 g/km\*  
**Fuel consumption**  
 City: 6.9–6.7 l/100 km\*  
 Highway: 5.9–5.7 l/100 km\*  
 Combined: 6.3–6.1 l/100 km\*

#### MACAN TURBO

**CO<sub>2</sub> emissions:** 216–208 g/km\*  
**Fuel consumption**  
 City: 11.8–11.5 l/100 km\*  
 Highway: 7.8–7.5 l/100 km\*  
 Combined: 9.2–8.9 l/100 km\*

\* Versatility depending on the tire set used



Porsche chief designer Michael Mauer (right) and Mitja Borkert, head of predevelopment design, looking at "their" Macan.

# *Eye to Eye*

*The muscle of a tiger with a 911 in its DNA: Only a Porsche SUV could be this beautiful.*

By Valerie Höhne Photos by Rafael Krötz





# D N A

Have we met? Yes. In 2012 the concept study of the Panamera Sport Turismo became the first Porsche to feature taillights in a 3-D design. As narrow as they are, the 911 was clearly the godfather. Even the rear of the Macan flaunts its brand identity.

*The coupe-esque Macan shows in uncompromising fashion that there is no contradiction between sportiness and comfort, functionality and elegance.*

**T**he line follows the legend. A gently rising, flowing front transitions to a dynamic drop toward the rear, exuding elegance and speed and stoking passions. Intrigue on four wide wheels that captivate the beholder in the blink of an eye. Sports car? Or is it an SUV? A class of its own. Powerful ... naturally. Fast ... of course. But also blindingly beautiful. The heart races.

Macan—"tiger" in Indonesian—is its name. A predator cat, gently purring or snarling wildly, that looks as natural in the urban jungle as in the wild backcountry.



Dateline Weissach, the hallowed halls of Porsche's development temple. Chief designer Michael Mauer proudly explains the new Porsche dimension. With its fifth model line, Porsche is now bringing its second SUV after the Cayenne to the market. A small revolution. Mauer enthuses: "It's a Porsche, right down to the last detail. How it looks both inside and out. How it drives and feels. How it takes the corners. How it sounds. We took our time to get the proportions right, to preserve the brand identity, fulfill the requirements in this segment, and set new standards along the way." It has been a balancing act for Porsche designers—and it is executed to perfection.

The Macan shows in uncompromising fashion that there is no contradiction between sportiness and comfort, functionality and elegance. It playfully combines seeming contradictions and draws strength from them. It exceeds the demands that an SUV must satisfy, and does so naturally. Yet



Wide, flat, dynamic:  
The Macan unites the  
sports car with the SUV.

it carries the uncompromising aspect, the irresistible Porsche magic, that leaves no one cold. It is a mobile exclamation mark.

Fresh, young, confident—the picture of poise. And Macan lives up to its name. The muscular body displays all of the tension of a jungle cat about to pounce: provocatively, playfully flirting with the dynamism of the form, flexing its powerful flanks and lissome tendons. It displays an exciting new flash of muscle that defies any temptation to compare it with the bigger Porsche SUV.

"The Macan is not a miniature Cayenne," Mauer explains. "That would imply that the two differed only in their dimensions.

In fact the Macan has its own headlight graphics, its own typical Macan taillights, and its own compact line. While with the recent Cayenne our template was more oriented toward the luxurious style of the Panamera, with the Macan we're keeping more to the clear, very reduced forms of our sports cars." Its 911 bloodlines are unmistakable—visible in every fiber of its being.

In front, the emphasis is on the wings and the air intake that is no conventional radiator grill. From the side, the eye follows the swift descent toward the rear and the very pronounced rear shoulders, ending with the relatively flat rear-end. As



The clamshell hood not only makes the engine compartment more accessible but also lends the front end a striking visual unity: The seams run above the wheel houses and are barely visible.

Michael Mauer describes it, “In terms of the form language, the Macan is not a typical SUV—they tend to be rather high-riding and voluminous. Our solution is a lot flatter, more like a coupe. The Macan stands out with the best proportions in the segment, and is also clearly the sportiest option on the market.”

It is an everyday champion, composed, elegant, an eye-grabber that betrays a bit of the glamour of its charismatic relatives. The taillights do indeed share the narrowness of those in the 911, albeit in the three-dimensional style of the spectacular concept study of the Panamera Sport Turismo. Then there’s the vertical arrangement of the front lights and the clamshell hood with its very subtle side seams. The striking sideblades, which not only stretch the Macan visually but also, with different material options on offer, add an individual touch. The result is a confident beauty that is the crowning achievement of the compact SUV segment. It is a masterpiece that began some three years ago as a bold vision—with a simple pencil and a first delicate line on a white sheet of paper.



“It began with the theme, the idea of it,” says Mitja Borkert, who, as the head of pre-development design, is responsible for the project. “Then we created the proportions in a 1:1 scale plasticine model. Then we went to the wind tunnel. Along with our

# SPORT

The steering wheel with the new spoke design is based on the one in the 918 Spyder super sports car; the instruments are arrayed clearly behind it.





Designs are often just dreams—at Porsche they become reality. The design drawing unmistakably shows a Porsche Macan. The tiger has asserted its character.

colleagues from the production, chassis, and engine departments, we slowly honed in on the technical requirements, without losing sight of the desired design. Occasionally there was a spirited tug-of-war between the departments,” says Borkert, with a wink, “but in the end it led to the best result, in typical Porsche fashion.”

The clamshell hood was a special challenge for the makers of the Macan. Made of a single piece, it lends the compact SUV a wonderfully flowing silhouette, with the seams an understated impression on the side. The sculpture finds its finishing touch in the handle-free rear end. There, too, nothing interrupts the language of aesthetics; required technology is hidden in refined details: the push button for opening the tailgate is located in the rear wiper. It is a fine technical solution—and perhaps will be in coming Porsche generations, as well?

Borkert says, “With every new model we strive to introduce innovations and raise the quality yet another notch. With the Macan, however, we’ve achieved an especially large step in the evolutionary process. Take the body design. This huge front

hood, in one piece and with such quality and precision—there’s nothing like it in the world. For me, that’s the pinnacle of engineering acumen and an element that you would otherwise find only in a super sports car.”



The timeless beauty of the exterior is matched by the SUV’s interior—an impressive stage for everyday utility, with enough space for passengers, recreation, and functionality, and simultaneously housing the modern control center harnessing the forces of the new Porsche tiger. The impression is of a clean, purist environment. It is familiar in the best sense. “Welcome home!” the cockpit seems to whisper, enticing the driver with details whose appeal is immediate.

The rising center console and the logical function groups for buttons and switches give you convenience and navigation at your fingertips. “The Macan immediately gives you the feeling that you’re a part of the machine,” says Mauer. “Although, this being an SUV, you do sit higher than usual; you are in, not on, a Porsche. You instantly

become one. That’s due to things like how an instrument is angled, or where the beltline is.” The upper side of the dashboard is dominated—as is only appropriate for a sports car from Porsche—by clean, reduced surfaces.

In the middle is the compass, to the left the three tubes with the rev-counter, speedometer, and onboard computer. In typical Porsche fashion, the rev-counter forms the high point in the center. The Macan’s sportiness becomes tangible in the steering wheel: it’s inspired by the 918 Spyder.

The Macan is, finally, an impeccable ride. Or in Mauer’s words, “A sporty vehicle that comes across not as extremely aggressive but as timelessly beautiful.” And the Macan doesn’t just cut a fine figure during the day. Says Borkert, “I’m looking forward to having one pass me on the autobahn at night and watching those sleek taillights go, accentuating the contours and stretching the flanks.” The Macan is a tiger on the prowl, whether in the “wild” or on roads. ●

MACAN CO<sub>2</sub> emissions: 216 g/km to 159 g/km  
Fuel consumption (combined): 9.2 l/100 km to 6.1 l/100 km