

REIFENTEST Sportreifen der Dimension 225/40-18 und 285/30-18



Gripaler Effekt

Straßenzugelassene Rennreifen sind stark im Kommen. Dunlop, Michelin, Pirelli und Yokohama haben die Gripkünstler für den Porsche 911 im Programm. Wo liegen die Unterschiede, und was gibt es beim Umgang mit den weichen Pneus zu beachten?

Tire test
Sport tires
sized 225/40-
18 and
285/30-18

The grip effect (this is a non-translatable play on words also meaning an infection).

Street legal racing tires are coming on strong. Dunlop, Michelin, Pirelli, and Yokohama have the art of grip in their Porsche 911 plans. What are the differences and what does one need to watch out for when it comes to these soft tires?



■ Drauf und drin: Vor verschiedenen Proben halten das Montageteam in Kabinen. Dort das Geschick war Hockenheim



Die Testfelgen

Doppelt bestückt ist besser

Zwar sind Sportreifen auch auf öffentlichen Straßen zulässig. Durch die eingeschränkten Nässeigenschaften empfiehlt sich demnach die Anschaffung eines zweiten Radsatzes, um die Trockenspezialisten erst auf der Rennstrecke zu montieren. Der italienische Hersteller Mille Miglia (Tel. 0 73 317 02 13 14) bietet beispielsweise das Cup 3 genannte Reif für den Porsche 911 in den Größen 8,5x18 Zoll vom 325 Euro und 10x18 Zoll (358 Euro) für die Hinterachse an.

Gut Ding will Weile haben. Dass sich die Geburt des von sport auto angebotenen Vergleichs der auf dem Markt befindlichen Sportreifen allerdings nahezu ein Jahr hinziehen würde – das ist der Weile zu viel.

Zuerst fanden sich keine identischen Größen in den Angebotslisten der Hersteller. Und als sich schlussendlich vier unterschiedliche Kreationen – Dunlop Super Sport Race, Michelin Pilot Sport Cup, Pirelli P Zero Corsa und Yokohama Advan 048 in der für Porsche gängigen 18-Zoll-Dimension 225/40 vorn und 285/30 hinten zusammentragen ließen, hemelte Porsche den Test mit der Verzweigerung eines adäquaten Fahrzeugs. Zum Glück half das Porsche Zentrum Rems-Murr mit einem GT3 aus.

Der nächste Stein, der in den Weg rollte, war die in Hockenheim für Formel 3-Tests abgesteckte enge Schikane Ausgangs der Quersparge. Gleiche Voraussetzungen zwar für alle – die ermittelten Rundenzeiten sind jedoch nicht mit den normalen Hockenheim-Runden auf dem Kleinen Kurs in Relation zu setzen. In Carrera-Cup-Kreisen spricht man von einem Zeitmanko von zirka vier Sekunden.

Und wie in Ausgabe 8/2000 bereits bewiesen, ermöglichen die weichen und mit deutlich mehr Positivanteil im Profil ausgerüsteten Sportgummis gegenüber herkömmlichen Reifen auf der badischen Rennstrecke einen Vorteil von rund zwei Sekunden pro Runde. So weit also die Vorgeschichte...

Aber auch der grundsätzliche Umgang mit den straßenzugelassenen Sportreifen sollte sorgfältig vorbereitet sein – vor allem beim feinfühligem Justieren des Luftdrucks. Seitens der Hersteller werden Drücke von 2,3 beziehungsweise 2,4 bar an der Vorderachse und 2,7 oder 2,8 bar an der Hinterachse empfohlen. Wohl gemerkt: im warmen Zustand. Und die richtige Temperatur von rund 70 Grad Celsius stellt sich erst ab zirka vier Runden ein. Mehrmaliges Kontrollieren ist also empfehlenswert.

Um das Können der Pneus richtig auszuschöpfen, empfiehlt es sich zudem, die Sturzwerte an Vorder- und Hinterachse zu erhöhen. In unserem Fall bekam der GT3 vorn 2,55, hinten 2,40 Grad Sturz spendiert. Das ist zwar nicht das maximal Mögliche. Die Werte sind aber ausreichend, um den Reifen mit seiner vollen Aufstandsfläche zum Arbeiten zu bringen, und noch gering genug, um nicht den Geradeauslauf komplett zu vernachlässigen.

Derart gewappnet lenkt der zweifelsohne bereits serienmäßig überaus agile GT3 granatenmäßig bei der kleinsten Lenkradbewegung in die Kurve ein. Dabei offenbart sich ein Gripniveau, das sich eindeutig mehr den Fähigkeiten eines profillosen Slicks annähert, als an die quietschende Momente normaler Straßenreifen zu erinnern.

Am präzisen lässt sich der Hecktriebler mit den Yokohama ins Eck treiben. So haarfein jedoch die Vorderachse auch den Vorgaben seines Lenkers folgt.

The test rims

Two sets are better

These are sport tires that are street legal. Due to their limited abilities in wet driving conditions, a second wheel/tire combination is recommended. The dry specialized racing tire should just be driven on at the race track. The Italian supplier of Mille Miglia (ph. 07351/1821914) offers, for example, the Cup 3 rim for the Porsche 911 in the size 8.5x18 on the front (325Euro) and 10x18 on the rear (358 Euro).

Good things take time. No one expected that the time from when the Sport Auto racing tire comparison test was planned to when it actually occurred would be a year – this was too long.

First, there were no identical tire sizes available in the suppliers lists. And, when I finally found 4 different brands – the Dunlop Super Sport Race, the Michelin Pilot Sport Cup, Pirelli P Zero Corsa and Yokohama Advan 048 in the required 18 inch dimensions of 225/40 for the front and 285/30 for the rear – Porsche wasn't able to provide an adequate test car.

Luckily, the Rems-Murr Porsche Center found a GT3 for our use.

The next stone that rolled in our path was that the Formula 3 test track at Hockenheim had been modified (they changed the schikane sections).

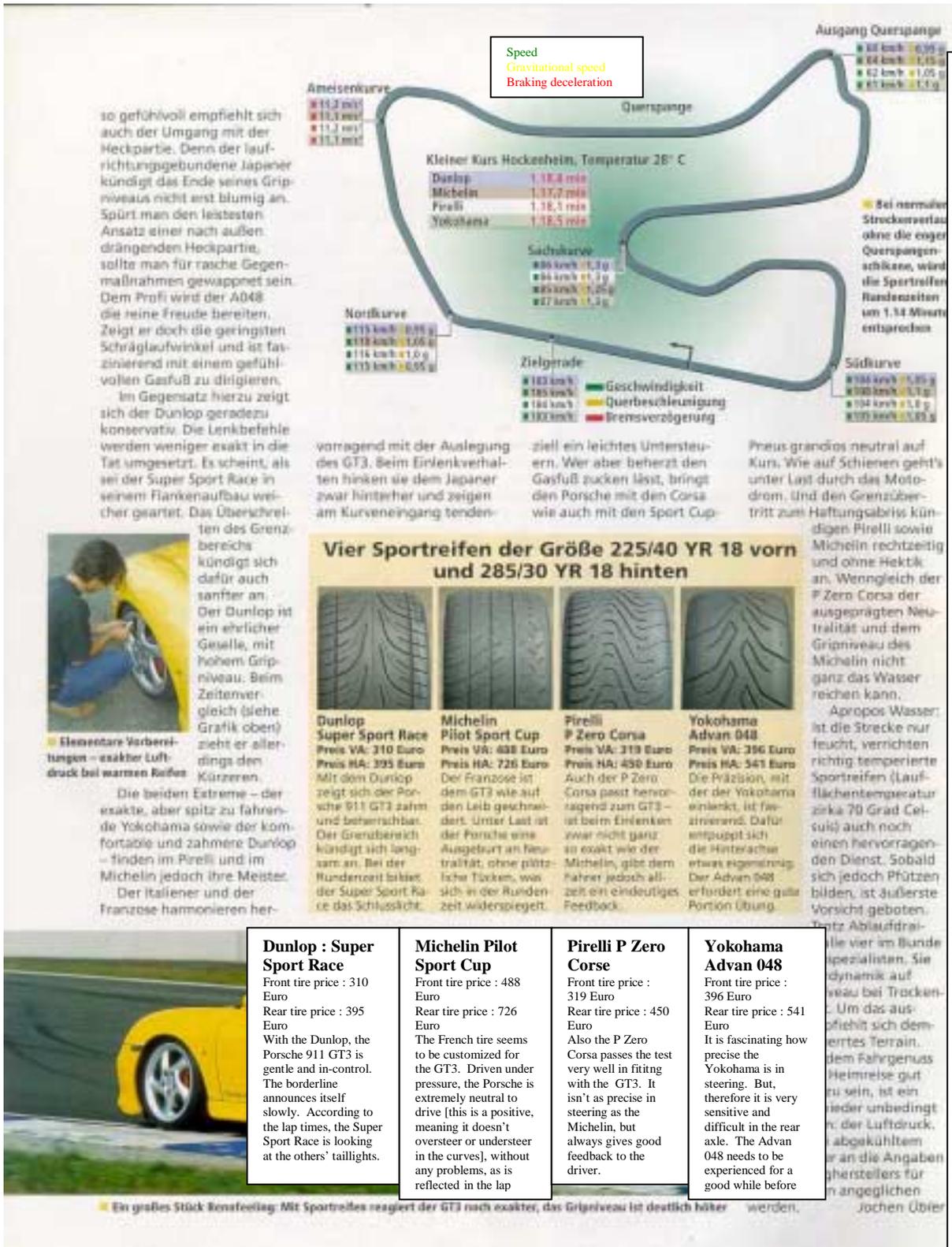
Therefore, we couldn't compare these tests to earlier test results -- the time per lap would be different from previous tests. For example, during the Carrera Cup race, there was an approximate 4 second per lap difference between the normal Hockenheim set-up and the altered schikane set-up.

Like described in the August 2000 issue, it is proven that soft tires with an extreme positive tread profile have an approximate 2 second (per lap) advantage over ordinary tires. So, this was the background information.

The ground rules for the street-legal sport tire test should be planned precisely – above all the sensitive air pressure adjustment. Suppliers recommended 2.3 – 2.4 bar [European air pressure measurement] on the front tires and 2.7 – 2.8 bar on the rear tires. This is for warm driving conditions of approximately 70 degrees celcius which occurs after about 4 laps around the circuit. Therefore, it is necessary to check the pressure very carefully and to adjust it as needed.

To reach the tire's maximum potential, it is also recommended that the camber (alignment) in the front and rear is increased. In our case, the GT3 was adjusted to 2.55 degrees in the front and 2.40 degrees in the rear. This is not, however, the maximum alignment possible. The values are good enough for our purposes and goal of wanting to test the full tread when driving straight or in corners.

Armed with these slight adjustments, you can already feel that the GT3 is more agile and reactive to the slightest steering wheel movement through the curves. Without any doubt these tires are more like treadless slicks than normal, squeaking street tires. The rear-wheel drive car was most precise in the corners with the Yokohama tires. These tires have such a hairfine sensitivity that the driver isn't aware that the tires will « give out » in a curve until they actually do.



The unidirectional Japanese tire doesn't announce it's loss of grip – it just begins to slide without warning. If you feel even the slightest loss of grip, you should react immediately before the car is out of control. The professionals would be pleased with the A048. Once you figure out how this tire works, you can nearly steer it like a conductor conducts a symphony.

On the other hand, the Dunlop performed very conservatively. The steering commands are less precise. It seems as if the sidewall of the Super Sport Race is softer. Therefore, if you go over the limit, the tire announces that it is about to lose grip. The Dunlop is an honest tire with a high grip performance. But, if you compare lap times (see graphic above), the Dunlop falls short of other tires.

Both extremes – the precise, but difficult to drive Yokohama and the comfortable and gentle Dunlop – find their « master » in the Pirelli and the Michelin. The Italian and the French harmonize extremely well with the GT3. When steering into the curve, both are a little bit behind the Japanese and show a tendency for a light understeer in the beginning of the curve. But, if you drive with your heart, you can bring the Porsche to a great neutral (i.e. not oversteering or understeering) with the Corsa or the Sport Cup. The car speeds through the course like it was on tracks. Both of the tires tell you early enough and in a mild manner before they lose grip. Even with the neutral driving quality and the strong grip of the Corsa, it can't hold water compared to the Michelin.

A big piece of the race feeling : with sport tires the GT3 reacts even more precisely and the grip is noticeably better

Speaking of water, if the racetrack is damp and the tires reach the optimum temperature of 70 degrees celcius, all the racing tires still perform well. But, if there are real puddles, caution is recommended. Despite the water channels, none of the four tires are rain specialists. They are for driving excitement at the highest level, but on dry surfaces. To reach the limits of the tires, it is recommended driving on a cleared terrain (without any obstacles or other cars). After all this driving excitement but before you head home, you have to not forget to readjust the air pressure for normal street driving. This should be done with cooled-off tires and by following the manufacturers suggested street tire airpressure.