



### ***The Competiton***

The Deutsche Tourenwagen Masters (DTM), the German touring car championship, is a competition with great international prestige thanks to the participation of ex-Formula 1 drivers like Mika Häkkinen, Jean Alesi and Heinz-Harald Frentzen. The DTM also serves as a springboard for young rising stars in the world of motor racing.

The resurrection of the German touring car competition in the year 2000 was based on the successful concept of the past and on common sense. Under the aegis of the ITR (international touring car racing association), forward-looking technical rules were laid down, building on the old DTM philosophy. The DTM 2006 championship included 11 races, 7 of them in Germany and the rest spread over different European circuits: Brands Hatch (United Kingdom), Zandvoort (Holland), Circuit de Catalunya (Spain) and Le Mans (France).

The DTM aims to put on a spectacular touring car competition, but at the same time it is conscious of cost. A range of components including the gearbox, cardan shaft, motor electronics, rear spoilers and carbon fibre brakes are regulated so as to be the same for all manufacturers.

A DTM engine must withstand a full racing season. A DTM vehicle is a touring car designed for no-holds-barred competition, with the profile of a top-of-the-range four-door car built on a steel tube frame. The bodywork is plastic, and the sheet steel roof is from the production model. Front wheel drive is obligatory, and ancillary driving systems such as ABS or traction control are banned.

For the DTM only V8 engines with a cylinder bank angle of 90° are allowed, with a maximum displacement of four litres and up to four valves per cylinder. The induction system must be fitted with two air restrictors, each of a maximum 28 mm diameter.

Proof of the strictness of the DTM technical rules is that the tyres and electronic system, among other features, must come from the same supplier for all teams

# Opel Vectra DTM "Heinz-Harald Frentzen"



**SCX car**

SCX brings us the Opel Vectra DTM driven by the German Heinz-Harald Frentzen in the German touring car championship (DTM) in 2005. The main distinguishing feature of this model by the German manufacturer is its highly sporty look, with air intakes in the front bumper and the bottom of the doors. The nose is quite simply spectacular, with an attractive set of headlights, a wide front and a front spoiler, as well as other details such as the windscreen wiper or the two small fins at the sides of the bumper. The dominant colour is red, an aggressive, attractive and sober colour, which contrasts with the white used for the markings, including the number 10 on the car's roof.

From the side view the aerodynamic features behind the front and rear wheels stand out, along with the lowered suspension, the wide, low-profile tyres with their markings and the alloy wheels.

The driver's name and the German flag – showing where both Frentzen and Opel come from – can be seen on the side windows.

Inside the car, the reinforcing bars, competition seats and painstaking detail on the single driver's clothes and accessories (gloves, helmet and overalls) are striking.



Black is reserved for the front and rear spoilers, the latter bearing the name of the German manufacturer in white letters.

From the back, increased body width and the enormous double spoiler give the vehicle better aerodynamics and make it even more spectacular

## ***The real car***

SCX presents the Opel Vectra DTM, the vehicle raced in the 2005 DTM by the experienced German driver Heinz-Harald Frentzen. The manufacturer with the lightning bolt badge will not be competing in the DTM this year, leaving it as a competition between another two German makers, Audi And Mercedes.

The design of the new vehicle's bodywork is inspired by the Vectra GTS, the sportiest version of the now veteran model. The car features as V8 engine, like its competitors in the DTM. Weight is another factor, as the the technical rules for this competition state that car and driver must not exceed 1,080 kg.

The Vectra's safe, effective structure consists of a space frame, a reinforced plastic and carbon fibre survival cell and special features to protect the chassis in the event of an impact. The brake discs are also made of carbon fibre, a widely-used feature which combines lightness and safety

The work done by Opel at the OPC DTM Center near Augsburg was amply rewarded in this excellent car, characterised by power and mechanical efficiency.



# Opel Vectra DTM "Heinz-Harald Frentzen"



High Intensity Headlamps  
Xenon effect



Removable and adjustable magnet



Guide with suspension



a.r.s. Guide



Tilting Chassis

## Test Bench

The Vectra is a difficult car to understand at first touch of the throttle because of its enormously long rear. This gives it extra volume and weight just where these factors are the most difficult to cope with. To get the hang of it, start by driving it slowly, and once you have learnt to deal with the tendency to skid when going into bends you can use this to your advantage by taking the car round bends half across the road. This controlled skid technique will help to make the best turns on the circuit. The model's strong points include the guide distance, which enables it to take bends comfortably, and the car's overall length, which gives it the momentum you need.



Inertia factors are greater, but thanks to the chassis both the shock of accelerating and braking and changes in balance are cushioned in this car. This increased comfort comes from the pivoting motor mounting, which also gives it a fine touch which other cars only gain after extensive running in. Obviously, for competitive use of the Vectra some time on the test bench is needed, though it is the typical case of a car with demands which can be learnt and met with a little practice.



### SPORT MEASURES TABLE

Wheel base	87,5 mm	Transmission type	4x2 rear
Distance	101 mm	Transmission ratio	9/27 = 3
Wheel track	58,5 mm	Type of Guide	Pivotant ARS
Wheel diameter	21 mm	Screws	5 (2+2+1)
Car weight	88,7 gr	Other	Tilting motor pod
Bodywork weight	29,5 gr		

### MEASURES TABLE

Motor	RX-42
Traction	rear
Front	Ø 18,3 x 9,8 mm
Rear	Ø 18,3 x 9,8 mm