

automotive testing technology international

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Chris Biggs

Chevrolet's global vehicle line director has taken big steps to improve small cars

Euro 6

The 2014 regulations are fast approaching. Be prepared with the latest technology



EcoSport

Ford aims for new generations in new markets with the EcoSport, the first One Ford car to be developed in South America, and the first to be built in India

Aerodynamics

Is CFD blowing away wind tunnels? Seven experts debate the future

BMW 3 Series

The junior exec against which all others are judged. The 2012 model features great advances



Transport Canada

Could Quebec's new crash test facility be the most accurate in the world?

ATP

The return of the facility test. In this issue: can Germany's ATP retain five-star status?

Froude Hofmann

Join us on our visit to the dyno guru's UK HQ to find out why it is a major player in the market



ATP

Nine years after its first visit, *Automotive Testing Technology* returns to the ATP proving ground to see if the German giant has still got what it takes

WORDS BY GRAHAM HEEPS

➤ Back in 2003, we were blown away by Automotive Testing Papenburg (ATP), the vast proving ground just west of Bremen in northern Germany. We called it “probably the finest proving ground in Europe, and one of the best in the world”. Praise indeed!

Almost a decade later, there’s no sign of ATP resting on its laurels. There has been steady investment in new facilities and equipment, with more planned in the short and medium term.

Perhaps the most important addition of recent years is the

GPS-based Traffic Control System (TCS). Co-developed with Bosch, BMW, and Volkswagen, this monitoring, messaging, data-recording, and emergency-detection system was implemented for the first time at Papenburg, some 2.5 years ago.

We watched an ATP technician fit the required antenna, black box, in-car screen, microphone, and power supply to a Mercedes test car in a little over five minutes, although up to 15 minutes may be required for the trickiest

applications. But once the system’s on board, the test driver no longer has to notify the dispatcher each time he moves from one test track to another, as his position is automatically relayed to the screens in the control room. Moreover, the driver need no longer monitor the radio to listen out for the positions of other cars – up to 70 of them at peak times – leaving him free to concentrate on driving.

If a driver has an accident, they can press an emergency response button on the TCS microphone, which will sound an alarm back at the control room. The system also has a number of automatic emergency detection alarms built in that detect incidents such as a car leaving the paved track or becoming stationary in an unexpected location. This provides additional reassurance

that in a worst-case scenario, an unconscious driver won’t be left undiscovered by others during a night-time durability run, for example.

In short, TCS is by far the most comprehensive and safest means of proving ground control that this reviewer has experienced. And by linking it to its booking and billing systems, ATP has made its administrative life easier, too. In the future, such a system could be the basis for fully autonomous proving ground operation, improving safety yet further.

In terms of the tracks themselves, it’s still all here: the real-world durability routes, on which cars can be driven by ABD robots if desired; the vast dynamics pad (now with the option of a recently introduced, in-house-developed ADAS test vehicle); the brake-test area

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FACILITY TEST

with different friction strips (there are plans to rebuild this area with a more efficient flooding system, too); and above all, the 12.3km (7.6-mile) high-speed oval, with its 4km (2.5 mile) straights and hands-off-at-250km/h (155mph), up to 49.7° banked ends.

This signature track remains a big draw for ATP's customers – some 300 of them in 2011 – with 60% booking time on the oval, where the straights are scheduled to be resurfaced within the next couple of years. There's no upper speed limit, making it an attractive place not just for AMG to run its hot Mercs, but for tuning companies to run their highly modified cars and SUVs in relative safety. The fastest recorded speeds to date – more than 400km/h (250mph) – were set by a RUF 9ff Porsche and a 1,407bhp Pontiac Firebird!

Tire companies – a crucial client base for ATP – also use the oval to develop high-speed rubber, as well as the UNECE 117-certified rolling noise and wet-grip tracks. Forthcoming changes to standards mean that the former will need a new surface in the coming years. In the case of the latter, ATP acknowledges that the wet-handling facility used for the grip tests has some shortcomings: it's very flat, has constant-radius curves, and is irrigated by water sprays – not always ideal in a windy location.

To rectify them, plans are in place to construct a new wet-handling track at the southern end of the 780ha facility, which will have some elevation change, more dynamic curve combinations (including some faster, wider corners), and a flood-based irrigation system. With the necessary financing still to be put in place, no date has yet been set for completion. And given the investment required, ATP is consulting extensively with its customers to ensure the design will meet their every need, before it gives the green light for construction to begin.

Another proposed new, tire-related investment concerns



ABOVE: The workshops at ATP are available for customer use, and are extensively stocked with equipment

"Plans are in place to construct a new wet-handling track at the southern end of the facility"

rolling resistance measurement. With the introduction of environmental labeling to tires sold in the EU from November 2012, ATP knows it will need to acquire a tire rolling resistance test bench in order to offer services in this area. The next facility to be added to the roster

will, however, be a new NVH test track, which is being built by an ATP customer and will be completed later this year.

With this and other investment projects in the offing, such as the introduction of a new ambulance planned for this summer, ATP is in



good health. Following the bankruptcy of former co-owner Karmann in 2009, the company is now 100% owned by Daimler subsidiary MBtech. It rode out the economic downturn with a temporary period of short-time working and has diversified its business to generate other income streams.

It performs contract testing (at ATP and elsewhere), hosts car club and small-scale motorsport events at weekends, hosts visiting groups in an old Routemaster bus, and has developed a proving ground consulting business to share its experience of building and operating a test facility with external clients, particularly in developing markets. ◀

Verdict



ATP remains hard to fault, not least because its management is anything but complacent. If the plans for new tracks and refurbishment works all come to fruition, the competition will have an even harder job keeping pace.