

HIGH-BRED HYBRID

With modern engineering and classic looks, Mechatronik's 300MSL New Tech could well be the perfect blend, writes Ian Kuah



It was a question nobody had asked before. Nobody, that is, except the Brunei Royal Family who, commissioned Mercedes AMG to build ten 300SL Gullwings and Roadsters with modern underpinnings. Using original cars as donor vehicles, these models received running gear from the R129 SL and were powered by 380bhp 6- litre AMG V8 motors.

The resulting vehicles are unique, thanks both to the source of the original commission and the fact that they were perfectly engineered, effectively by Mercedes- Benz itself. Seven of ten were eventually completed and, as such, they'll always have value to certain collectors. Purists, on the other hand, might well be aghast that in order to shoehorn a modern V8 and running gear into the 300SL, a fundamental and irreversible modification of the car's structure was required. Removing seven original, valuable cars from the tally of original 300SLs was indeed a bold move.

On the face of it, placing a mid-1990s E-Class straight six in the engine bay of a W198 300SL is an act of equal heresy. But when you speak to Mechatronik, builder of this particular hybrid, about just how careful it is to preserve the integrity of the donor car's structure, you realise that this is no act of vandalism at all. Rather, it's a blessing in disguise that enables owners to get more time on the road in what remains a beautiful, classic Mercedes.

NEW TECH

Mechatronik refers to modifications such as this as "New Tech", a concept aimed at giving old Mercedes a new lease of life. The theory goes that if the car is more usable and adapted to modern driving demands, it's less likely to live out its days locked away in a museum or private collection, never to turn a wheel again.

The idea of such extensive mechanical surgery on valuable classic like a Gullwing or 300SL Roadster may seem controversial, especially when original cars are in such demand. That said, many owners of original cars are put off using and enjoying them to their full potential by virtue of the difficulty in maintaining them. It's also worth bearing in mind that a great deal

of thought has gone into ensuring donor cars are not permanently altered.

“We have designed our New Tech conversions in such a way that they are completely reversible”, Mechatronik boss, Frank Rickert explains. “We use only original Mercedes-Benz parts wherever we can and, where we cannot – say in the case of special brackets and fittings – we make them up ourselves. Rest assured that we are perfectionists here and ensure that all work is carried out to factory standards, or better. Apart from the New Tech conversion itself, we know our subject well enough also to address weak points of the original design in the course of a restoration or New Tech conversion.”

The interest and orders that New Tech has generated from Mercedes enthusiasts all over the world proves the point that many people are getting bored of today’s high volume, mass-produced cars. These peoples realise that with New Tech the cost and, more importantly, time require to maintain a classic car for everyday use can be neatly sidestepped. More than that, the modern engine, transmission and other drive train components grafted in by a New Tech conversion enable an old warrior to behave just like a current production Mercedes-Benz car in the cut and thrust of today’s demanding traffic conditions. The sheer density of traffic we have today is several times greater than it was in the 1970s, let alone the ’50s or ’60s, and classic cars with carburettors or mechanical injection and points in their distributors simply do not like today’s stop-go traffic.

Having a modern engine and ignition ensures first-time starting and perfect running each and every time. And with service intervals pegged at 10.000 miles, using such a machine every day is as painless as running a new car.

The 300SL New Tech prototype seen here is a case in point. Trickling through the villages near Mechatronik’s Pleidelsheim HQ, half an hour’s drive north of Stuttgart, the car idles peacefully at traffic lights and junctions, but pulls away perfectly without a stutter and maintains the impeccable running manners of a modern vehicle. All this comes with more directness and panache, too.

EASY LIFE

As someone who has spent considerable time behind the wheel of an original 300SL Gullwing, I was initially confused by the experience of driving this Mechatronik New Tech interpretation. But that feeling soon turned to my being deeply impressed by the realisation that a long- term relationship with this car would indeed represent the advantages of classic car ownership without the usual drawbacks associated with it. First of all, you have to get your head around the fact that this car will always start.

There’s no need for fancy tricks such as dancing on the throttle pedal to keep the motor alive as the mechanical injection struggles with its rich mixture in the first few seconds of its cold-start cycle. Just turn the key in the ignition and the starter kicks the straight-six engine into life and the Bosch Motronic ECU ensures that it idles perfectly, hot or cold.

You can have any variation of the M104-Series motor in your New Tech car, but Mechatronik favours the 302bhp Brabus-tuned 3.6 litre for its strong torque of 310lb/ft at 4.000rpm. This complements the easygoing nature of the vehicle, and provides enough performance to fend off challenges from modern performance machine. Its top speed of 181mph is certainly faster than I would care to go in a classic roadster! With its hot cams and the equal-length pipes of the bespoke sports exhaust manifold, this motor is as crisp as a new banknote. Blip the throttle and, despite the fact that it has a single throttle body and plenum, the revs rise and fall as quickly as on a BMW M3 which has the benefit of one throttle per cylinder.

MANUAL BOX

This makes you instantly grateful for Mechatronik's choice of a manual gearbox, since most of the M104 3.2-litre engines on which this Brabus 3.6 motor is based left the factory in an E-Class or S-Class with a four or five-speed automatic transmission. But that isn't the ideal choice for keen drivers, so Mechatronik partnered the engine to a Getrag five-speed manual with a dog-leg first-gearshift pattern. The shift requires more effort than a modern car, but its gate is precise and the engagement of each ratio is like a rifle bolt slamming home via the pleasingly simple, ball-ended gear stick. In a period car such as the 300SL, this very direct and mechanical feel is entirely appropriate.

Overall, it provides a standard of feel and keenness missing from modern vehicles, even highly focused sport cars such as the Porsche GT3.

HEAD-TURNER

The 20 km test route favoured by Mechatronik's engineers takes in a couple of villages linked by fast country roads with a variety of curves wending their way through this picturesque wine-growing region. The timeless shape of the 300SL still turns heads today and it's amazing just how much attention this 45-year-old car continues to receive.

Once clear of built-up areas, the lusty acceleration and glorious straight-six howl bouncing off stone walls add up to a magical fresco driving experience. Those outside the car will hear you coming some way off, and the sound lingers long after you've disappeared. From the cockpit, it's always there, the new stainless steel exhaust offering a deeper tone than the original, and it's more thrilling thanks to the crisp throttle response.

It's loud too – loud enough to broadcast to all around you your skill as a driver. Measured and deliberate heel-and-toe downshift blips combined with firm acceleration out of bends create a fantastic soundtrack to your progress. But, by the same virtue, if you're hesitant and clumsy, the rest of the world will know about it too! With its upgraded Mechatronik suspension kit, the New Tech SL copes admirably with the 50 per cent greater power of the modern Mercedes motor, and its upgraded brakes are on a similar plane. Our only complaint, and this must be taken in context, is that the original steering feels a touch slow-written by modern standards.

We mentioned this in our test of Mechatronik's Pagoda SL New Tech three years ago (Mercedes Enthusiast, December 2001). And, at the time, boss Frank quite rightly pointed out that, while you can install a modern power-steering system in one of these older cars, the modifications are such that you can't restore the car to original spec. Beyond that, the mechanical work on this car has been flawlessly executed, while the body, paintwork and the trim are finished to concours standards. If only a modern Mercedes were built to the same standards of fit and finish!

Incidentally, this particular example was one of ten models which were originally purchased for the Brunei project, and one of the three that was never converted. Two years ago, it came on to the market as part of a private collection, having been bought by its then owner to use on the Carrera Panamericana powered by the Brabus 3.6-litre motor.

The Brunei V8-engined models cost 1 million Lire (1.5 million euros) each. By comparison, a turn-key Mechatronik 300SL New Tech will set you back just 385,000 euros, plus tax. Since this also includes the price of the original 300SL donor car and considering the work involved in creating this car it is, relatively speaking, something of a bargain.

New to old

The New Tech 300SL is one of several fascinating conversions in Mechatronik's stable, as

Ian Kua discovers While you might expect a "New Tech" Pagoda SL or indeed the 300MSL we tested this time to blast off into the distance, you would be most miffed if a 1952 300c left you standing.

But that is the latest New Tech project which Mechatronik boss Frank Rickert and his able team are working on. It was nothing more than a shell in undercoat when we saw it, but a 320bhp Brabus 3.6-litre straight-six had already had been installed and the car was due to be on the road early in the new year.

Its owner is a Belgian businessman who likes classic Mercedes and wants something unusual to drive around in. "About 85 per cent of our business is restoration work on original cars," says Frank, "but more and more customers are interested in the New Tech concept, and I see that side of the business continuing to grow as people become increasingly bored with the comparative lack of character in modern cars.

ONE- OFFS

"Right now, there is no one else doing what we do in this area," he continues. "This is real engineering and you need both a deep knowledge of the marque as well as considerable mechanical and coachbuilding skills to pull off some of the changes required to make a New Tech car work properly.

"I am only interested in creating special cars and fulfilling the wishes of customers who want something unique," Frank continues. "When I saw the direction AMG was taking as it grew under Mercedes, I decided to leave and set up my own company. My first love is historic racing, so I set out to restore post-war classic Mercedes-Benz cars and prepare historic racers. A smaller part of the business is undertaking commissions for clients who want special models."

Based in Pleidelsheim, Germany, Mechatronik is known for restorations of popular classic Mercedes models such as the 190SL, Pagoda, 300SL Gullwing and Roaster and the 280SE 3.5 Coupe and Cabriolet. Frank recently had the idea of adding pre-war Mercedes to his list of specialities too.

Walking around the workshop area, he shows us a blue 1936 170V pick-up in the midst of a full restoration. "We are building a few of these pick-ups and vans for clients who want to use them for advertising," explains Frank. "You see a lot of retro cars, such as the new Beetle and the new Mini, being used as mobile advertising billboards. Smarts are also popular for this purpose, so we reckon a genuine pre-war Mercedes would appeal to a few more upmarket companies who do not cover huge mileages."

Frank then lifts a dust cover reveal the most beautiful 280SE 3.5 convertible I have ever seen. In glossy black with a cognac leather interior, this car was restored two years ago and had returned to Mechatronik for a full interior re-trim.

"The owner was not happy with the brown leather," says Frank. "We agreed with him that cognac was a nicer colour. In fact, we liked the result so much, we plan to do a limited edition of five coupes and five convertibles which will feature the same colour combination."

As I was being given the grand tour, a grey R107SL returned from a test drive. "That car looks standard, but it's packing a 330bhp 6-litre engine, upgraded adjustable dampers, big brakes behind 16-inch wheels and goes like hell," Frank revealed. "It belongs to a customer who owns several classic cars and that is one of his 'normal' examples!"

Since I drove one of the early New Tech Pagoda SL cars, two years ago, the specification has been growing increasingly sophisticated. "For our 2005 model year, the SL New Tech will get the Tipshift automatic, upgraded brakes with ABS, and an improved soft-top," says Frank. "A five-speed manual is another possibility – the same as we have on the 300MSL. Two gearboxes are possible: a ZF with overdrive fifth for long-distance cruising or a close-ratio Getrag with dog-leg first for more sporty driving. In the future, we will introduce more features, such as a remote boot opener and who knows? Maybe even Keyless-Go if there is demand."

BRAKE FEST

The higher speeds achieved by Mechatronik cars necessitate upgrading the suspension and brakes. "Brakes come from the vast Mercedes parts bins and are adapted to suit," says Frank. "But the springs and dampers are specially made for us by KW, near Stuttgart. KW makes the dampers for Manthey Racing and even John Cooper Works and it makes special stainless-steel cased dampers for us.

"These are dual-valve units with 16 separate settings for bounce and rebound," Frank explains. "It is critical that we can set up every car just right for individual customers' requirements, and these dampers allow us to do so. They cost more, but in view of the value of these cars and the perfectionists we and our customers are, I feel they're worth it." The hood has received similar treatment. "Up to now, we used the original Mercedes mechanism with new fabric. But this is 1960s technology and is hard to raise," Frank continues. "So we designed a spring mechanism to make raising the hood much easier and the overall handling more user friendly. And while redesigning the original mechanism, we found we'd made a big improvement to the operator handling simply by improving tolerances of the moving parts, which were a bit wobbly as standard."

There are a couple of interesting vehicles in Mechatronik's showroom, too. One of these is a wooden display buck for a 300SL Gullwing, partially clad one of Mechatronik's craftsmen. "This is a display piece by Tom Ostermeier to show the form of the Gullwing," explains Frank. "We are very experienced at fashioning aluminium panels for the 300SL: we can make a complete new aluminium skin for an SL for 25.000 euros."

Next to the 300SL buck sits a rally-prepared 230SL with the names Vasilis Bogiatzis and Constantinos Alexiou on the side. "We prepped it for the 2002 Acropolis Classic," Frank says. The Recaro seats, trimmed in period check fabric, have modern Schroth safety harnesses, a roll cage and a net for safety helmets.

The passenger's side of the dashboard houses mechanical rally trip meters, and the car runs on steel wheels with Avon tyres. Powerful Cibié Oscar rally-body shielding continues all the way back to the differential and rear suspension.

FIRST LOVE

As Frank's first love is historic rallying, he has plans to set up an entertainment scheme whereby Mechatronik will hire out fully prepared cars to corporations to do employee incentive events. "We will organise everything including hotels and hospitality," he says. "The cost will start at around 4.800 euros per car for a Pagoda, although a Gullwing would be more. This idea came from the enthusiasm we get from our customers who do historic racing and rallying. They are really into it and it becomes more than a passion – I call it a disease, and I am the first to admit that I have it!"



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