

# HWA: The Racing Soul of AMG



by Kevin Ehrlich and Mary Fischer | photos courtesy Mercedes-AMG

## HWA AG

is a close sister company – a separate entity but integrally intertwined with Mercedes and AMG. Founded late in 1998, HWA AG was spun off into its own entity when Daimler formally acquired a majority interest in AMG in early 1999. Named after founder Hans Werner Aufrecht, HWA AG is effectively the racing arm of Mercedes Benz. In recent times, it has handled customer GT racing, DTM (German Touring car racing) and Formula 3 engine supply.

The visit to the HWA facility is not usually on the standard AMG owners' tour, so The Southwest Star is very grateful for the generous invitation extended by our AMG hosts. We walked through the loading dock area, past a row of four brand new engines (yes, we checked – three had Michael Kübler's name on them) and several bare AMG GT body shells awaiting transformation into race cars. The body shells are made at a new plant in Weinsberg, close to Heilbronn which is about a half an hour's drive north of Affalterbach. (For road cars, the AMG GT body shells are delivered to Sindelfingen to be assembled into complete cars.)

GT3 racing is intended to make racing versions of road cars, apply regulations to keep them close in performance capability, and prevent expense escalation. The AMG GT road car platform provides the starting point for the AMG GT3 race car. Mercedes contracts with HWA to build new AMG GT3 race cars, deliver them to new customers, and then support them with knowledge and parts when they race.

We entered a long rectangular open workshop where half a dozen AMG GT3 race cars in various states of assembly were arrayed in front of us. The shop was clean and tidy but not overly clinical, evidence of a working shop rather than a showpiece.

An AMG GT3 race car shares the aluminum roof and chassis with the AMG GT road car, but nothing more. At the first station, wiring and electronics were being added to the basic clean chassis. Thereafter, the chassis moves to its right through several other stations, each adding requisite parts towards a completed race car. Each car is cloaked in black carbon fiber and Kevlar bodywork as it moves down the assembly line. Customers usually opt to wrap their cars in custom liveries for the race track rather than paint them.

The entire process takes about two and a half weeks. The same ethos of personal ownership that underlies the “One Man, One Engine” assembly operation is also present in the race shop. In fact, arguably the engine assembly ethos came directly from the race track where no mechanic wanted to be the weak link in the chain.

Each car is custom ordered by a racing team. Parts are ordered with an online catalog, akin to an Amazon.com framework. On our tour, a buildsheet in one of the cars identified



it as an IMSA Endurance Specification order. Prudence prevents naming the customer but perhaps we'll see it on track in the US in 2018!

In endurance specification, it takes in excess of €394,000 (plus VAT where applicable) to buy a GT3 race car. A sprint version is slightly less given modest component differences like the size of the fuel tank. A GT4 variant is planned with a slightly lower price tag as it is more directly tied to the road car.



Looking at the plumbing in the engine compartment of one car nearing completion, we discussed the longevity of race engines. Most regulatory frameworks where GT3 cars race require the engines to be de-tuned from stock to balance their performance with other marques. The objective is cost control to prevent teams and owners from investing unsustainable amounts of money in pursuit of slimmer and slimmer performance edges.

Ironically, we learned that de-tuning also had the effect of dramatically extending engine life, so engine re-builds are far less frequent than might be otherwise thought. In fact, one AMG racing engine should last for an entire season, even if it the schedule includes a 24-hour race. Teams and car owners certainly appreciate that gentle

touch to their racing budgets.

As we neared the end of the assembly line of new race cars, our host turned with a glint in his eye and suggested that we might be in for a surprise in the smaller bay around the corner.

Here is a tip for your AMG/HWA tour – when the host suggests that there might be something interesting to see, believe him. And follow him.

We did both and found ourselves in the midst of five brand new AMG GT3 race cars. Each was clean, shiny, and being readied for their imminent trip to the Nürburgring for the 24-hour race. Each would soon claim the attention of drivers, crews, marshals, photographers, hundreds of thousands of fans, and worldwide television, radio and internet audiences. Each would soon be screaming down straightaways and into corners with precious margins between other cars, straining for position. But at that moment, in the company of our hosts and a few mechanics, we shared a few quiet moments with five members of the AMG racing fleet.

Subsequently, our host suggested that we might also like to see what was parked just outside in the bright sunshine. Remember the tip for your AMG/HWA tour – when the host suggests that there might be something interesting to see, believe him. And follow him.





To the left sat an accurate replica of the 1971 Spa 24 hour winner. The red 300 SEL 4 door sedan serves as AMG's official homage to the car that made it famous. The original is lost to history, having been sold off after the race. (In those days, race cars were a means to an end and certainly not collector items, so selling an old and used racecar converted junk into cash which was important for a small company.) When we saw it, the car was awaiting transport to the Nürburgring to join five other AMG race cars in a historic display at the AMG compound in the paddock.

To the right sat a silver 1999 Mercedes Benz CLK-GTR Roadster. The CLK-GTR is a rarity. After 20 coupes were built, five roadsters were built, all based on the race car because of a regulatory requirement for the race car to have a corresponding road car version. The prices were eye watering, the styling exotic, and the 6.9 liter V-12 incorporated into the carbon fiber monocoque chassis. HWA developed and built both the CLK-GTR race car and road car in an unprecedented 128 days, from first paper sketches to its arrival at the race track. The race cars and both version of road cars have become highly prized given their novelty, rarity, styling and V-12 engine. The driving experience is likely a life-changing event. We await the opportunity to report further if a current CLK-GTR owner would like to extend a driving/riding invitation to The Southwest Star.

A closer inspection failed to spot a chassis plate in the usual location on the left side door sill. With a wry smile, our hosts informed us that this was not just a Mercedes Benz CLK-GTR roadster built by HWA but rather THE prototype for the five production CLK-GTR roadsters. In other words, we were spending time with a unicorn.

At this point, the restriction on photography was causing physical cranial pain.

We then moved to see another of HWA's talents – restoration. A pair of vintage 300SL roadsters sat off to the side with no fanfare or ropes. One crème color car was hoisted on a lift, showing off the results of its completed restoration. It was magnificent. It was likely cleaner than when it originally left the factory and sat on the showroom floor. The other was still in progress with the rolling chassis fully stripped down to the tubes on the floor and the body covered in the cocoon of plastic on a lift. Lest there be any doubt, a close look at an original 300SL rolling chassis is remarkable. We could still see the remnants of fibers where the chassis was bonded to the body. As we looked over the tubes, our host drew the analogy of a tudor house where the timbers provide structural support but drew additional strength from the stabilizing elements and body around it.

Walking along, we paused for a few minutes in front of a cabinet of victory wreaths and trophies to talk about the technical merits of an impossibly light carbon fiber driveshaft our host handed us. While we were focused on the driveshaft, our host again suggested that we turn around for another surprise.

Now that we've learned to follow our host's lead in such things, we obliged and saw a 2006 Mercedes Benz CLK-DTM AMG Cabriolet rolling into the shop – one of only one hundred built. The car is an homage to a DTM (German touring car) race car with 582 horsepower from a 5.5 liter V-8 engine. From a standing stop, 60 mph takes only 4 seconds and terminal velocity comes at 186 mph – both of which are ridiculous numbers for a convertible.

The cabriolet version was built after Mercedes AMG built 100 coupe versions which sold out immediately. With overwhelming demand but a promise to make only 100, the obvious solution was to make 100 cabriolet versions.

The mechanics backed the cabriolet into a bay and got to work on the right rear wheel hub. When we left, precise adjustments were being applied with a hammer by a highly skilled HWA technician.

In the midst of all the excitement, we almost missed noting the 2010 SL65 AMG black series coupe that pulled into the garage awaiting attention. With only 350 total made – 175 for the US and 175 for the rest of the world – the SL65 black series is a relatively rare car. Of course, when you have just absorbed the sight of the only CLK-GTR roadster prototype and a CLK-DTM cabriolet, rare is relative.

Our visit to HWA was a rare opportunity to see the crucial work that takes place far away from the race track, the glory of victory, and the press of fans and media. It takes serious resources, dedication, engineering and planning to make it all happen. HWA (and AMG) are involved in much of the racing across the world for entrants bearing the three pointed star, but HWA is rarely shown on any of the race cars. While HWA may labor in relative obscurity, its passion and drive are integral to ensuring the success claimed on the race track.

