



# OUT OF AFRICA

## TRUCK CONVERSION: POWER ENGINEERING

**The nuances of export markets can be complex, but Colin Gill has become an expert in the trends on the continent of Africa, making different products to suit its demands**

**WORDS: GEORGE BARROW**

**Commercial Motor** Colin Gill is known across Africa, and while you might not have heard of him you'll certainly be aware of the sort of work he does. He runs his own company – Peterborough-based Power Engineering – specialist in converting trucks, specifically Mercedes-Benz Actros, for export. Prior to setting up the business, Gill worked for Mercedes for 20 years heading a team doing special modifications, but he set up his own business in 2000.

When the second-generation Actros was launched, fitted as standard with an electronic automatic Telligent gearbox, customers in Africa were immediately turned off. The complicated electrical systems prompted requests for a manual conversion, so Gill subsequently developed a package and carried out the required conversion.

As truck prices dropped in 2002 this enabled a conversion from right-hand-drive vehicles to left-hand drive to be cost effective, something that worked at the time because the values of

the vehicles in the UK made them an attractive proposition in the African market.

The story nowadays is, however, very different and the past few years have seen prices of the most prized Mercedes in Africa, the Actros MP3, outstrip those of the more modern Actros MP4. Fears over the electronics and other more practical elements of the fourth-generation truck have meant that the older model has remained the de facto choice, but with third-generation models now approaching their end of life, good examples are commanding as much as a 50% premium over a similar mileage MP4.

### TURBULENT CLIMATE

“The current climate is turbulent,” explains Gill. “Technology has moved on quickly, but manufacturers never moved on with the mindset of what they do with the vehicle when the contract or lease expires. Now that the Actros 4 is coming back into the marketplace, there is a large resistance from African operators, prices are falling and that makes converting the Actros 4 for export economical.”



Gill has seen it all before, but the complexity of the newer Actros has meant that many exporters in Power Engineering's position have sought to cut corners to get the vehicles on the boat without incurring much of the necessary costs to make the product more suitable to a typical MP3 customer in Africa.

"I've been telling Mercedes for years that if it doesn't create a market to accept the new MP4 truck with the latest technology, the consequences are there will be very high stock levels that will perpetuate falling prices and the residual values will drop," he says. "Looking back 25 years, there was the same issue, but it was more that the overseas economies had hit a recession. The overseas market

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collapsed, and stock built up. The UK market 'hit a brick wall' because stock wasn't moving.

"As the African economy picked up, it slowly took more trucks, and it's the same situation now, except the brick wall has been created by a new product that they don't like. There's also a slight downturn in the African market, and of course there's also the Chinese, Indians and the Japanese all building a truck with simple technology, which some operators in Africa just prefer.

"But really, we're forcing them down the road towards those Chinese products because customers feel Mercedes is not supporting the vehicles."

Gill paints a vivid picture of the problems caused by the oversupply of cheap contract vehicles in the ▶





domestic market, and while not pointing the finger at Mercedes alone, the Actros MP4 is his primary focus due to his enviable reputation in countries like Kenya, Rwanda, Zambia and Tanzania, where one of his converted trucks is almost a brand in itself. The rock-bottom prices Euro-5 tractor units are now available at also help and while it seems like Gill is “shooting fish in a barrel”, there have been a number of challenges to overcome in order to reach this point.

“We would usually buy 4x2s, but due to the lack of them in the market and the availability of 6x2s, we are buying those and converting them to be a rear-lift. We looked at what the customer wanted, which has been driven by a change in the law in Tanzania, penalising mid-lifts on axle weights in favour of 10-tyre rear lifts, and so we have engineered a product to meet their demands – something the manufacturer hasn’t been able to do for them.”

### DE-RATED ENGINE

As a result, Power Engineering takes a UK spec Actros MP4 and raises the suspension. It also fits an extra fuel filter to compensate for the lower-grade diesel available in African countries as well as a water separator. Then a 6mm steel plate radiator guard is added and a heavy-duty front bumper of Gill’s own design is installed. Crucially they also de-rate the engine from Euro-5, which is something other exporters don’t necessarily do correctly and instead bypass the AdBlue system tricking the ECU into thinking it is still dosing the exhaust, which can lead to problems further down the line. While Power Engineering’s customers don’t want to put in AdBlue, their converted engine doesn’t want it either. The overall package has therefore been created specifically with the African customer in mind, and as such these Power Engineering-modified Actros are marketed as Mercedes-Benz Actros MP4-AS by Power Engineering, with the

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AS standing for Africa Spec. There’s an impressive amount of detail on each of the vehicles, from the customised paint job they receive right down to the Power Engineering name, which is cut out on the mud guards.

“The designers and the engineers didn’t really talk to each other,” Gill explains as he points out the weaknesses of the standard Actros for the African market. “We built the suspension up because the MP4 is far too low to operate in poor road conditions and we also protected the radiator for the same reason.

“Fundamentally the Actros is a good truck. The peripherals around the outside make it more of a challenge to operate in Africa, but it’s easily overcome if you have the right support.

“In Zambia there isn’t a Mercedes commercial dealer, so we would like to be a parts agent to give the customers support. Most exporters from the UK send trucks to Africa without carrying out any additional work to allow them to be more durable, ▶





or they install a cheat module to put the AdBlue out of action, which leads to higher soot and eventually engine failure. We know the weaknesses on the Actros, so when we sell a truck these areas are checked and replaced if required, prior to shipping, and once the vehicle is delivered this support is ongoing.”

The entire build process takes a week, but the work doesn't stop once the vehicle is complete. Gill also sends a consignment of parts out with the truck including sensors that are known to fail, as well as consumable items like brake pads. At least £1,000 worth of additional equipment is sent with the vehicle to ensure it stays on the road.

### EXPANSION PLANS

Based on the reputation of Power Engineering and its Actros conversions, business is understandably booming, but he's keen to expand its offering and markets, by using his expertise to convert other brands – which new markets in Africa would take to. Economic conditions play a huge part in his sales, with MP4 tractor units selling particularly well at the moment in Zambia and Rwanda, but new products from different manufacturers would potentially open up other markets where different

brands are preferred.

“Building these Actros is 90% of what we do, and we've been making them for seven years now,” explains Gill. “Moving forward, we are looking at supplying services. We have a very good name in the used-truck world abroad, but for every one that I sell, there are 10 out there that aren't going to last, that haven't had the Africa spec applied – they make my next sale even harder because the [Actros] product is developing a bad reputation for unreliability, which is ill deserved. There are markets that would take large volumes of them, but you need to have the support and the network. Otherwise you'll just be getting a one-off sale.”

### FALLING PRICES

The ever-falling price of the MP4 Actros has undoubtedly had its benefits for Gill and his business, but the real winner will be the customers in the export market.

“They're that cheap you could throw £5,000 at them and have a product that is more suited to a wider client base. Currently our conversions range from £23,000 to around £29,000 depending on mileage. The price is inclusive of carriage and freight and also includes new tyres that can be upgraded as an option to 315/80/22.5.”

But the falling base costs aren't going unnoticed and Gill knows that his customers are expecting more for their money. This is where the new parts support and service items for the first year come in and, while the trade in Actros continues to be steady, Gill is, of course, diversifying his products and has already converted a Scania R-series, which will surely be the blueprint for another successful Africa-spec truck. □

### DRIVING DESIGN

The nuances of the African market can be difficult to keep abreast of, but Colin Gill has become an expert in the trends on the continent making different products to suit its demands.

“Rear tag-axle is where the market is going because of axle-loading laws penalising mid-lift that came into force in East Africa,” he explains. “When you're travelling so far, the cost per tonne escalates, and a lot of our customers are in the fuel industry where they get about \$150 per tonne. It means the returns can make a big difference, and we normally say that the conversions we do are paid for in a year.”

Gill says that the top of every owner/driver in Africa's wish-list is a Mercedes 6x4, but pitches his conversion as a poor man's 6x4 with a rear lift.

“We haven't created something that's not needed,” he says. “The need for it has driven the design.”