

Trade secrets

Behind the scenes at Coachman caravans

Our Rob Ganley enjoys unparalleled access to the design studios and production line of Coachman Caravans. Find out how they work

IN JANUARY I was fortunate enough to spend a day at the manufacturing base of Coachman Caravans in Hull.

Factory tours aren't for everyone, but I'm absolutely fascinated by the processes involved in manufacturing touring caravans. What's more, this was the first time I had been invited behind the scenes at Coachman.

A potted history

Coachman has been building caravans since 1986. The firm was founded by Jim Hibbs and George Kemp, who had both been directors of caravan maker

ABI. Coachman spent a few years at the end of the 1990s under the ownership of the Explorer Group, which also owned brands including Elddis, Compass and Buccaneer, but underwent a management buyout led by Jim Hibbs in 2001.

Down the years, it has earned a reputation for making robust, high-quality caravans that stand the test of time. Its tourers charted as the highest scoring pre-owned brand from a UK manufacturer in our 2013 Owner Satisfaction Awards, and it received a further Gold Award, attaining an admirable 89% satisfaction rating score from

respondents to the survey, in our 2014 results.

But more than just making caravans that are reliable, its upper ranges remain some of the best-looking tourers on the market. For 2014, in line with efforts elsewhere among British manufacturers, it has introduced processes to ensure better, even more reliable caravans.

The story today

Coachman employs some 150 people at its 7.5-acre site, which includes the 100,000sq ft plant, and can produce up to 40 touring caravans each week. Unlike Elddis, Lunar, Swift >>



The Vision: from design to dispatch



The designers work on models for the upcoming season using specialist computer software. These are used to program computer-controlled cutting machines, known as CNC routers

RIGHT Polyurethane framing battens — you can tell them apart from timber by their black colouring — are stored, ready for use in the sidewalls



In the machine shop, CNC routers cut the furniture to the right size and shape for each model



The sandwich walls and floors are laminated here, and then the aluminium skin is bonded to them



All furniture is assembled in the cabinet shop before being fitted to the caravan wallboards



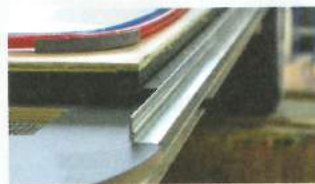
The Coachman Vision replaces last season's Amara. We're fans of its clean external lines



The PU battens are fitted accurately in place using jigsaws



Here, the chassis gang assembles the Al-Ko chassis from its kit parts, and the floor is mounted to it on an extruded rail



Note that the sidewalls now sit in an aluminium rail that is screwed to the floor from the underside, and adhesives are used to join the floor and walls



A new feature involves drilling into the sidewall in order to fit these plastic fir-tree fixings upon which the awning rails are now bonded. This is a new process



The furniture gang attaches the interior furniture to the walls before the full bodyshell is mounted on the chassis



The van is then rolled off the line towards the test row, where all its components and utilities are fired up for several hours to check whether they're in full working condition before dispatch

» and Bailey, which all produce motorhomes, as well as caravans, it focuses solely on building touring caravans of the highest quality.

For the 2014 season, Coachman invested a lot of money, time and energy in planning and producing the new lead-in Vision range, which replaces last year's Amara. And crucially, it features some significant strides forward in technology that, unlike its manufacturing rivals, Coachman didn't shout very loudly about when it was launched.

Building by bonding

For starters Coachman now makes extensive use of bonding technology, employing Bostik adhesives to replace screws and mechanical fixings.

This of course follows the lead of Eddis, which rolled out its SoLiD (Strong, Light and Dry) construction method across its tourers and motorhomes in 2012. This involved chemical bonding, with keyway joints, maximising bonding surfaces to evenly spread the working loads.

In effect, it creates a monocoque structure with a fully bonded seal against water ingress, and it has so far performed very well in our Owner Satisfaction Awards.

We said: "For pre- and post-SoLiD Eddis models, the evidence was unequivocal... In the latest survey, it recorded lower incidences of damp than other volume brands."

Coachman's use of bonding isn't quite as far-reaching, but it is substantial nonetheless. For 2014, Vision parts now bonded to the caravan bodyshell, rather than mechanically fixed or screwed, include the exterior door frame, fridge vents, battery boxes and the awning rail. Even more important, the front and rear panels are now bonded to the roof as well.

In fact, holes are no longer drilled into the external shell for mechanical fixings. This significantly reduces the likelihood of leaks.

This has also meant significant changes in the way that Coachman assembles its caravans, with the bonding process itself requiring

preparation time and several hours to bond, depending on the particular caravan parts involved at any given stage.

Polyurethane framing

Second, Coachman has replaced the main timber framing battens in the caravan sandwich sidewalls with a polyurethane material. This takes a leaf out of Bailey's and Swift Group's books. The latter replaced all the timber in its tourers' sidewalls with polyurethane for 2014.

This is a closed-cell material that is impervious to water, accepts screw fixings and stands up to compression loads.

Swift Group christened its new construction Smart. Body panels now have PURe (a polyurethane material) framing

in place of timber. In Swift's own words, SMART stands for 'Strong timber less body frame with Modern desirable looks and a leading Aerodynamic shape this is Resilient to moisture, all wrapped up in a caravan that has undergone the most comprehensive Testing'.

Coachman has no such fancy names (as yet) for its own caravan manufacturing revolution, but it has always been a little less flamboyant in its marketing than some of its main UK manufacturing rivals.

I took a look at the life cycle of a Coachman Vision caravan, from its early design through the various stages of production at the Hull factory, right until the van is rolled off the line, ready for test and dispatch. **PC**



Coachman Caravans: range finder

NOW YOU'VE SEEN how Coachman builds its caravans, let's look at the finished products. Coachman offers four ranges, from the lower mid-market vision to the premium twin-axle Laser.

All now have a Truma Combi 6 heating, with a smart new digital-control panel operated via a rotary knob. The premium VIP and Laser ranges get new, market-leading 80W solar panels.



Vision

The newcomer for 2014 is an eight-model line-up offering layouts from two to six berths. Most models are lighter and cheaper than the outgoing Amara. The external lines are clean and modern, and the ash-effect furniture complements the oatmeal and turquoise upholstery. The kitchen is well specified with dual-fuel hob, a separate oven and grill, and a microwave.

We say... The Vision looks fabulous, but we'd have liked to see the option of a sunroof or overhead lockers up front.



Pastiche

Pastiche is an upper mid-market van. It has six layouts, one of which is a two-berth while the rest are four-berths. Tweaks for 2014 include new alloy wheels, a Avtex omnidirectional aerial, and the Truma Combi 6 with smart control panel. Otherwise, slight changes have been made to the soft furnishings and external graphics, for a gentle sprucing up of Pastiche.

We say... Some Pastiche models are aimed at well-heeled caravanners whose grandchildren visit on holiday.



VIP

Coachman's single-axle luxury range features five models for 2014. It gets the same new alloy wheels, Avtex aerial and Truma Combi 6 boiler as the Pastiche. It also gets a roof-mounted 80W solar panel, which may appeal to caravanners who rally or camp off-grid. It also benefits from a new Avtex ultra-thin TV and lightly refreshed soft furnishings and graphics.

We say... It's still a looker, thanks to the sunroof and front panel. But is it that much better than a Pastiche?



Laser

Space and luxury are still the selling points of Coachman's top-of-the-range Laser. This line-up of twin-axle vans has been trimmed to two four-berth models for 2014. It benefits from all upgrades to the lower ranges, plus gets the new Phantom Pro-3 tracking system — it can tell you exactly where your tourer is and the status of its leisure battery.

We say... The Laser represents the last word in luxury. Only serious 4x4s can tow the 1800kg-MTPLM vans.