

# HOW TO BUILD A CARAVAN



*Caravan* heads to the vast Caravelair factory in France to see the firm's award-winning tourers being constructed

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➤➤ The Caravelair factory at Tournon-sur-Rhône in the Ardèche region of France is one of the biggest outdoor-leisure-vehicle plants in Europe. We watched as tourers from the Antarès range 'sped'

along the production line at a rate of 26 vans per day, being carefully formed and fettled, using traditional manufacturing techniques and state-of-the-art machinery.



**1** Unlike most major caravan manufacturers, Caravelair creates its own lightweight and robust chassis from galvanised steel. Chassis members are profiled for maximum rigidity and low weight.



**2** Caravelair also makes its own swing axles. They feature integral suspension, which utilises strong rubber 'cords' to take the sting out of potholes, bumps and pretty much anything Europe's roads have to offer.



**3** Chassis members are bolted to an inverted composite floor. The floor is strong and has excellent insulation qualities. Axles, chassis and the A-frame are attached before it's flipped back onto its wheels.



**7** From the raised walkway, you can see how the internal cabinets add considerable extra strength to the structure. You'll also notice how much storage room you get in these Caravelairs. A roof anyone?



**8** High-tech robots make wall and roof panels on site. Each caravan's details are uploaded into the computer, then lasers project where cuts, contouring and strengthening panels need to be.



**9** A roof panel is positioned on the caravan body. The quality of the finish is exceptional, with tolerances of less than 1mm. 'Half-depth' cuts allow the roof panel to curve around the caravan's contours.



**13** The large gas-locker door is fitted, along with its hydraulic lifters. This sizeable front locker offers excellent storage for gas bottles and accessories. Access is really easy due to the size of the aperture.



**14** Finishing trim, including the wheel-arch mouldings and edgings are fitted. Aerials, air vents, locker doors and bike-rack supports are also securely attached to the Caravelair's body.



**15** The door (they put it on the 'correct' side!), windows and rooflights are fitted. The rear bumper unit, with integral light clusters, is bolted on. Indicator side repeaters are also attached. Nearly there!



**4** Rolling on its wheels, the embryonic tourer is towed along the production line by a pulley system. It stops at each workstation for a job to be completed. Here they fit vinyl flooring, pipework and cabling.



**5** Meanwhile, the caravan's cabinetry is being prepared and checked ready for fitting, in a different part of the factory. Once fitted, these fixtures will add further rigidity to the body panels.



**6** Composite wall panels are added and glued and screwed to the floor, then the front and rear panels. Most of the internal structure is already in place. The caravan is now beginning to take shape.



**10** The edges are sealed with mouldings. Now it just needs its rooflights to be fitted. In the rooflight apertures, you can see how rigid insulating foam is sandwiched between thin-but-strong layers of GRP.



**11** Caravelair's wiring looms are made in-house. Each one's created to fit a specific caravan, sometimes with bespoke options. This work requires extreme focus and precision. It's no place for a man then!



**12** As space is always limited, hundreds of cables they have to be created and delivered on a 'just-in-time' basis, so that they're ready and waiting when the correct model is being built.



**16** Meanwhile, inside the van, technicians are beavering away fitting bed mechanisms and doors, etc. The LED roof and reading lights are also fitted and working, as is the rising bed frame.



**17** All the way along the production line, the build is carefully logged, including the specification and its quality-control status. Any issues are noted, to be addressed before the tourer is completed.



**18** The vinyl graphics are prepared ready for applying. These are designed by an in-house art team using the latest on-trend colours and styles. They're made in tough, weather-resistant vinyl on site. >>

## On the factory floor



**19** Next, the vinyl graphics are carefully applied. They give the Antares its unique, contemporary style. Make sure it's level, young man! At this point, the front window protection is still in place.



**20** Can you tell what it is yet? The DNA of these characterful French caravans shines out as they approach the end of the production line. The interior is being finished off and quality-control checks made.



**21** The gas system is carefully tested and commissioned. The spare wheel, steady winder and waste water container fit neatly into the front locker, too. There's still plenty of room for other accessories.



**22** The final touches are made inside the tourer. Meanwhile, at the end of the line each van passes under strong lights which help to highlight any flaws either in construction or minor panel imperfections.



**23** Final quality-control checks are made and details, such as panel fit, are checked and adjusted if necessary. Nothing leaves the factory until the experienced QC team is 100% happy.



**24** After production, vans are taken outside to be drenched in the Caravelair 'shower'. This will highlight any flaws... which are incredibly rare, so you know you can buy with confidence.

Here's a British-spec Caravelair Antares 455 hot off the production line. Build-quality, practicality, style and value for money. What's not to like?



For more details on the entire Caravelair Antares range, log on to [marquisleisure.co.uk/caravelair-2018](http://marquisleisure.co.uk/caravelair-2018)

