Compressed air at its best – nobilia in Verl

Dream kitchens à la

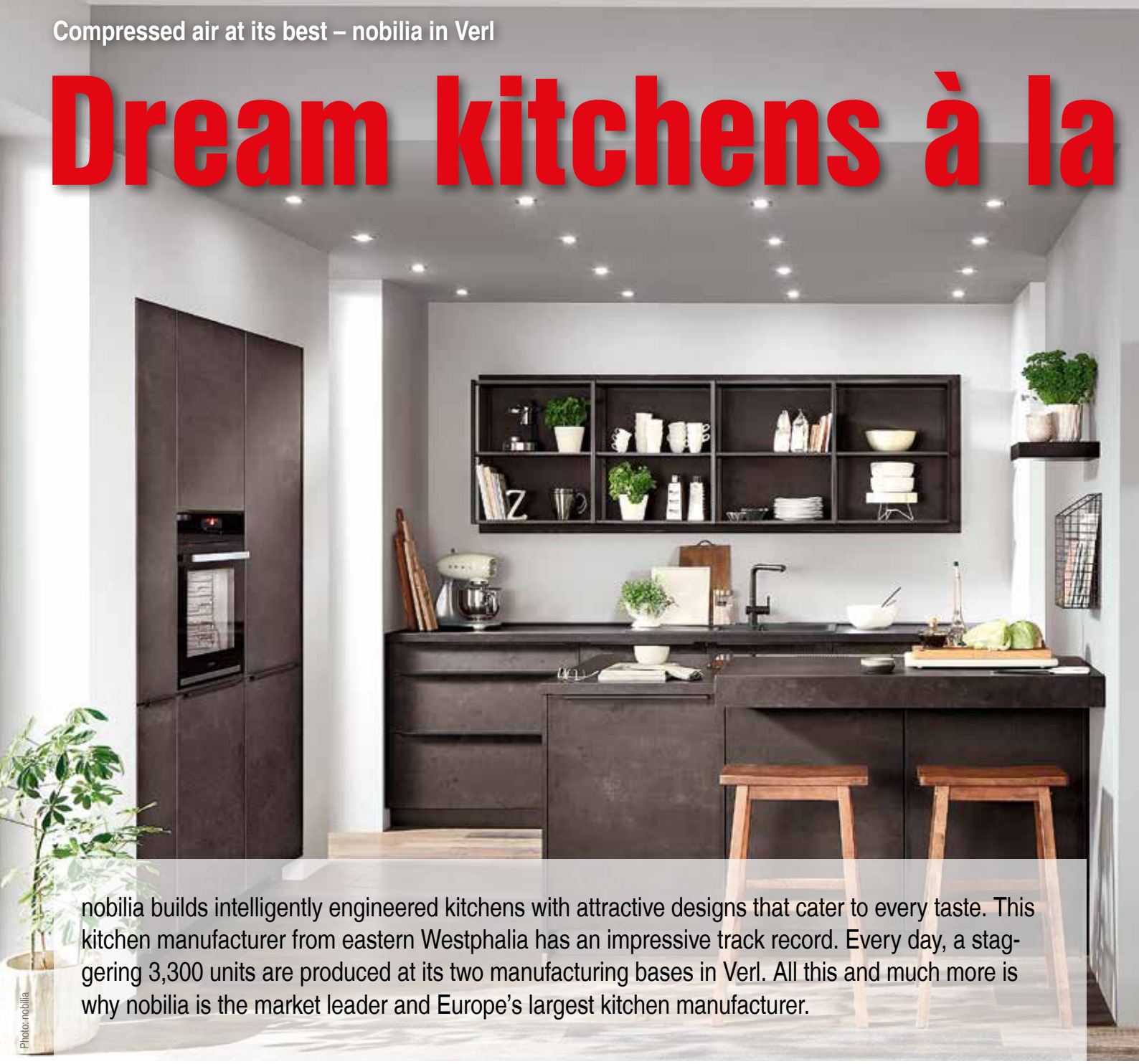


Photo: nobilia

nobilia builds intelligently engineered kitchens with attractive designs that cater to every taste. This kitchen manufacturer from eastern Westphalia has an impressive track record. Every day, a staggering 3,300 units are produced at its two manufacturing bases in Verl. All this and much more is why nobilia is the market leader and Europe's largest kitchen manufacturer.

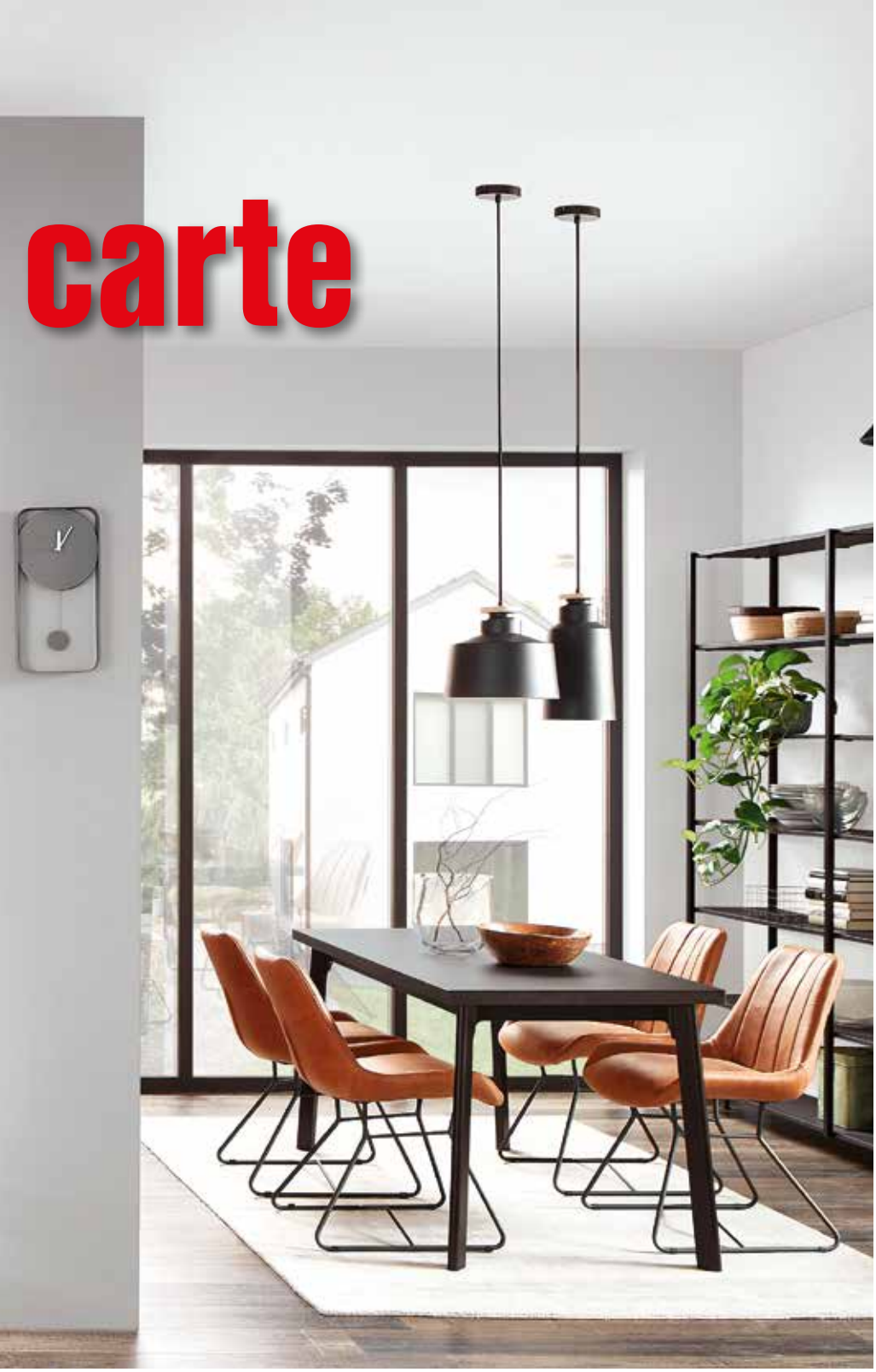
The white lorries with the red 'nobilia' logo are a familiar sight on our roads. The company's impressive pool of 200 lorries and 700 semi-trailers transport a yearly total volume of 2.7 million m³. Thanks to its 'white' fleet, the kitchen specialist has a reputation for unrivalled delivery quality and punctuality. It is important that neither timeliness nor product quality suffer during delivery, since the three to four kitchens being transported in these vehicles should make the customers' kitchen dreams come true as quickly as possible.

An area the size of 25 football pitches

nobilia specialises in the manufacture and sale of fitted kitchens. But this was not always the case: this decision came only a quarter of a century after the company was founded back in 1945. Shortly after the end of the Second World War, the brothers Johann and Willy Stickling teamed up to establish a small carpentry workshop in Avenwedde (Gütersloh), initially producing sewing cabinets and occasional furniture in rented halls. In 1956, the brothers went their separate ways and Johann Stickling continued to manage the original company. In the late 1960s, the decision to specialise in manufacturing fitted kitchens under the new name of NOBILIA-Werke J. Stickling KG set the company on the road to success. From this point on, the kitchen specialist expanded on an annual basis and now employs approximately 3,600 staff and generates a total turnover in excess of €1.2 billion per year.

nobilia now has two production sites in the Gütersloh area: plant I in Verl-Sürenheide

carte



nobilia builds kitchens that cater to every taste and any interior décor.

and plant II in Verl-Kaunitz. The available production area is enormous: together, the two plants cover 250,000 m², almost equivalent to 25 football pitches. However, the kitchen specialist has proved so successful that its ever-increasing production repeatedly outgrows the available space. Therefore, plans are already underway for two further plants.

Large volume of one-off designs

As unique as its owner, the style of a kitchen is a personal preference. Therefore, the aim is to offer a wide variety of options in order to provide the perfect solution for any style of home and to accommodate every taste. Moreover, the kitchen specialist aspires to ensure that every nobilia kitchen is affordable. Both objectives can be achieved by means of a consistently configured product line with clearly defined kitchen components. This makes kitchen planning straightforward and enables large-scale manufacture. We are talking large numbers: approximately 3,300 kitchens roll off the assembly lines every day in the huge production areas. This equates to 727,000 kitchens per year at the two plants in Verl. The export share is 47.7%. In other words, almost one in two kitchens is shipped abroad. nobilia kitchens can be found in 90 countries around the world.

From untreated panels to a complete kitchen

Highly automated workflow, state-of-the-art manufacturing technology and advanced logistics are essential in order to produce 3,300 kitchens a day. Accordingly, the kitchen elements pass through assembly lines in the production halls. It all begins in the high rack warehouse (approximate floor area 5,000 m²), where some 1,360 tonnes of wood are delivered each day, at half-hourly intervals. The timber all comes from controlled sources. For every tree used to make a nobilia kitchen, a new one

Compressed air is needed at every production stage: transportation of the wood panels shown here.

Cutting the worktops to size.

And glueing the edges.

is planted. The boards are cut in an optimised process to ensure minimum waste. Even these few offcuts are either recycled or used to heat the production plants.
The first step in transforming the raw panel into a finished kitchen panel is to cut it into side sections, shelves, plinth panels and front panels, etc. In this way, 241,000 individual elements are produced on a daily basis. The parts are mass-produced, yet according to individual specifications. In the second production stage, following interim storage, the individual components required for every commission are assembled to order. The complete kitchen, including the electrical appliances, worktops and accessories, is only put together at the end, shortly before the finished kitchen is loaded onto the lorry. This is a logistical tour de force, since all components have to be ready to go at this point.

Compressed air for 245,000 m²

Compressed air plays a crucial role at nobilia. It is needed to cut and glue the front and side panels, shelves and worktops, to power the automation technology and, last but not least, as work air for the process technology. Given the vast production area and immense number of units, it comes as no surprise that the compressed air station is also of gigantic proportions. The complex setup was based on an air demand analysis (ADA), which revealed that plant II alone required 145 m³ compressed air per minute. As KAESER regards itself as a systems supplier, the compressed air station is viewed from a holistic perspective. With this in mind, it is best if all compressed air station components come from a single source: from generation to treatment, control technology and regulation, right through to intelligent compressed air distribution. Three KAESER BSD 72 rotary screw compressors, four DSD 202, one DSD 202 SFC and two CSDX 137 and 162 are responsible for the reliable production of compressed air in plant II, while the air treatment is handled by four TE 141 and four TF 340 refrigeration dryers, together with various compressed air filters and oil/water separators. A SIGMA AIR MANAGER 4.0 master controller orchestrates the different components. The thermal energy generated by the compressors and made available via the internal plate-type heat exchangers is used to heat the canteen. What is more, during the spring and autumn, this energy is sufficient to heat three office complexes and the exhibition area. In winter, the compressor heat supports the chip heating, resulting in substantial extra cost savings.

3,300 kitchens roll off the assembly line every day. Compressed air is crucial for production.

The custom-made kitchen cabinets wait in a row to be transported.

Wood is the most important raw material.

Photo: nobilia

The compressed air production 'Hall of Fame' at nobilia, seen here in plant I.