

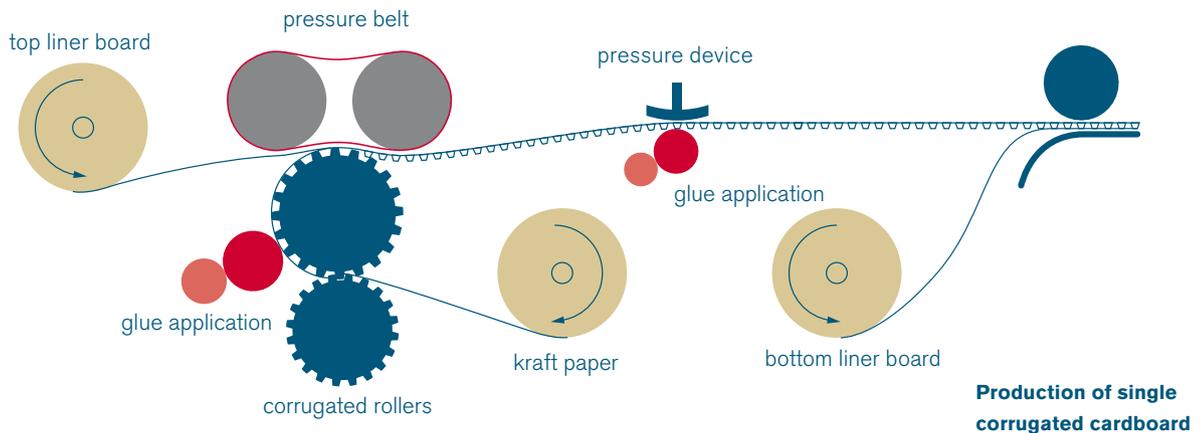
On a wave of success

The business model of BHS Corrugated Maschinen- und Anlagenbau GmbH is anything but a flimsy house of cardboard. Nevertheless, corrugated cardboard is at the very heart of its business. The company, based in Germany's Upper Palatine town of Weiherhammer, is the world's largest supplier of solutions in the corrugated cardboard industry.

By Alexander Günzler



Standard colour: Most of the corrugators made by BHS Corrugated are pearl white.



Simple but effective. A lightweight that protects loads weighing tons. Unobtrusive and ubiquitous. The number one in transport packaging is ambivalent: Corrugated cardboard was invented more than 150 years ago by an American, Oliver Long. Now annual production in Germany alone is more than seven billion square meters (75 billion square feet). The material is used in 70 percent of all freight shipments worldwide. To achieve such numbers requires sophisticated production lines. They are up to 180 meters (590 ft) long, weighing in at 500 tons, and capable of churning out up to 450 linear meters (1476 ft) of corrugated cardboard per minute. Globally speaking, one in two of these giant units comes from the German town of Weiherhammer. The 3900-strong community in the town of Neustadt an der Waldnaab is where the BHS Corrugated Maschinen- und Anlagenbau GmbH headquarters are located. The company, which traces its origins to a ducal hat factory established in 1717, has delivered more than 400 complete systems around the world and thousands of individual machines. Some 1600 employees—half of them in Weiherhammer—generated a record turnover of EUR 320 million in 2014. The magazine “Wirtschaftswoche” ranked BHS Corrugated among Germany’s oldest successful companies, at 24th place.

“In the corrugated paper industry, we are the world’s largest solution provider,” says Christian Engel, who co-manages BHS Corrugated, together with his brother Lars, and Norbert Städele. The brothers share ownership of the business, following in the footsteps of their father Paul, who prompted the company to acquire a stake in its current core business; then took it over in 1993. Much has changed since then. “Twenty years ago we were very manufacturing-heavy,” Christian Engel recalls. “Today, production makes up only 20 percent of sales.” A research and development team with more than 200 employees, as well as sales and service activities worldwide, offer

customers of BHS Corrugated complete support. Since the end of 2014, a new logistics center has optimized and accelerated assembly. By 2017, BHS Corrugated plans to invest a total of EUR 45 million in expanding its headquarters. The company has also been active internationally for decades. It also has production facilities in the Czech Republic, Brazil, the US and China. Although, BHS Corrugated had just five foreign employees in 1993, today there are 800. In Shanghai alone there are 300 of them, and their numbers are growing because particularly in Asia, sales volumes have been taking off lately. “Previously, eighty percent of our machines →

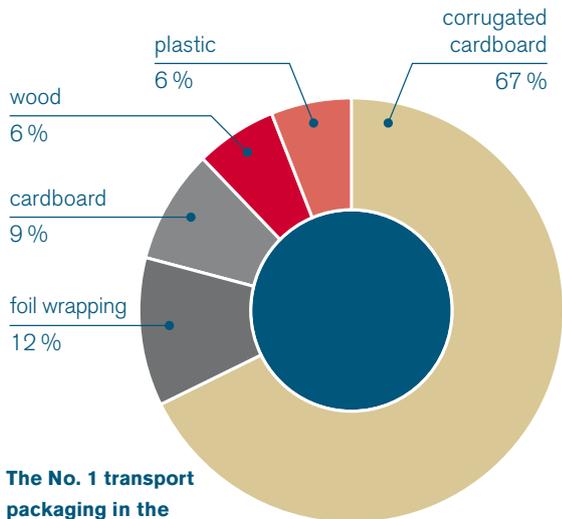
BHS Corrugated

History: Parts of the original plant were built as early as 1717. Since 1960 corrugating machinery has been produced there. The GmbH was founded in 1993

Employees: approx. 1600 worldwide

Revenues in 2014: EUR 320 million

Manufacturing locations: Weiherhammer (Germany, headquarters), Tachov (Czech Republic), Shanghai (China), Curitiba (Brazil), Knoxville (USA)



The No. 1 transport packaging in the world: corrugated cardboard.

→ went to Europe and the USA. Today, nearly forty percent go to the new Asian markets,” explains Lars Engel. Currently, BHS Corrugated supports customers in 22 countries. Service as a vocation—this is the standard the company has set for itself.

Partners for decades

Wörwag and BHS Corrugated are linked by an extremely reliable partnership proven over the past twenty years, says Wörwag sales representative Peter Donhauser. The corrugating machinery is coated exclusively with liquid coatings from Stuttgart-Zuffenhausen. The company’s current annual consumption stands at 120 tons. The machines get a two-coat system of primer and topcoat, supplemented by a protective coating on particularly heavy-wear areas. “That is particularly important in units which come into contact with hot steam or glue,” says paint technician Andreas Bäuerle. As simple as corrugated cardboard is in principle, it is complicated to produce. Raw paper is moistened, heated and then passed between two corrugated or fluted rollers under pressure, which give it its characteristic wavy form. Immediately afterward, a starch-based glue is applied to the wave peaks and a pressure belt presses the cover sheet firmly into place. Not long afterward, the other side gets the same treatment. To make the

corrugated cardboard fold more easily, it is usually creased. Cutting is the final step. The components used in these operations have names like module facer, splicer, dispenser and cross-cutter. BHS Corrugated manufactures them all. That enables the company to configure production equipment to its customers’ requirements. There are more than 1,000 different profiles available for the fluted rollers, of which BHS Corrugated produces some 1300 a year, and about 35 percent of which end up in its competitors’ plants.

New coating shop in in Weiherhammer

Customers have free choice in the way they coat their machines. “The standard colour is pearl white,” says Bäuerle. For quality assurance, BHS Corrugated and Wörwag regularly exchange information about processes and any potential problems. When BHS Corrugated built its own paint shop in Weiherhammer in 2014, the machinery and plant manufacturer also received support from Stuttgart-Zuffenhausen. “The constant technical support is an aspect that we particularly value in our cooperation with Wörwag,” says Markus Gruber from the assembly/production department at BHS Corrugated.

In addition to a responsible approach to the environment, BHS Corrugated takes social responsibility seriously. “Angels for Children”



True giants:
Corrugation systems from BHS Corrugated are up to 180 meters long.

is the family foundation initiated in 2003 by Ingrid Engel, the late mother of the company's current owners. A trip to Laos drove home the lack of opportunity facing the local youth. Since then, the foundation has been supporting the education of Lao children by building schools, paying education or teaching expenses, as well as providing teaching and learning materials. Even in the local town of Weiherhammer, BHS Corrugated has taken up the cause of education. On the premises is a multi-

company training center for some 240 companies from around the region. For many years, BHS Corrugated has also been working with the OTH University of Applied Sciences Amberg-Weiden and Regensburg University. Last but not least, the company has some one hundred apprentices. "Most of them stay with us once they finish their apprenticeships," says Christian Engel. "Ultimately, it's the employees who assure not only our success, but also the success of our customers." ■



PETER DONHAUSER
started at Wörwag 18 years ago. Since then he has been responsible for the sales force in Bavaria in the field of powder and industrial coatings. Above all he enjoys being able to work independently: "I can approach each customer individually." He also appreciates the trusting cooperation with his colleagues in Stuttgart. "We speak the same language."



Photos: BHS Corrugated Maschinen- und Anlagenbau GmbH, Frederik Laux