



THE SPRINGS INSIDE A DUX BED ARE LINKED TOGETHER WITHIN THE MATTRESS TO ENHANCE WEIGHT DISTRIBUTION AND COMFORT.

Comfort zone

SWEDISH BED MANUFACTURER DUX HAS EARNED A WORLDWIDE REPUTATION AS A COMFORT PROVIDER, BASED ON THE INTERIOR QUALITY OF ITS PRODUCTS. HERE IS THE INSIDE STORY.

BY BRYAN RALPH PHOTO ROLAND CALVÉN

The success of family-owned Swedish bed maker Dux rests squarely on its spring mattresses. Efraim Ljung, who founded the company, developed the spring mattress (a first for Scandinavia) and began its manufacture in 1926. Since then, striving for comfort has been a family tradition.

Today Claes Ljung, Efraim's grandson, heads the company, and high-quality beds and mattresses remain its prime focus, accounting for 90 percent of its annual sales.

The Dux factory is situated on the outskirts of the small, sleepy town of Sösdala in southern Sweden. The factory produces spiral springs and assembles all the other components – loose covers from the company's textile plant in Portugal, pine bed bases from a local carpentry firm – for its beds and mattresses. Each year the company manufactures and sells products worth about 100 million U.S. dollars and ships them all over the world. More than 60 percent of all Dux beds are exported. The United States is the largest market.

Sösdala has been home to Dux since 1947. Production manager John Johannesson says that the present factory, built in 1977, remains a robot-free zone. "We have the in-depth knowledge here on how to manufacture springs and assemble beds of the highest quality," he says. "A high level of craftsmanship is involved and all quality-sensitive steps

are done by hand. It is the small touches that produce the final quality."

The company has always concentrated on quality, Johannesson says. "We have never aimed to be a high-volume producer. We sell comfort, and what's inside the spring mattress is just as important as the look of the bed."

Dux makes its own springs – each bed contains between 2,000 and 4,500 – and is the only mattress producer in Sweden with in-house spiral spring production. The unique "multilastic" system of interconnected springs that is used today was developed in the late 1960s. "Most manufacturers use individual springs, but our springs are linked together within the mattress, and this enhances overall weight distribution and comfort," Johannesson says.

Most Dux beds are bought through the Duxiana chain of specialist shops, a sales concept launched in the 1980s. More than 100 Duxiana shops in some 20 countries showcase the company's four basic bed models and its accessory range. Dux beds can also be custom-made in any shape and size. The Sösdala factory produces about 25 special orders a week.

About 10 percent of the company's annual sales are derived from producing approximately 35,000 spring cassettes for subcontractors that make seats and beds for Scania and Volvo trucks.

"Supplying spring modules for other applications was a natural extension of the business," says Johannesson. The company has previously supplied spring-based products for Saab car seats, ferry and submarine berths, and Swedish trains such as the X2000 fast-speed train. Dux spiral springs can also be found in office furniture, wheelchair seats and even upholstered church pews in the United States.

Innovation has played an important part in the company's success. "You can't afford to lie still in this business," observes Johannesson with a smile. "We have always dared to try out new ideas, and this has kept us ahead. We were the first to spot the trend for softer mattresses, and the first to create individualized comfort zones."

In-house R&D and cooperation with external sleep researchers has helped to create new products, such as the Pascal top-spring mattress system launched 10 years ago. With three separate comfort zones, the system allows two people sharing the same bed each to customize their side of the bed.

The pursuit of greater comfort goes on. Behind closed doors in the R&D department at Sösdala, a team of six developers enhances existing products, testing innovative mattress prototypes and dreaming up new ideas to enable customers worldwide to get an even better night's sleep. □

EMBEDDED QUALITY

Haldex Garphyttan supplies Dux with all its spring wire – about 600 tons a year. The two companies have built a close, smooth-running relationship during the past 12 years.

Two types of cold-drawn spring wire, Garbed 52 and 59, were specially developed by Haldex Garphyttan in cooperation with Dux to provide the

right performance characteristics for spring mattress applications.

Although Garbed spring wire is an important niche product for Haldex Garphyttan, it is a small percentage of the company's output, which is mainly oil-tempered spring wire and stainless spring steel for automotive applications such as valve springs or piston rings. Every week Haldex supplies Dux in

Sösdala with about 25 reusable spools, each holding 70 to 80 kilometers (40 to 50 miles) of spring wire varying in gages from 1.1 millimeters to 1.7 millimeters. The wire is fed into one of 30 specialized coiling machines that produce long strings of coiled springs. A separate battery of machines wires the strings together to form spring mattress cassettes of the required size.