



LINAK moves the kitchen

By Dirk Biermann

She is 1.60 m tall and he is 1.85 m tall – and they both like to cook. In such cases, even an ergonomically oriented kitchen plan reaches its limits if it relies on rigid heights. Height-adjustable worktops could be a solution here. In addition, this flexibility is much easier and more cost-effective to achieve than you might think. Including sales margins.

The Danish company LINAK is one of the world's leading providers of actuator systems for height-adjustable worktops. The kitchen industry has only known the company intensively for about two years. However, in health care, agriculture and industry, LINAK is considered to be one of the predominant providers when it comes to exact positioning of working heights. And, of course in the office. Electronically controlled technology for the height-adjustable office desk – known amongst specialists as a “sit-stand workplace” – is one of the company's core competencies. About one third of its EUR 400 million turnover goes to the furniture account. In Germany, this share of turnover is even 37%.

Electronically controlled lifting systems for furniture are part of the DESKLINE division. The emphasis is on the first part of the word: Desk. Therefore, it is by no means a term from the depths of the Danish vocabulary, but regular English spelling, indicating its international orientation.

Joyful experience

The kitchen industry is relatively new to the Danish company, but market-oriented solutions are already in the product range. “At the launch four years ago, we examined whether our proven products are suitable for kitchen applications,” says Christoph Messing, DESKLINE sales manager in Germany and Austria. As one of the pioneers, the kitchen furniture

manufacturer team7 applied a lifting system, and a further pilot partner, Sachsenküchen, followed shortly thereafter. The use of the technology went smoothly and the gain in comfort in the application was a joyful experience for all those who previously had trouble with not quite optimal working heights. Besides team7 and Sachsenküchen, the list of LINAK customers now includes more renowned names such as Tielsa, Zeyko, kuhlmann, eggersmann, Störmer and the Swedish company Nobia Group. Another one is rKüchen-technik. The accessory specialist from Halver was one of the first to focus on height adjustability with Danish-made technology and created their own trademark with “rGonomic.”



Fotos: Bermann



New development at interzum 2015: The extension table with battery operation should simplify use in height-adjustable kitchens.



Johnny Petersen, CEO of the Danish kitchen furniture manufacturer Sonderborg Kitchens, is a trendsetter who provides inspiring ideas for the development of height-adjustable kitchen furniture. LINAK and Sonderborg Kitchens work closely together.



Christoph Messing, DESKLINE Sales Manager at LINAK GmbH in Nidda, presents the company's first specialised kitchen product: Baselift. The height adjustment has been on the market for about one year.

However, integrating these basic components poses a challenge to customers, because every manufacturer of kitchen furniture must construct its own furniture solution. One manufacturer integrated the lifting technology on the sides of furniture, the same way as with an office desk; another had produced a firmly welded frame which the kitchen furniture of the island or kitchenette was attached to.

First special kitchen product

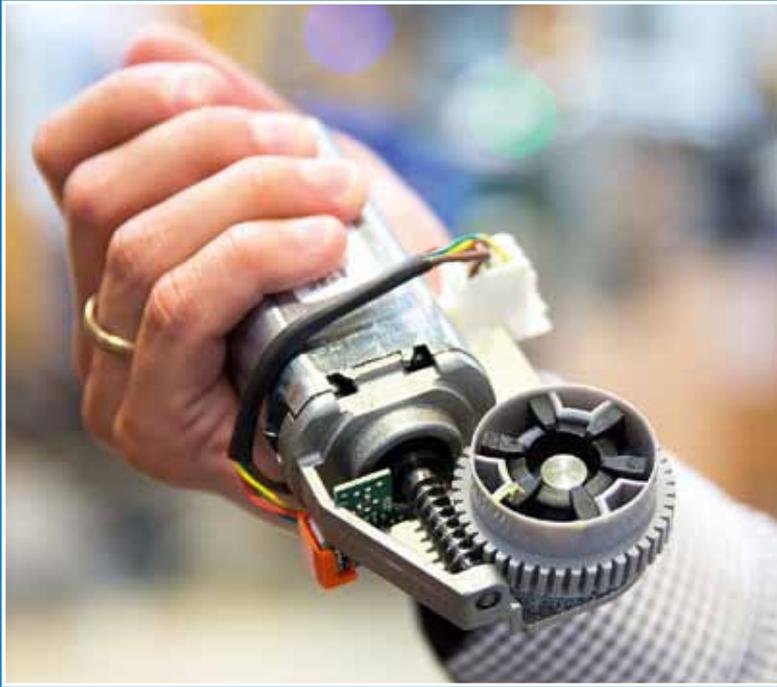
Designing and implementing customised solutions is daily business for kitchen furniture manufacturers, and thus feasible – especially for medium-sized manufacturers. However, it represents a certain obstacle for standardised use in cycle-dependent volume production. “Together with our development partners from trade and industry, we quickly realised that we are best off putting the technology in the base,” explains Christoph Messing. This is because, kitchen furniture manufacturers in Germany usually mount base feet under the base units, so that the space needed for the lifting technology is available anyway. The specialists’ discussion also revealed another aspect, adds Christian Renner, who is responsible for public relations at LINAK GmbH: “An adjustment of 10 cm is sufficient to ease most height problems in the kitchen and significantly increase comfort.” The result of these considerations is the Baselift, the first LINAK product, “which was specially designed for

use in the kitchen,” says Christoph Messing. Baselift was presented at the ZOW 2014, and the product has been on the market since summer of last year.

Simply screw it under the furniture

Each Baselift has a load capacity of 150 kilos and is mounted under the cabinets in the kitchen instead of the base feet. Up to four of these mechanical components can be connected to an electronic control unit and four of these control units can be connected in series. This gives a maximum lifting capacity of more than two tons. “Generous safety reserves are included,” the manufacturer says. After all, when guests at a party sit on the work surface after a few drinks and run the worktop up and down electrically, the technology should still be able to handle it. A helpful feature during installation: the electronics are initialised at the touch of a button via “plug and play” in just five seconds. The height adjustment is operated with control device or in the work surface – or by remote control.

But the Baselift can be mounted on more than just the base. Further positioning is possible depending on what is to be moved electrically. For instance, it can also be positioned under the working surface if a rack module is to be moved down from the tabletop or all cabinets should be adjusted at different heights. Manufacturer eggersmann presented ideas at LivingKitchen 2015.



A motor-driven spindle rotates to move a tube with a nut forward and backward on the spindle. This generates a linear movement.

Relief for the best friend

LINAK is headquartered in Nordborg, southern Denmark, approximately 50 kilometres by car from the German-Danish border. The roots of the company date back to 1907, when the grandfather of the present owner founded the Christian Jensen Maskinfabrik. Nordborg was still German territory at that time, by the way. However, the company did not undergo dynamic development until 1976, when current CEO and owner Bent Jensen took over the company. Until the mid-1970s, the family dealt with the production of pulleys and grinding plants for agriculture, providing a living for seven employees. But graduate mechanical engineer Bent Jensen was not that eager to take over the family business – he wanted to work abroad and make his own career.

However, a very special situation made him rethink. A car accident left one of his best friends from school wheelchair-bound: Hans Peter Clausen, from the family of the neighbouring heating company Danfoss. Bent Jensen developed an electric rise function for his wheelchair to make his friend's life a little easier. This electric linear actuator was later refined to form the basis of the present business and has enabled the company to develop on a global level. The first linear actuator was introduced to the market in 1979.

Precise adjustment

Six years later, the company was renamed "LINAK," which is composed of the initials of the product, "linear actuator." LINAK only manufactures certain components itself. The focus is on development and a cutting-edge assembly line.

However, two core competences remain in own hands and include its own manufacturing. These are the electronic controls as well as the steel spindles, which convert the electric impulses in a precisely defined relationship between power and speed. The production of electronic controls is not given to a supplier until the technology functions perfectly, i.e. absolutely free of malfunctions on the long term.

Countless tests

To ensure this process reliability, LINAK has integrated several test stations into the entire production and assembly process. The goal is to keep the tolerances as tight as possible. For example, the thread of the piston rod is not cut from raw material, but pressed inward into the material to ensure maximum stability and rigidity. Thanks to its own mechanical engineering, LINAK is able to comply with individual customer requests as to height adjustment. Where it always is about adjusting speed and force – depending on the application.

LINAK maintains it is the only manufacturer of electric linear actuator systems which has such a tight-knit integration of development, main component production and assembly processes and offers mechanics and electronics from a single source. 40 experts work in the development department of the DESKLINE furniture division alone. They design the mechanical components as well as the electronics and software.

Another important aspect is the design. Here, LINAK sees itself as the interface between designers and manufacturers. More and more OEM customers value and use this pool of ideas for new products," says Nina Ramberg of LINAK Marketing. "We want to create products that fit into any design," she adds.

Rapid growth

Today, the company employs 1,900 people at four production sites in Denmark, the USA, China and Slovakia, and has 30 subsidiaries worldwide. The German subsidiary, with its 65 employees, is located in Nidda (near Frankfurt) and the managing director is Sören Rasmussen. Within 10 years, the LINAK Group's turnover has nearly doubled, and rose from 327 million euros to nearly 400 million euros in the last business year alone. (dib)

The DESKLINE business is like a factory inside a factory. Here, the departments from development to assembly and management work together. Glass walls divide the areas; the atmosphere is surprisingly quiet.



View through the Plexiglas base cover: This is how the Baselift modules are assembled. Each of these mechanical components carries up to 150 kilos.



For accessories wholesalers, too

Baselift technology can be used in the kitchen furniture manufacturer's in-house production. However, specialty dealers in charge of planning can use it, too: in addition to rKüchentechnik, Naber will also be including Baselift in its sales programme, starting at area30 in September 2015. LINAK is open for further sales channels in industry and wholesale. After all, it is a standardised industrial product for which there can be no claim to exclusivity, explains Christoph Messing.

The conventional lifting technology will continue to be offered at the same time. This technology displays its strengths whenever the adjustment range must be more than 10 cm, if customised solutions are needed and when even greater weights must be moved.

"Gateway drug" for the industry

New in the product range is the battery-operated height-adjustable

side table, which was introduced at Interzum 2015. Height-adjustable tables have actually been used in the kitchen for decades, but they never really gained widespread acceptance. There may be different reasons for this, a very practical one being that the cables for the power supply cannot always be completely hidden. "Battery operation has solved this problem entirely," says Christian Renner, emphasising the advantage of this new development and winkingly calling it a "gateway drug for the industry." This means the simple side table is used to whet the appetite for height adjustability, resulting in a next stage of development for kitchenettes and islands moved by Baselift.

Comfort with added value

Height adjustability in the kitchen probably won't become "mainstream" on the short term but it always has potential for growth in defined market segments. LINAK has made it clear that it does not

want this subject to remain confined to the premium segment, but rather the "high-end standard kitchen from about 8000 euros." Four Baselift modules will cost about 1,500 euros for the end customer. Three modules will do for a separate functional areas or small kitchen blocks, further reducing the cost, which Christoph Messing maintains can be brought down to under the 1,000 euro threshold. "With the Baselift, we have cut the price in half, while retaining the full storage space" is his well-formulated sales pitch that should be used in many sales conversations. The aspect of the additional revenue generation should also please retailers. After all, mentioning the subject of height adjustability not only polishes one's image as an advisor, it also leads to concrete sales.