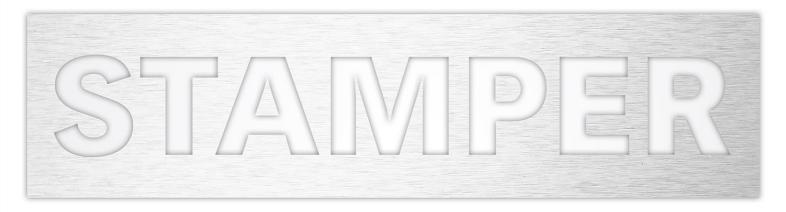
### **BRUDERER APPLICATION STORIES.**

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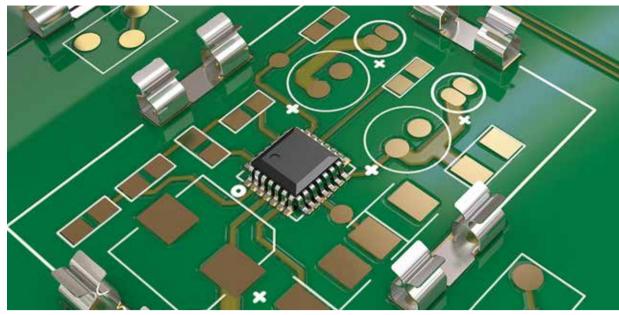


## BSTA 280-75 with BPG 22: HARWIN ready to tap into new market potential.

The British company HARWIN is a successful player in the highly competitive electronic components market, not least since their production lines are being kept at the cutting edge of technology. Their latest acquisition is a BSTA 280-75 with BRUDERER planetary gearbox.

### **BRUDERER AG**





An example from HARWIN production.

# HARWIN – investing in machinery to stay at the cutting edge of technology.

With half a billion stampings a year, HARWIN need to keep their finger on the pulse of the best that research and development has to offer. And with BRUDERER, they have found the ideal partner to support the company as it grows and adapts to the needs of expanding and ever more demanding markets.

British company HARWIN was founded in 1952 by Patrick de Laszlo, a visionary who believed that components should be engineered to the highest possible standards. That goal is still very relevant today and it is why they invest heavily in keeping their plant and machinery ahead of the game in terms of technology.

HARWIN manufactures surface-mounted printed circuit board (SMT PCB) hardware, high-reliability interconnects for a wide range of safety critical applications, and industry-standard connectors. The company's sales and service offer extends around the world via offices and manufacturing facilities in the UK, USA, Germany, France and Singapore, coupled with a worldwide distribution network.

- 1952: HARWIN founded by Patrick de Laszlo
- 1989: Becomes a PLC
- 1990: Opens offices and warehousing in Singapore
- 1990: IS09001 certification achieved
- 1991: Opens offices and warehousing in USA
- 2012: Launches Gecko high-reliability connector range

Harwin has 200 employees, 140 of them based in Portsmouth with many working on stamping the EZ-BoardWare range of SMT PCB hardware products that improve assembly processes and reduce customerinstalled costs, as well as components for their high-reliability connector families Datamate and Gecko. They also have an apprentice scheme to ensure that they always have the necessary skills to run the newest engineering and plating technology along with the design and tool-making skills necessary to manufacture products right from the raw materials. This avoids out-sourcing from supposed low-cost countries, which in turn reduces the time to market and increases the flexibility of the services offered to

### BRUDERER world-first.

HARWIN is a vertically-integrated company which retains all manufacturing processes in-house and systematically puts 10 % of turnover back into the business. They invest heavily each year to keep their manufacturing capability abreast with the latest technology, replacing machinery on a five-year cycle throughout the manufacturing process.

A perfect example of this is the recent £500,000 investment in a BRUDERER high-performance automatic stamping press at its Portsmouth plant, to help it increase efficiency and conquer new market opportunities in the aerospace, military and medical sectors. The purchase of a brand new BSTA 280-75, with a BSV 75 high-speed servo feeder, further strengthens the company's 30-year relationship with the Swiss-based company in high-speed stamping technology. It has also created a world first, with the integration of a BRUDERER BPG 22 planetary gearbox into the shaft of the main motor which gives HARWIN's engineers full control of tooling development to produce test runs of new products.

The press works with 28 tonnes at from 1 up to 2,000 strokes per minute. Strips range from 0.01 millimetres to 3 millimetres in thickness and widths of 3 millimetres to 100 millimetres, and are produced in brass, stainless steel, foil, phosphor bronze and beryllium copper, to a tolerance of 0.001 millimetres. Tooling can be designed in either single or multi-stampings to increase capacity, while automated de-reeling and re-reeling also allows HARWIN to manufacture around the clock.

### Increased efficiency, reduced costs and streamlined logistics.

"BRUDERER has supported HARWIN in our vision of automation and offered a high level of technical support," explains Operations Director Richard Wild. "Throughout the HARWIN organisation there is a high level of confidence in BRUDERER's service and ability. The BSTA 280-75 with the high-speed servo feeder and planetary gearbox basically removes the need for a separate development press, as we can put new tools through at the lowest stroke rate and at full press capacity, allowing us to identify any issues before flicking a switch to launch full production. There are lots of advantages to this: increased efficiency reduced costs, less space required and even gains in terms of logistics, since tools now require less transport. We are continually investing in our new product development programme and this new acquisition will help us develop the next generation of connectors, EZ boardware, interconnectors, circular connects, spacers and terminals."

Ben Green, Technical and Marketing Communications Manager for HARWIN, underlines how the investment will help to strengthen the company's commitment towards being at the cutting edge of research and development. "A large part of our focus is on constantly developing high-reliability components that go into ground-breaking applications such as nano-satellites, blood gas measurement sensors and even the NASA Robonaut humanoid robotic development project which featured our off-the-shelf expertise," he explains. "This BRUDERER machine gives us the capability to continue to lead from the front, not to mention providing a host of efficiency and cost savings. We are now in a perfect position to supply our customer base of 40,000 clients across the world."

#### "One of our most exciting projects ever".

HARWIN's order was secured by BRUDERER'S UK operation, which employs 11 people at its technical and sales office in Luton, just north of London. It has been working with HARWIN for over three decades and held a number of discussions with the manufacturing team in 2013 to develop this innovative solution with the high-speed press, servo feeder and planetary gearbox which was unveiled in April at MACH 2014 – Britain's largest exhibition of manufacturing technologies.

"This is one of the most exciting projects we have ever undertaken, and we're delighted to bring a world first in machine technology to the UK which will help a forward-looking manufacturer like HARWIN to expand and create jobs," explained Adrian Haller, Managing Director at BRUDERER UK.

"BRUDERER listened to what we wanted, and by working with their experts, we came up with a solution that met our exact requirements. We will benefit from a high-speed press that offers us great versatility by catering both for the development of new tools and for full production," states Damon De Laszlo, Chairman at Harwin PLC.

In the years to come, HARWIN envisages stampings becoming ever smaller, in line with the general trend in electronics markets. Now more than ever, the company will be looking to leverage its engineering expertise and R&D to deliver customer value – handin-hand with BRUDERER.