



SAKAMURA BPF-625SS

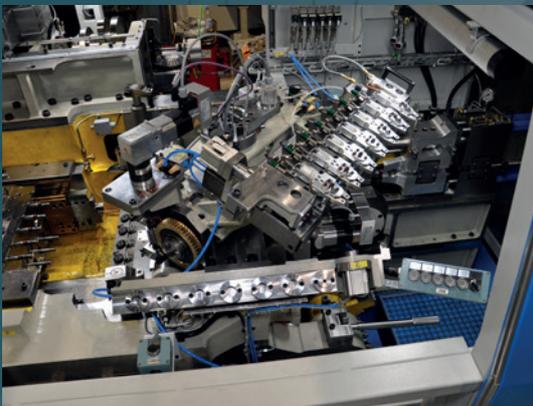
JAPANESE DESIGN MADE IN GERMANY

## BPF-625SS – A MACHINE DESIGNED TO SATISFY CUSTOMERS DEMANDS

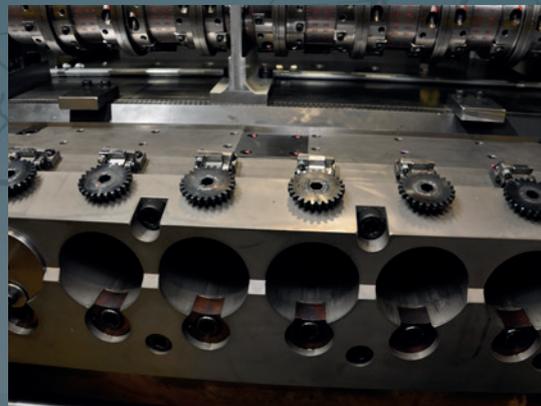
The philosophy of Sakamura/Redimo is to comply with customers' needs and to satisfy them. In 2011, Redimo and Sakamura conducted market analysis to find out what their customers' and the market wanted. This led to a machine concept corresponding not only to the personal demands of the customers, but also to the mechanical and technical needs of the market - in combination with an environmentally responsible use of resources (e.g. energy sufficiency).

Based on the Sakamura design and taking into account the daily requirements of the customer, a machine was created with components that are mainly produced in Europe and assembled at Redimo's headquarters in Willich-Münchheide. By producing the machines in Willich-Münchheide it gives the customer the opportunity to be involved with the design of the machine during the assembly. Also, a high value was placed on only European producers being used for the components in order to allow a harmonisation of the spare parts kept in stock at customers' sites.

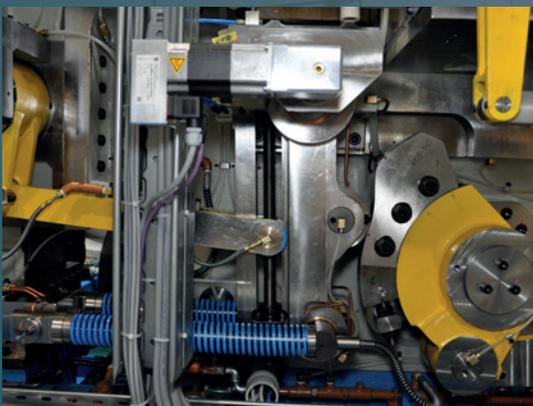
Today lots of our customers are buying a machine that conforms to CE regulations, but what about the rest of the components in the process – the uncoiler, inline wire drawer, turning charger? That is why, in cooperation with well-known producers, we include the a.m. peripheral equipment into our risk assessment and are now in a position to declare that our whole process conforms to CE regulation.



CS-TRANSFER



DIE BLOCK WITH FRONT LOCK AND GEAR LOCK



MOTORIZED FEED LENGTH ADJUSTMENT



HYDRAULICALLY CLAMPED TRANSFER CAMS

The BPF-625SS machine has six forging stations and a modified CS-transfer. The transfer has seven transfer cassettes - with the last transfer cassette taking the forging part out of the sixth forging station and laying it down properly on the SP-conveyor, protecting the forged part against damages caused by the fall down from a regular chute.

Another new development is the high-speed cut-off system for precise cut-offs in combination with the patented hydro-pneumatic linear feeding system. The use of the wire end for production is standard.

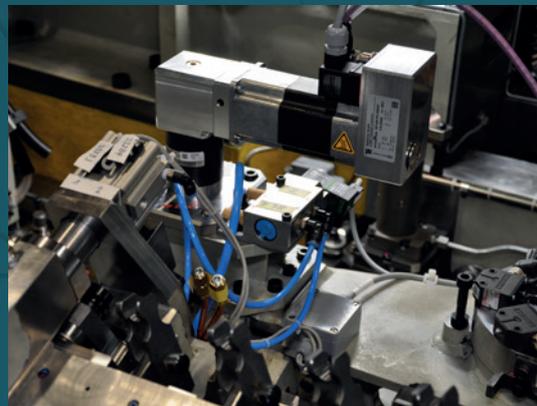
For supporting the changeover, the feed length, as well as the ejector spindles, are adjustable by servomotors. A jog dial makes the slow movement (jogging) of the forging ram possible and helps the machine operator during the set up of the transfer fingers and the timing of closing and opening.

The a.m. features can only be fully appreciated by using a modern control conception. The heart of the control system (Profinet) is a Siemens Simatic S7-319, which is safety integrated with all necessary digital and analogue I/Os as well as a Profibus/Net Master interface.

An energy management system, integrated into the control system, continuously supervises the energy consumption and switches off – depending on the mode – those drives that are not needed. The main drives and the auxiliary drives conform to energy efficiency class 2.



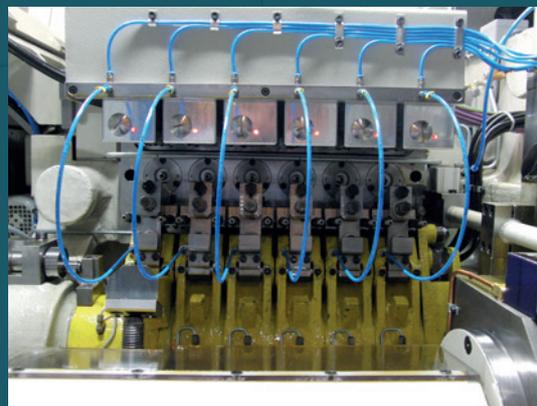
LINEAR FEEDING SYSTEM



MOTORIZED TRANSFER UP - DOWN



SP-CONVEYOR



MOTORIZED KICK OUT SPINDLE DEVICE

## MACHINE SPECIFICATIONS

|                      |                                    |
|----------------------|------------------------------------|
| Machine Model        | BPF-625SS                          |
| Forging Stations     | 6                                  |
| Forging Dia.         | 15 mm                              |
| Transfer Clear Dia.  | 22 mm                              |
| Nut Size (M)         | 8 mm                               |
| Forging Load         | 1,000 kN                           |
| Permissive Load      |                                    |
| No. 1 & 6 Station    | 400 kN (40%)                       |
| No. 2 - 5 Station    | 600 kN (60%)                       |
| Cut-Off Wire Dia.    | 15 mm (T/S 500 N/mm <sup>2</sup> ) |
| Cut-Off Length       | 10 - 105 mm                        |
| Knife Dia. × Length  | 47 × 20 mm                         |
| Quill Dia. × Length  | 45 × 65 mm                         |
| Punch Dia. × Length  | 50 × 155 mm                        |
| Die Dia. × Length    | 63.45 × 170 mm                     |
| Die Pitch            | 75 mm                              |
| PKO Stroke           | 30 mm (Total: 38 mm)               |
| KO Stroke            | 5 - 85 mm                          |
| Ram Stroke           | 190 mm                             |
| Production Speed     | 100 - 180 min <sup>-1</sup>        |
| Main Motor           | 45 kW (Inverter: 75 kW)            |
| Machine Size         | 4.8 × 2.8 × 2.3 (L × W × H)        |
| Machine Weight       | 23 ton                             |
| Electric Capacity    | 90 kW                              |
| Lubrication Oil Tank | 250 L                              |
| Coolant Oil Tank     | 250 L                              |

**REDIMO**

REDIMO GMBH | HANNS-MARTIN-SCHLEYER-STR. 27  
47877 WILlich | FON: +49 (0) 2154 49 03-0  
FAX: +49 (0) 2154 49 03-10 | INFO@REDIMO.COM  
WWW.REDIMO.COM

**SAKAMURA**

SAKAMURA MACHINE CO., LTD  
I 46 TOMINOSHIRO SHIMOTSUYA | KUMIYAMA, KYOTO JAPAN  
FON : +81-774-43-7007 | FAX : +81-774-44-5190  
TRADE@SAKAMURA.ORG | WWW.SAKAMURA.ORG