

Reutlingen, August 2019

Retrofit packages aimed at boosting productivity, quality, and efficiency have a long history at WAFIOS in Reutlingen

According to service manager Klaus Reicherter, value preservation has always been a priority at WAFIOS. WAFIOS builds high-end machines for wire and tube processing in the premium segment – where customers naturally expect above-average performance, quality, and service life. It is therefore almost inevitable that the machine life cycle will often span multiple generations of technological development. In such cases, certain components and spare parts may become unavailable and the life cycle of the machine may end up being artificially shortened due to a lack of spare parts. This is particularly true for components with short, high-intensity development cycles such as those used in control and drive technology.

Retrofit packages are particularly successful in cases where, due to the level of investment in the production equipment and the output rate (machine yield), it makes sense to operate the machine cost-effectively over a longer period and profitability is increased on a long-term basis. Retrofitting involves not only repairing the machine, but also updating it with the latest technology. WAFIOS decides whether or not to offer retrofits based on evaluations of discontinued parts, which are then broken down to the individual machines.

A retrofit generally offers the following advantages for customers

- Machine body can be retained
- Minimal training requirements
- Existing tools can be used
- Increased productivity and quality
- Up-to-date technology
- Availability of spare parts
- Reduced failure rate

The first retrofit solutions offered by WAFIOS were for the large machines used in compression spring production. Customers in this field were struggling and they expected WAFIOS to provide appropriate modernization options.

This can be illustrated by means of a simple example:

A customer buys a FUL 10 for producing suspension springs in 1982. WAFIOS supports the customer throughout the entire life cycle of the machine and, over 30 years after the machine was purchased, offers a retrofit with the following benefits: Increasing the value of the machine / updating the user interface to the latest WAFIOS standard / stabilizing the production process / existing tools can be used / use of latest technology means spare parts availability is increased / increased efficiency, e.g. energy savings due to the use of new controllers for electric drives (operating costs reduced).

WAFIOS started to offer retrofit packages of this kind in 2008, initially for compression spring and suspension spring machines from the FUL series. The portfolio has expanded over time, and numerous retrofit packages are now also available for torsion spring machines, extension spring machines, chain machines, and straightening machines. The options range from full retrofits to partial retrofit solutions. They generally involve control and drive technology but can also cover entirely different fields such as optical measuring systems, the latest programming software, switch cabinets, welding control systems, or even converting

the central drive on straightening machines (variator replacement – discontinued Variducer transmission unit) to a master-slave drive made from standard components.

WAFIOS also offers the option of updating individual components to the latest technology using special packages or upgrades. Examples include camera and computer packages, control software upgrades, and auxiliary equipment (modernization packages). The aim of these solutions is to assure customers that their investments are secure and will last well into the future. The pressure spring machine FUL 56 was launched in 2012 and can now be fitted with numerous retrofit options: Camera measuring systems, interface technology, control software, or even *iQ* solutions for process optimization. This not only guarantees that the machine will retain its value, but also increases productivity and creates options for expanding the product portfolio.

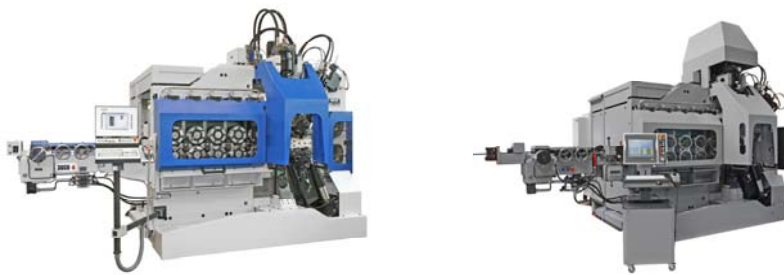


Fig. 1: Suspension spring machine FUL 103 before and after the retrofit