

1. Active laser safety cabin

Füchtenkötter GmbH / SAP-WELD Sp. z o.o.

The constantly growing power of lasers and the ever-better beam quality mean that in many laser applications there is a risk to human health and a passive laser shield may turn out to be insufficient. For such cases, Füchtenkötter has developed an active laser protection cabin that combines the advantages of a passive shield and LaserSpy sensors. Everyone is talking about laser safety. And we have already built hundreds of cabins that reliably ensure laser safety not only in catalogues!



2. Vertical milling machining centre M1

Famot / DMG MORI Polska Sp. z o.o.

The M1 was created for customers who need a simple, compact, reliable and easy-to-use numerically controlled milling machine. The M1 will find application both in small enterprises and large production plants that need a simple and accurate 3-axis milling machine. The M1 combines the uncompromising quality of DMG MORI machines, high performance and a competitive price, which translates into reduced manufacturing costs in our customers' enterprises.



3. Roll baler and baler wrapper-combination for harvesting roughage in round bales with a system for monitoring and influencing the process of their creation

**Sieć Badawcza Łukasiewicz
Poznański Instytut Technologiczny**

The achievement includes the development of a roll baler and baler wrapper-combination for harvesting roughage in round bales, equipped with systems monitoring the bale formation process, enabling the impact on the bale creation process in a way that increases the quality of the obtained haylage while increasing the efficiency and ergonomics of work. The result are innovative solutions that increase the functionality of the roll balers and wrapping machines, which has a positive impact on the environment. Machines equipped, inter alia, with: • systems for controlling the dosage of additives; • sensors enabling effective adjustment of the press parameters to the prevailing conditions; • a set of monitoring sensors; • location determining system. The resulting machines are the first of this type equipped with a number of innovative design and functional solutions, in particular a combination of a round baler and a wrapper.



4. Press Brake HRB 1003 ATC

AMADA Sp. z o.o.

The HRB1003ATC press is the perfect solution for processing small production batches. Set-up times are dramatically reduced to increase productivity. It is a press brake with a bending length of 3 m, a pressing force of 100 tons with an automatic tool magazine with a total tool length of over 22 m.



5. SINUMERIK ONE

Siemens Sp. z o.o. / MDMarketing Małgorzata Dądela

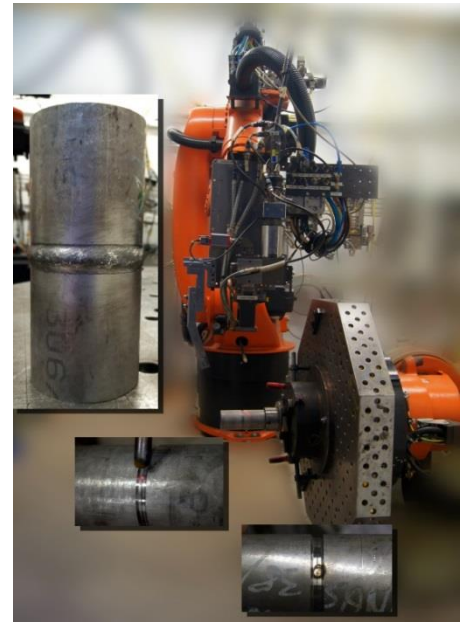
SINUMERIK ONE is the first CNC control that allows you to create a true Digital Twin of a machine. It provides: • new possibilities in machine prototyping and programming, • simulation and commissioning of machining, • processing of production data and servicing, • full integrity in the CAD-CAM-CNC chain, • smooth connection of the virtual and real world. It meets the highest standards of CyberSecurity and know-how protection. Supports Edge and Cloud Computing technologies. The Digital Twin is an ideal tool for training purposes.



6. The method of joining two-layer (composite) pipes with the use of laser technologies

Łukasiewicz Research Network - Welding Institute

The innovative technology of joining two-layer pipes with the use of laser technologies ensures work safety, shortening the time of making welds, obtaining high-quality joints and financial effects related to a significant reduction in the amount of materials used. The technology has been developed mainly for modern automated production of composite pipes in the power industry, especially for elements working in an aggressive environment.



7. STAR SL-7 Automatic longitudinal lathe

STAR MICRONICS CO.,LTD. / RANDS Sp. z o.o. Sp.k.

STAR MICRONICS has developed a new SL-7 automatic lathe model, launched in December 2021. This model has been developed to meet the small diameter machining needs in the watch, ICT devices and instruments, automotive and medical industries.



8. FORTiS™ encapsulated linear position transducers

RENISHAW Sp. z o.o.

Rulers designed to work under machining conditions? YES! The enclosed FORTiS™ linear position transducers are characterised by excellent repeatability, reduced hysteresis and better metrological parameters thanks to an innovative non-contact design. The DuraSeal™ lip seals used have excellent resistance to wear and the penetration of lubricants used from machine tools. Thus, they ensure the highest sealing and degree of protection IP64.

