

THE NEW DIMENSION IN PRODUCTIVITY

For successful fineblanking

Servo-mechanical fineblanking press XFTspeed







- ► Significantly increased output
- ► Great flexibility
- ► Maximum process reliability
- ► Fast retooling times
- ► Long tool lives
- ► Energy efficiency
- ► Low production costs



PRODUCTIVITY. REDEFINED

Built to make you successful

The XFTspeed press series impresses with fast retooling times and high cycle rates. The use of state-of-the-art servo drive technology achieves cycle rates that were considered impossible until now. In production they reach up to 140 (XFT 2500speed) or 200 (XFT 1500speed) strokes per minute: a striking improvement when compared with their predecessor models. With its high performance, flexibility and process reliability, this press range offers your company everything it needs on its path to success.

MULTIPLY OUTPUT

Servo-mechanical drive for maximum cycle rates

200 strokes per minute

Thanks to the modern servo technology of the XFTspeed presses, they achieve cycle rates which were long thought impossible: Up to 140 strokes per minute with the XFT 2500speed and up to 200 strokes per minute with the XFT 1500speed. Even at these high stroke rates they achieve long tool lives, thanks to the rigidity of the press and the fully programmable operating sequences.

The XFTspeed presses are driven by two latest-generation servomotors. Output can be increased by between 100% and 200% even with existing suitable tools. This results in unparalleled productivity and an important success factor.

Unique: The servo direct drive

Directly connection between the servo motor and the press table results in a highly dynamic drive system. In the event of a malfunction the press stops much faster, thus shortening the braking distance significantly. This innovative design also enables the motors to run at a slower speed and so consume less energy.

Milliseconds for productivity

Both types of XFTspeed presses enable operating sequences to be freely and easily programmed. Movements such as acceleration, braking, part removal or even intermediate pauses can be defined with millisecond accuracy. As a result, you get maximum productivity from a process while at the same time protecting your tools.



The XFT 1500speed

Sensitivity for high process reliability

Other impressive features of the XFT 1500speed include its lightning-quick response times and its sensitivity. The interaction between the servo-mechanical drive with the newly designed sensor table and the new, patented tool space results in a striking reduction in the response time to a standstill in the event of technical problems. And in addition, the braking distances of the press are considerably reduced thanks to direct drive. This effectively prevents tool breakage and half-severed components.

- ▶ Multiple increase in output compared with other presses
- ▶ 5 to 200 strokes per minute, 50 mm ram stroke
- ► Low-wear servo-mechanical drive
- ► High-precision operating sequences
- ▶ Optimized processes for maximum productivity
- ► High level of protection against tool breakage





The XFT 2500speed

Servo technology for the toughest requirements

The XFT 2500speed model offers an effective solution for the special challenges in fineblanking production, delivering forces of up to 2500 kN. In an additional version, the knuckle joint bearings are equipped with stronger cylindrical roller bearings and the the knuckle joint links are reinforced. This increases the press force at the tip to 3000 kN (time-limited), giving you new possibilities in production. Due to the additional reinforcement, this model is also suitable for parts made of high-tensile materials with thicknesses of up to 8 mm at more than 100 strokes per minute. This means a lower load on the press during operation with conventional tools and greater flexibility due to the occasional use of tools with higher power requirements.

- ► Massively increased rigidity
- ► Large tool space and quick-change system
- ▶ High-precision operating sequences
- ▶ Optimized processes for maximum output
- ► Significantly increases in productivity possible
- ▶ Optional: Time-limited maximum overload of 3000 kN

FLEXIBILITY. IN EVERY DIRECTION

Tool changes in minutes



Tool is also accessible from behind



Tool pre-mounted on bolster plates

Every batch a success

Short retooling times come as standard with the XFTspeed. This is due to several innovations that were incorporated into the press during its development. These make it possible to change tools in a matter of minutes. As a result, even small batch sizes can be produced very cost-effectively.

Tool changes made easy

Tools are assembled and mounted on bolster plates outside the press – next to the machine while it is still running. The XFT 2500speed is fitted with fold-out tool consoles on which the plates are laid for tool removal and installation. In conjunction with the new hydraulic tool clamping function, the console ensures maximum speed when changing tools: The old tool is unclamped, rolled onto the console and removed. The new tool is rolled into the press via the console and clamped into place at lightning speed without screwing.

- ► Tool changes within minutes
- ► Substantially shorter machine downtimes
- ► High cost-efficiency even for small-series production

EFFICIENCY. FOR EVERY PROJECT

The perfect foundation for countless applications



The enlarged tool space of the XFT 2500speed



A special adapter means that the press does not have to be reconfigured for tools with a moving punch.

More applications thanks to flexible hydraulics concept

A new hydraulic concept enables the integration of two additional forces for multi-stage tools. Another innovation is the minimization of pressure peaks which occur at high speeds. This guarantees top quality and prevents unwanted instances of deformed parts due to high stroke rates or thin materials.

Fineblanking and conventional blanking

The XFT 1500speed's unique flexibility opens up a new and broader spectrum of applications. It can achieve 5 to 200 strokes per minute with fixed ram movement. The press's versatility makes the production of conventionally blanked parts which have to satisfy particular requirements for dimensional repeatability and surface quality an economically attractive option.

Precision and speed for complex components

The tool space of the XFT 2500speed has been enlarged, compared with its predecessor models. This opens up new opportunities for efficient parts production, with which competitive advantages can be achieved: The press enables a

virtually unlimited variety of applications — it is particularly suitable for the manufacture of complex parts. Furthermore, it is ideal for raising productivity with multi-cavity tools.

Guaranteed investment security

Thanks to their highly flexible tool space, both models can easily accommodate existing tools from predecessor models. Earlier investments will thus continue to bear fruit for a long time to come. Moreover, modular tools are used in the press. These have the advantage that only a single module has to be replaced, rather than the entire tool, if something is incorrect.

- ► Greater range of applications
- ▶ Minimum pressure peaks ensure maximum parts quality
- ► Adoption of existing tools

AVAILABILITY. ALWAYS READY TO GO

Minimum wear and maximum tool service lives



Minimum wear and maximum tool service lives



Consistently high parts quality

Same process, greater productivity

Even though there is no change in cutting speed, faster closing, sensing and opening processes ensure a marked increase in productivity without subjecting the tools to greater loads.

Stay in shape longer

The XFTspeed is gentle on tools. Even at very high cycle rates, tool deformation is practically ruled out and the new ram guides ensure excellent parallelism at all times. On the one hand this reduces tool wear and maximizes service life. On the other hand the quality of the components remains at a constantly high level, even with large batches.

Well built for stability

The strength and rigidity of the XFTspeed's press frame have been optimized. Both the frame and ram guides are of high rigidity. In addition, the cast-iron frame ensures maximum stroke damping. All this contributes to the greatest possible stability of the press table and thus long tool service lives.

- ► Minimized tool deformation
- ▶ Long tool service life
- ► Consistently high parts quality
- ► Easy care and maintenance
- ► Built to work for decades

LONGEVITY. WELL INVESTED

Ready for the coming decades



Use of a modern thermal imaging camera for service analyses



Our maintenance for a long press life

Quality at every level

When Feintool developed its new XFTspeed press concept, it paid close attention to ensuring high availability throughout the years. The individual subassemblies and components of the XFTspeed have therefore been systematically designed for decades of operation. Fast and simple maintenance and effortless component replacement help to ensure that your investment will pay off in the long term.

Easy care, low maintenance

The XFTspeed is exceptionally low-maintenance: Large service ports offer easy access, and centralized lubrication minimizes maintenance work. Moreover, Feintool stands ready to assist operators at any time. Within minutes, Feintool's specialists can establish an online connection to the machine and correct faults by remote maintenance. Feintool's comprehensive maintenance packages for presses and tools round out its offering for ensuring successful long-term production.

- ► All components of the highest quality
- ► Built to work for decades
- ▶ Simple yet comprehensive retention of value
- ► Easy care and maintenance

ECOLOGY. ACTIONS NOT WORDS

Ecology and economy in harmony

Cleverness pays off

Feintool is committed to the sustainable protection of the environment. When developing new products, ecological concerns are a high priority. The XFT speed's innovative energy management system guarantees minimum energy consumption. The welcome consequences are as follows: Natural resources are protected and unit costs fall.

Servo technology, energy storage and stand-by

The servo mechanical drive guarantees highly efficient energy use. Thanks to this system, the press only consumes as much energy as it needs to perform the part-specific process. In addition, the press makes use of energy storage: The energy generated when braking the press is captured and stored, and then re-used when needed. This reduces costly peak-loading of the electricity grid. When not in use, the XFTspeed switches automatically to power-saving stand-by mode.

- ► Environment-friendly energy management
- ► Low energy consumption
- ► Lower unit production costs





Lower energy consumption resulting from innovative energy management

PROCESSES. PLAYING IT SAFE

For consistently high part quality

Environmentally friendly ejection with no impact marks

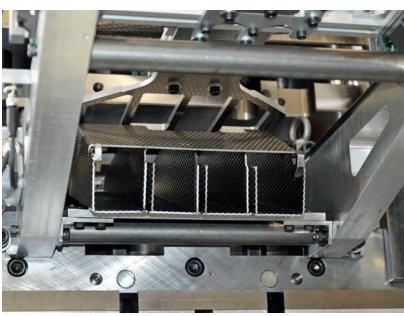
Conventional presses normally use expensive compressed air to eject parts. Products can be damaged by impacting against objects. Feintool eliminates this risk with a further new development: Die XFTspeed can be added with the servo-powered Feintool removal device. This removes the parts from the tool at high speed, i.e. at up to 150 strokes per minute, without damaging them. Valuable side effects: High air consumption, oil mist and air noise are gone for good.

Metered mist-free oiling

Even while developing the spray system, Feintool pursued ecological goals. Its use results in massive reductions in cutting oil consumption. The energy-saving system uses no compressed air and produces virtually no oil mist, so there is no need for an extraction unit. The press is less prone to fouling and there are no pollutants in the surrounding air.

- ► Maximum protection against tool breakage
- ▶ No impact marks on parts
- ▶ No oil mist, lower oil consumption





The removal device, which is integrated into the press control system, ensures that parts are removed undamaged

COMFORT. PROGRAMMING MADE SIMPLE

Feintool Motion Control

Process control via touchscreen

The tried and tested Feintool Motion Control system has been upgraded with the addition of new elements. When used in the servome-chanical XFTspeed, they open up new perspectives in process control. With its state-of-the-art control engineering and network technology, the system is equipped for the future, offering actual-value recording and top-quality process performance. Feintool's Motion Control system has a user-friendly touchscreen interface for ease of operation.

All movement details under control

The XFTspeed's ram speed and operating sequences can now be individually programmed in an unparalleled depth of detail. Each phase of the motion sequence can be precisely defined and controlled with an accuracy of one hundredth of a second. It is possible to optimize individual process steps at any time. This flexibility enables manufacturers to define the best-fitting, most cost-efficient process for each project.

- ► Maximum process quality
- ► Precise process analysis
- ▶ Stroke simulation and test stroke





The XFTspeed is equipped with the latest control technology

PERIPHERAL SYSTEMS. COMPLETE SOLUTIONS

A perfect match on all sides



Strip straightening unit in compact long configuration



Carousel for separate multiple ejection

Perfect coordination

Optimum results can only be achieved with the XFTspeed if the surrounding peripherals can keep pace with the press's high productivity. Feintool offers peripheral system solutions which are perfectly coordinated with the press. Its own experience of producing parts means that Feintool knows the nuances that determine whether or not these solutions are successful.

Everything from a single source

Feintool offers its customers fully-fledged complete solutions for a highly productive facility: They range from customized feed systems, through fully automated tool changers to robots for the separate removal of finished parts and slug. Operators can obtain the engineering, installation, commissioning and training services for complete facilities from a single source.

Strip straightening lines – seamlessly integrated

Efficient material feeding plays an important part in ensuring the cost-effectiveness of the fineblanking process. Incorporating the feeding line's control and safety technology into the fineblanking press enhances process reliability and system availability by a very significant amount. Feintool can deliver the ideal solution for every challenge by working closely with innovative manufacturers.

- ► Maximum productivity and reliability
- ► Customized solutions for peripheral systems
- ► Everything from a single source

SERVICES. ALWAYS THERE FOR YOU

Feintool Service - on call around the world



Preventive on-site maintenance service



Professional support by remote maintenance

Hotline-Service – connected worldwide

Whichever time zone your company operates in, it can access Feintool's knowledge base via the Service Hotline. Hotline staff are well experienced with Feintool fineblanking systems, and are thus the most competent advisors around. They have a direct line to Feintool's service engineers and genuine spare parts. Remote diagnostics by telephone or Internet serve as an efficient aid for rapid fault correction. You can find the contact details for our Service Hotlines at www.feintool.com

FEINmonitoring and Smart Maintenance – increasing performance

To increase system availability and cost-efficiency, Feintoll offers FEINmonitoring, its ready-installed maintenance and analysis tool. Integrated sensors continuously monitor the technical condition of your fineblanking press. The data obtained are analyzed and automati-

cally transmitted online. Together with Feintool Smart Maintenance, it helps you to reduce unplanned downtime, optimize maintenance cycles and increase press availability and performance.

eShop – for an even faster response

Genuine spare parts can be sourced even more quickly in the Feintool eShop. Online orders significantly reduce waiting times for orders and order processing. Speedy spare parts delivery means that your fineblanking system will quickly be running at maximum performance again.

Feintool. Powerful service

- ► Available worldwide
- ► Fewer stoppages
- ► Minimized downtime

FEINTOOL – LEADING WORLDWIDE

Technology support for demanding customers

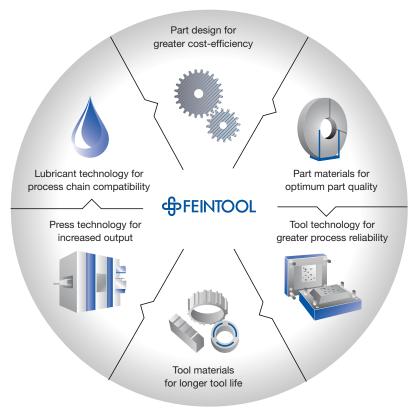


Fineblanking technology training

The complete spectrum

Feintool supplies total solutions comprising presses, tools and peripheral systems for fine-blanking and forming technology. Feintool's activities focus on customer-specific development and production as well as comprehensive support comprising consulting services, engineering and training.

The optimum interplay between lines, tool systems, materials technology and parts design is indispensable for the success of a project. As a globally operating provider, Feintool unites all of these core competencies, giving it the foundation needed to deliver comprehensive technological consulting and customer support.



Feintool technological knowledge for every segment

No detours - direct to the best solution

The specialists at Feintool support their customers along the entire process chain. The advice they offer covers everything from component and tool design and materials to lubricants. Customers also benefit from Feintool's skills in process optimization, machine operation and preventive maintenance of their systems.

Feintool. Feintool - Expertise from the technology leader

- ► Comprehensive technological consulting
- ► Process optimization
- ► Services from a single source

EUROPE

Feintool Technologie AG

USA

Feintool Equipment Corp.

6833 Creek Road Cincinnati, OH 45242, USA Phone +1 513 791 00 66 Fax +1 513 791 15 89 feintool-ftu@feintool.com

ASIA

Feintool Japan Co., Ltd.

260-53, Hase, Atsugi City Kanagawa Prefecture, 243-0036 Japan Phone +81 46 247 74 51 Fax +81 46 247 20 08

feintool-ftj@feintool.com

Feintool Fineblanking Technology (Shanghai) Co., Ltd.

Bld.No. 27, No.1525 Minqiang Road Shentian High-Tech Park Songjiang District 201612, Shanghai, P.R.China Phone +86 21 6760 1518 Fax +86 21 5778 6656 feintool-ftc@feintool.com