THE FEINTOOL GROUP
Expanding Horizons with Fineblanking, Forming, and Electric Motor Lamination
Precision parts ... for advanced gear boxes ... in dynamic and efficient cars.
Feintool specializes in the development and manufacture of fineblanking systems and the production of sophisticated fineblanked and formed components as well as electric motor lamination components in high outputs. The technology company’s leading position is the culmination of unparalleled expertise and close collaboration with its customers. For more than 60 years now, Feintool has made their needs the focus of its innovation activities. Around 2,700 dedicated employees work toward this aim, developing solutions that often push the boundaries of what’s technologically possible.
The fineblanking and cold forming processes are cost-effective, accurate, and high-quality, making them suitable particularly for demanding applications in automotive production.
The hallmark of Feintool technology is complex part geometries and, most notably, smooth, die break and tear-free fineblanked surfaces after just one operation – these quality traits are characteristic of this form of fineblanking and set it apart from other blanking processes. The benefit: with this level of precision and flatness, there’s no need for a costly second operation.

All it takes to produce a precision component that’s ready for assembly is one fineblanking press and tool: blanked, formed and de-burred. For example, fuel rail clips made from high-tensile steel make the injection nozzles of diesel engines functional. They’re manufactured with high stroking rates and 100% repeat accuracy — all at an affordable unit price.

The same goes for cold forming technologies, which are combined with each other or with alternative and secondary processes depending on requirements. Once again, the final result is precision components ready for assembly.

Feintool’s fineblanking and cold forming solutions are designed for precision and ultimate cost savings. The expertise in these key technologies can be used in a targeted way — depending on the application and requirements. There’s good reason why every car in the world features up to 200 components manufactured by Feintool itself or using Feintool technologies.
Faster, more complex, and more cost-effective – Feintool develops fine-blanking presses and systems as well as tools for the efficient manufacture of precision components.

Seat belt tongues: the tool blanks, bends, and deburrs in progressive steps.

Precision and high output: the next-generation fineblanking press.

Integrated removal arm: components leave the tool without any damage.
Feintool makes every effort to ensure that the investment is well worthwhile for the customer. A partnership that begins with the first inquiry. Once we’re aware of how a component should work, we develop the right solution, designing the parts and defining the tool, press, and peripheral system. The press user requires increased output and reliable production, and the press developer provides it.

Feintool optimizes the necessary technologies such as the servo drive to make its fineblanking systems more efficient. The tool boasts a long service life, as the rigid press design and servo drive allow you to control the technology movement with precision, down to a fraction of a second and tenth of a millimeter. The result is a fineblanking and forming process sequence that’s tailored to the tool and material and enables high speeds and thus high output. This can be done with multi-out tools and ones with progressive stations as well as material-saving strip layouts, all developed by Feintool’s tool engineering group.

Feintool systems are even more effective as part of a production line. Feintool provides modular straighteners and part removal systems for each press series, which operate in exact synchronization. Feintool goes one step further and transfers the principal of controllability to the peripheral equipment. The part removal system with servo drive reliably removes components from the tool at high stroking speeds and without causing any damage.
The components that Feintool manufactures are developed in collaboration with the customer. Innovative components that are lighter and more complex, and yet more affordable, and help users successfully pursue their own innovations.

- Drive: disc carrier for clutches and gear boxes.
- Comfort: tooth plate for reclining seat adjusters.
- Safety: components for airbag systems.

Up to 200 parts per car are manufactured using Feintool systems.
Feintool uses the fineblanking and cold forming processes in the production of its parts. Quality can be achieved economically and efficiently: functional surfaces are smooth and tear-free. Tools combine multiple stations and can accommodate complex geometries and forming systems with secondary processes such as CNC machining and laser welding build complete process chains.

Feintool’s manufacturing processes are demanding, as it takes extensive technological knowledge to design complex parts and manufacture tools in a way that enables high-volume production of precision components at low costs per part. That’s also why modern, efficient automatic transmissions that help reduce consumption and CO₂ are increasingly gaining ground.

Feintool manufactures high-volume components in the US, China, Japan, the Czech Republic, Germany, and Switzerland – wherever innovative segments such as the automotive industry operate. There’s a key focus on components for seat adjusters, safety systems, and the drivetrain. As a project and development partner, Feintool also supports the most important trends in the automotive industry: lightweight manufacturing, module variations, and alternative drive concepts such as hybrid and electric.

Many of these components are manufactured by Feintool developers in collaboration with the users at the company’s technology centers for parts design and tool development. Customers benefit from expertise that has expanded over the decades and continuously pushes the boundaries of what’s possible with manufacturing processes.
Feintool’s electric laminations and interlocked stacks are high-precision components developed for the eco-friendly drives of the future. But they also play a key role in other growth markets.

Stamped stator and rotor interlocked stacks including injection molding and stator groove insulations from a single source.

Finished interlocked rotor and stator cores are efficiently manufactured.

Individual laminations, laser-cut or blanked.
Electric motors of all sizes are the future. These successful components are not only important in electric vehicles, but also in growing sectors such as renewable energies and robotics. With high-quality electric motor lamination products and a comprehensive range of related services, Feintool offers its customers the perfect springboard.

Feintool’s electric motor lamination products are built for maximum performance. Whether they’re used in micromotors, electric vehicles, or large power plant generators, they feature a robust design and reliable operation, guaranteeing the best results. The selection offers the right solution for any quantity and includes laser-cut sheets for prototypes, combinations of laser-cutting, notching, and stamping, and stacks for greater volumes with high-speed stamping. From individual laminations to interlocked stacks for rotor and stator to single and multi-part sets, Feintool provides everything in optimal quality. The key technologies, including secondary technologies, all come from a single source.

Feintool is also constantly breaking new ground in the field of electric motor lamination, with a key focus on the development of new technologies, materials, products, and processes. Feintool embraces a culture of innovation, ensuring that even highly complex individual laminations and interlocked stacks can be manufactured economically.
If you look to the future, you’ll always be one step ahead. Feintool pursues innovation on a daily basis. By constantly questioning the status quo, conducting research, and moving forward, we can respond to customers’ needs in groundbreaking ways.

Every innovation begins with communication. A conversation between people who ask new questions on the basis of past achievements. At Feintool, the results can be seen in a knowledge database that stores more than 10,000 solutions and over one hundred new tools that are developed each and every year. Engineering that spans multiple teams and always aims to identify the most cost effective combination of component design, material selection, and tool concept. Simulations rather than expensive trial-and-error loops and prototyping in realistic conditions pave the way for the future. The best “pro active” production is identified early on in order to optimize investment costs and, in particular, reduce costs per part further down the road.

As a development partner to its customers, Feintool looks far into the future, assessing the feasibility of new technologies in even more powerful fineblanking systems and continuously optimizing the processes of fineblanking, forming and electric motor lamination production. This includes investments in basic research as well as global collaboration with prominent universities and institutes. It doesn’t matter if it’s new drive concepts or alloy and high-tensile steels, the coating for active tool elements, or metal and plastic connections for in-tool lamination core stacks. Each and every innovation needs to secure the technological edge — and the customer’s competitive advantage.
Feintool's more than 2,700 employees have unique expertise. Well-founded, tailored training opportunities and ongoing knowledge exchange ensure that customers are able to benefit from optimal solutions.
Feintool trainees are often the best in their class. Feintool also upholds the high standards of the integrated work/study education system, as it exists in Switzerland and Germany, at all of its other plants around the world. After all, only a well-trained young professional can secure highly specialized expertise for the future, and education and well-founded knowledge can help young people develop confidence. Feintool therefore continues to cultivate an intensive culture of knowledge even after the training program.

Feintool’s success is based on the outstanding dedication of its employees. With their reliability, qualifications, many years of experience, and company loyalty, they ensure the high quality of our solutions. More than 2,700 specialists currently work for Feintool in the US, China, Japan, the Czech Republic, Germany, and Switzerland.

As an international company, Feintool benefits significantly from the cultural diversity of its staff. In line with the motto, “learning from the best,” employees help each other by periodically spending time abroad at other plants. This not only enriches the company, but also expands horizons and promotes a company culture that spans national borders and is based on respect, appreciation, and openness.
Fineblanking, forming, and electric motor lamination offer enormous potential. Our mission is to continue developing these, and our goal to ensure the economic success of our customers. This particular path to the future is tradition at Feintool.
Fineblanking, cold forming, and electric motor lamination are cost-effective processes, which you can take advantage of, provided you have a firm understanding of them. Feintool has been successful in the field of fineblanking for more than 60 years and is now a global leader in this technology. Having acquired long-standing companies more recently, Feintool has successfully established itself in the fields of forming and electric motor lamination. Specialists’ expertise and close collaboration with customers are the key to making manufacturing more efficient and successful.

This approach is just as effective today as it was in 1959, when Swiss toolmaker Fritz Bösch used fineblanking on an industrial scale for the first time. It was such a success that his Feintool company was able to gain a foothold in the US and Japan just five years later. Plants and technology centers followed in Germany, the US, and Japan as early as the 70s as well as in China and the Czech Republic after the turn of the century.

Change requires a sturdy foundation: for Feintool this takes the form of long-standing business relationships and responsible business practices. Feintool has been listed on the stock market since 1998, operates with adequate risk management, uses resources responsibly as a participant in the Carbon Disclosure Project, and follows ethical rules, which are outlined in a code of conduct. Needless to say, the company observes the ISO 9001, ISO TS 16949, and ISO 14001 management systems as well as an energy management system based on ISO 50001:2011 in Germany.

Feintool prefers to grow under its own steam and pursue investments that concentrate specifically on quality and customer benefit. The basis is forward-looking optimization of manufacturing processes – with continuous innovations at its core.
With its technologies, Feintool is at home in innovative and demanding industries. For instance, the company is represented in all relevant automotive markets as a partner to global car manufacturers. Close proximity to customers is important, with four technology centers and 14 production facilities in the US, China, Japan, the Czech Republic, Germany, and Switzerland.

Feintool’s technology centers accelerate service and have the expertise to support customers with solutions locally. The company’s inspection and maintenance specialists can be found on three continents – wherever Feintool systems are in use.