FEINTOOL TECHNOLOGY NETWORK
Strong partners for successful fineblanking
YOUR BENEFITS:

▶ Usage of the Feintool partner network
▶ Highest level of innovation
▶ The right solution for every challenge
FEINTOOL PARTNERS
Expanded expertise creates added value

With the professional partners of the Feintool Technology Network, we provide extensive expertise relating to fineblanking and added value for our customers. Through intensive cooperation and exchanges with our industry and university partners, we optimize important areas of the process chain and continue to further develop fineblanking technology as a whole. We are introducing you to the Feintool partners and your benefits in the areas of equipment, lubricants and ancillary materials, as well as research and development.
FEINTOOL TECHNOLOGY NETWORK
Working together for your fineblanking success
EQUIPMENT
The ideal complement for your fineblanking press

ARKU Maschinenbau GmbH
For decades, ARKU has focused on the essentials and sets the direction for the entire sector: resilient and reliable levelers for coil processing.

The company ARKU Maschinenbau GmbH was founded in 1928. With over 50 years of experience, it is the market and technological leader in leveling technology. ARKU offers the largest selection of precision leveling machines in the world. The company has expanded its industry expertise with innovative deburring technology.

With its main office in Baden-Baden in Germany and ISO-certified subsidiary companies in Kunshan (China) and Cincinnati (USA), the company covers markets in almost 30 countries.

Your benefits:
► The company ARKU Maschinenbau is an expert for leveling and deburring technologies.
► ARKU develops machines that set the standards in process reliability and cost-effectiveness.
► ARKU also offers customers contract work in its leveling and deburring centers in Baden-Baden (Germany), Cincinnati (USA), and Kunshan (China).

www.arku.com
For over a hundred years, our company has stood for groundbreaking expertise in special lubricants.

FUCHS WISURA GmbH is one of Europe’s leading developers of special lubricants for non-cutting metalworking. At our location in Bremen, we unite research and development as well as production and distribution under one roof. We are proud to realize both tried-and-tested, high-quality standard products as well as very individual solutions for our customers.

We have made a name for ourselves thanks to our expertise, and not only with our customers: in the global business association Fuchs Petrolub SE, we have been the competence center for forming lubricants since 2005 and advise Group companies. The role of leading chemist for all forming products and manager of the group-wide Forming Work Group was conferred upon our manager of research and development.

FUCHS WISURA premium fineblanking oils meet Feintool’s specifications, promote optimal roughness depth for fineblanked surfaces, provide the best protection against wear, and make it possible to increase tool life while guaranteeing the greatest possible process reliability.

Your benefits:
- Chlorine-free fineblanking oils
- Chlorine-free forming of rust-free steels
- Conversion coating is not used in cold forging
- Products made using renewable raw materials – free of mineral oil, solvents, and VOCs

www.fuchs.com/wisura
HOLIFA Fröhling GmbH & Co. KG

HOLIFA specializes in fineblanking oils. HOLIFA offers its customers optimal fineblanking oils for all their fineblanking applications.

The company HOLIFA has been developing high-performance lubricants for the sheet metal industry for over 50 years. Over the course of this long time, we have acquired a wealth of experience from direct collaboration with national and international customers, and we combine that with the most recent discoveries in science and research to continually develop our products further.

HOLIFA lubricants are world renowned, not least because of the fineblanking oils we have developed over a period of 40 years, among other things in collaboration with our cooperation partner Feintool. Not only does Feintool, market leader in the area of fineblanking technology, itself rely on HOLIFA fineblanking oils, it also recommends them to its customers around the world. We are able to offer our fineblanking customers optimal fineblanking oils tailored to their individual needs for all imaginable material qualities and applications.

Your benefits:
- HOLIFA offers and recommends chlorine-free fineblanking oils for all materials (steel, stainless steel, aluminum, non ferrous metals) to its customers
- HOLIFA has also specialized in the development of individualized lubricant solutions for its customers
- The HOLIFA product palette also incorporates a series of fineblanking oils that contain chlorine for the most difficult applications
- HOLIFA is represented by a large number of distribution partners around the world

www.holifa.com
The creed at MOTOREX is: "We constantly champion innovative, environmentally friendly, quality products and pioneering services using state-of-the-art technologies." We are your reliable partner when it comes to high-quality fineblanking oils.

For over 100 years now, innovation and tradition have been part of MOTOREX. If you have great plans, we’re the right partner for you. You can achieve competitive benefits with our products and services. Thanks to the intense research and development involved in producing MOTOREX products, we guarantee your output will improve. Additionally, you can reduce your tool costs by up to 20%. Our lubricants are developed in concert with fineblanking experts and have been used successfully for years.

MOTOREX is globally active. Its products are represented in over 75 countries. Traditional but also a strong global player – these are the logistical strengths of our Swiss family company.

Your benefits:

- Your experts in precision mechanics, market leader in the watch industry
- Over 100 000 different implant models have been produced for medical technology using cutting oils from MOTOREX. All in all, that means many millions of implants which improve the lives of the people concerned every day.
- MOTOREX is the best place to go for the ongoing development of chlorine-free, high-performance fineblanking oils.
- Motorex Corrosion Protection V.355 features a very thin, resistant, non-sticking protective film that keeps fineblanked parts from corroding during transport. This ensures that the parts arrive at their destination in the best quality possible.

www.motorex.com
PLATIT AG - Advanced Coating Systems – Swiss Quality

Creative engineering, customer proximity, open communication, and a strong drive for innovation for user-oriented "Turnkey" high-tech coating systems - that is PLATIT.

PLATIT AG was created from the internal R&D of the BCI Blösch Group, which has been successfully active for over 70 years. It is based in Selzach in Switzerland and has become one of the leading high-tech companies for compact coating equipment and complete systems worldwide.

On the basis of the PLATIT MoDeC® concept (modular dedicated coating), PLATIT developed the special layer FeinAl together with Feintool. Its goal: increase performance during fine-blanking. Around the world, Feintool customers can also obtain this special layer at suitably licensed partners/contractors for coating.

With locations in Europe, the USA and China, and customers/users in demanding branches of the industry around the world (526 PLATIT facilities, of which 150 are compatible with FeinAl), PLATIT has surprised the field for over 30 years with technological, user-oriented innovations.

Benefits: target-oriented, significant increase in performance of tools and components.

PLATIT supports its customers worldwide in all issues relating to coating technology and their application in production.

Your benefits:
- PLATIT 11 series coating systems, incl. complete turnkey solutions (TKS)
- PLATIT 11 series layers (TripleCoatings®, QuadCoatings®, SCiL®, LACS®, DLC, POS® PlatitOpenSource)
- PLATIT 24/7 service concept (individual customer support, installation, training, technical support, worldwide service, cathode exchange center)
- International team (112 employees worldwide) with unique expertise

www.platit.com
ETH Zurich,
Institute of Virtual Manufacturing, D-MAVT

The Institute of Virtual Manufacturing specializes in planning and designing forming processes using FEM-based simulation procedures.

The institute, which has been directed by Professor Pavel Hora since 2005, is one of the pioneers in the field of "special purpose" FEM development for applications involving forming technology. The simulation tool AutoForm (www.autoform.com) is established worldwide. It was developed by the Institute of Virtual Manufacturing, and is now the number one in the area of sheet forming simulations. Additional "special purpose" packages have also been developed based on this first software tool, such as FineForm (simulates fineblanking), PressForm (simulates extrusion), and ExForm (simulates internal high pressure forming processes). In addition, the institute advises and helps industrial partners create and implement suitable material models (1.4301, Ti, 22MnB5, prediction of distortion due to hardening).

Since 2015, Prof. Pavel Hora has also directed the SATW topic platform Industry 4.0. Where these topics are concerned, the institute helps companies realize intelligent or "smart" systems, such as the quality control system Q-Guard for inline monitoring and direct adaptive control of sheet forming processes.

The institute also demonstrates extensive expertise in the development of electric vehicles (battery, electric engines, control systems, recuperation).

Your benefits:
▸ World-renowned institute in the field of "special purpose" FEM packages
▸ Development of precise failure models for predicting the limits of forming
▸ Expertise in "smart" production systems
▸ Development of innovative forming systems

www.ivp.ethz.ch
RWTH Aachen University, Laboratory for Machine Tools and Production Engineering (WZL)
Around the world, the Laboratory Machine Tools and Production Engineering (WZL) at RWTH Aachen University is synonymous with successful and future-oriented research in production technology.

Research projects that are related to fundamentals as well as projects targeted at the requirements of the industry are performed in six research areas, and practice-oriented solutions for rationalizing production are also developed. The goal of addressing the entire area of production technology under one roof has resulted in a broad work area, which is oriented towards the corporate divisions of development and construction, quality management, organization, planning operations, production and assembly as well as control and automation.

The Laboratory for Machine Tools and Production Engineering (WZL) is managed by four professors: Christian Brecher (machine tools, machine data analytics, excellence clusters, gear technology), Fritz Klocke (manufacturing technology and gear technology), Robert Schmitt (production metrology and quality management) and Günther Schuh (production engineering).

One of the research priorities of the Department of Manufacturing Technology is fineblanking. Through holistic treatment of the interaction between tool, fineblanked component and machine using experimental and numerical methods, research questions addressing the issues of wear, coatings, component quality, tools, and new aspects like Fineblanking 4.0 are answered.

Your benefits:
► High level of methodological competence and implicit knowledge of the development and implementation of research projects
► Tradition and expertise in the field of fineblanking
► Pre-competitive, cross-industry collective research with companies in the fineblanking research circle
► Strategies for the application of Fineblanking 4.0

www.wzl.rwth-aachen.de
Extremely precise, maximally rigid equipment and tools are indispensable to guarantee high quality results for the department.

The chair was founded in 1968 and has been active in the field of cutting for over two decades. Fineblanking has always been a fixed and significant part of our research. Many successful research projects prove the benefits fineblanking can offer compared to other cutting techniques for a wide range of components. With function integration in parts and in connection with increased output, new possibilities open up for fineblanking equipment from Feintool. In addition to pure cutting parts, we are using our press from Feintool today to investigate the manufacturing capability of complex components with a large forming amount. Together with Feintool, we have regularly pushed the boundaries of what is technically possible in this process.

Another important component of our work is the simulation. Virtual analyses allow us to gain insights into processes in tool and material during forming, which are not accessible by experiments. The combination of experiment and simulations is the foundation for successful research for our department.

Your benefits:
- High level of methodological competence and experience in planning and running research projects
- Numerous flexible fineblanking tools
- Large measurement and analytical possibilities in tools and parts

www.utg.de
Shanghai Jiao Tong University, Institute of Forming Technology & Equipment (IFTE)

Knowledge, innovation and motivation: these are the key values that have guided the IFTE people going forward.

The Institute of Forming Technology & Equipment at the School of Materials Science and Engineering of Shanghai Jiao Tong University is the Chinese national level research institution for the research on advanced materials forming technology and equipment as well as manufacturing technology. For more than 30 years, IFTE successfully worked together with industry partners in the manufacturing field.

Both Feintool and IFTE pay attentions to the research and development of advanced and innovative fineblanking and forming technology. The partnership between Feintool and IFTE has enhanced the cooperation in the field of advanced and innovative forming technology, particular the development of fineblanking systems and some fundamental research work. With the developed fineblanking system (FSO+), the design cycle has been sharply shortened.

Your benefits:
- Chinese national level research institution in the field of advanced forming.
- Developed FSO+ system has sharply shortened the design cycle.
- Successful support in the R&D of the automobile industry.

ifte.sjtu.edu.cn
THE PROCESS CHAIN. SEAMLESSLY SUPPORTED
Expertise at every single step

Consistently reliable production, unbroken press availability and long tool service lives? We know how you can achieve these goals – and will use our expertise to ensure every fineblanking technology parameter matches up.

From part and tool design, through materials for tools and parts, all the way to lubricants. We will also be glad to offer you advice on process optimization, Internet-based production monitoring, press operation and the preventive maintenance and servicing of your systems.

With Feintool, you get state-of-the-art expertise and system engineering straight from a single source. Our experts will support you along the entire process chain and can offer you a full fineblanking package to ensure your success.
Feintool Fineblanking Technology is the world’s leading provider of technology and solutions for fineblanking and forming. The central focus of all our work is delivering cost-efficient engineering that provides the greatest possible benefit to our customers.

We pay particular attention to innovation. We secure competitive benefits for you with the very latest technologies. Investing in long-term capital assets such as fineblanking presses is a matter of trust. Place your trust in the market leader with a history of success going back 60 years.

Strong global presence
With Technology Centres on three continents, its own production sites and sales offices in Europe, the USA and Asia, and a network of professional representatives, Feintool is your ideal partner.