



Fein and Dandy

The German company that invented and developed the first drilling machine in the world in 1895 is today the international niche specialist for professional electrical tools for the metal, construction, and automobile market segments. Despite its state-of-the-art industrial production, the Fein company still sees itself as a traditional manufacturer.

□ HEINER VON DER LADEN

If you ask Richard E. Geitner about how he deals with corporate consultants, he'll give you a clear definition: "We're prepared to take external expertise on board," says the CEO of C. & E. Fein GmbH. "However, the project must be described with absolute precision. And it is imperative that the project solution be implemented by our own people. In the course of the project, the process know-how must also be absorbed by our own employees, so that they will be able to implement comparable projects in the future. There's no alternative."

If it is not already clear, a look at the production process at the headquarters in Schwäbisch Gmünd-Bargau (Baden-Württemberg) soon reveals that the inventor and manufacturer of extremely reliable electrical tools for professional use in industry and small trade is steering a perfectly defined course. "Clean" is the most accurate way to sum this up. In the assembly hall, flooded with daylight, nothing is left to chance: Yellow markings on the glossy industrial floor



demarcate working areas, everything is structured clearly and logically, perfectly sorted, and nowhere is an unnecessary device or material to be seen. Small electrical trains deliver material and collect finished products according to a cyclic schedule. Geitner: "We used to think our hall was too small. After rearranging things, we now have double the capacity. And we no longer produce to stock, but tailor our production precisely to the corresponding sales situation."

The impressive look of the Fein production division (it would also be correct to speak of a traditional factory) is the result of a development process that began five years ago: "At that time, we set up the basic organization for a continuous improvement process," says Geitner, who thus continues to develop the business processes in both the production area and administration. The company also utilizes the experience gathered by Porsche Consulting, though without ceding control in the process: "We obtain the know-how and refine it ourselves. This is our Fein method."

The Porsche consultants have no problem whatsoever with the Fein approach. On the contrary: What could be better for them than to have all the employees enthusiastically participating in the restructuring, thus coming up with a highly individualized solution for their own company? Ultimately, the result aspired to is a tailor-made suit that fits perfectly. And should this suit require alterations →

Every Fein employee carries the folding brand card at all times. This card contains the Fein brand strategy's most important findings, and is to be used as a guideline for day-to-day work



A good tool is not enough—Fein also provides the user with the relevant know-how



in the future, the employees should be able to change it themselves.

To keep the continuous improvement process (CIP) as close to the actual practice as possible, Fein insisted that all the CIP employees continue to carry out their normal duties. Of 12 CIP moderators who were trained to be trainers and multipliers, Geitner only assigned a single employee to the new task. Fundamental changes, such as those to assembly lines or in production areas, are now implemented in interdisciplinary workshop teams and of course with the increased involvement of the relevant employees. On the other hand, “minor deficiencies” such as problems with quality, material

provision, and supply, or the optimization of work standards, are identified systematically by team leaders within the work groups in production directly. At the same time, they also ensure that the problems are resolved as soon as possible. “We developed what is known as a team-leader concept especially for this. The main advantage of this is that we now have responsible employees in production who have in-depth knowledge of the CIP instruments while also performing their normal tasks. This direct, operative connection has proven itself very well from the beginning,” says Geitner.

To keep the CIP moderators at Fein up to date at all times while further developing the topic



PHOTOS: FEIN

Fein insists on the highest production quality to ensure that an electrical tool will not let the user down, even in extreme situations

in-house, each moderator leads two to three workshops per year. The actual benefits are carefully considered for all CIP topics. It is very important for the company that all changes are checked with regard to their brand conformity. And the employees are regularly reminded that they have a significant effect on the strengthening of the brand core values, and thus the company brand. The people at Fein define their orange-colored brand with terms like “indestructible, precise, reliable, user-friendly, and manageable”. To ensure that nobody forgets these Fein details, every employee has been issued a folding “brand card” in the format of a bank card. The employee should have this with him at all times.

One of the most important brand rules is: “Every contact with users is an exchange of knowledge on application solutions, as well as for stimulating recommendation to third parties.” Behind this is the close contact with customers, which one always looks for—and finds—at Fein. Whether in high-grade steel machining, core drilling in metals, or interior construction and renovation—as a niche specialist, the company management is concerned not only with its reliable machines and their wide range of accessories, but also with the communication of application-specific know-how. Says Geitner: “We have training programs for our trading partners and end customers. For example, these provide intensive explanations of which

machines to use at which rotation speed for high-grade steel machining, and which sanding or polishing plates are to be used in what sequence, in order to get a defined surface result.” To this end, Fein worked with users to develop a manual that explains individual work steps in detail and independently of the manufacturer. These measures have to work all over the world in order to enhance the excellent reputation of this company that was founded in 1867 (number of employees: 840).

Fein already has a good international network, with 17 sales organizations and many representatives worldwide; since 2009 it has also been active in India, and in 2010 →



Fein has perfected all the production and assembly steps for its premium tools, down to the last detail. This can be seen in the clearly laid out production system

the company opened a marketing and training center in Shanghai. Field staff everywhere maintain a direct link to specialist trade and to what is known as production-linked trade. “Our customers must be able to experience the Fein brand values,” says Geitner. He knows that customers want to use his tools as “problem solvers,” and that they expect the machines to last significantly longer than competitors’ products. “Which is why,” Geitner points out, “we define ourselves through quality and significant usage benefits rather than through price.”

Of course, a company that wants to structure itself as optimally as Fein has to look beyond the end of the production line. Therefore, the electrical tool manufacturer has also involved its customers and suppliers in its restructuring. Together with Porsche Consulting, Fein started working on the product optimization of an angle grinder, investigating the functions

and costs for the device. In an international customer survey, the functional characteristics that provided added value to the customer were identified. An optimal angle grinder concept was derived from these.

At the same time, the value analysis presented different elements of the construction and the design. Next, in collaboration with the suppliers, the various solutions were investigated as to their quality and cost effects. “We went so far as to organize workshops at the suppliers,” says Geitner. Of course, a typical Fein approach was necessary here as well: “Discussions with our suppliers must be carried out in a very early phase, and they must be structured so that the results cannot possibly damage our brand core values.”

The optimized contact with customers and suppliers led to strategic changes at Fein: Today, customers are involved in product devel-

opment at an early stage, and the company’s purchasers no longer go alone to negotiations with the suppliers. They are accompanied by employees from the QM-CIP area, who provide expertise to secure and improve production processes. Geitner: “Our experts help find the optimal solution in discussions with the supplier—in fulfilling the customer’s desires, for construction components, and for processes. Intelligent simplification can also often lead to a reduction in costs, while also improving quality. This sustainable development requires an integrated approach that involves all the functional areas and the main suppliers.” ←

INNOVATION THROUGH TRADITION: 140 YEARS OF INVENTIONS FROM FEIN



Wilhelm Emil Fein



The world's first electrical hand-held drilling machine weighed 7.5 kilos and had a bore diameter of 4 mm

It was the spirit of invention that drove brothers Wilhelm Emil and Carl Fein to found their “Workshop for the Manufacture of Physical and Electrical Devices” in **1867**. Their aim was to develop ideas and manufacture devices that would be of great practical benefit to users. Today, C. & E. Fein owns several hundred patents.

Mobile communication is not a contemporary concept just a few decades old. The first portable telephone was invented as early as **1885**. However, it was intended for military purposes rather than for private use. Its mobility remained limited: It could be carried around, but required a cable.

Fein was quick to recognize the potential of portable electrical tools. In **1895**, the world's first electrical hand-held drilling machine—and therefore the first electrical tool in the world—left the Fein development workshop. It revolutionized the tradesman's work. Today, the device is exhibited in the Deutsches Museum in Munich. In 1908, Fein became a “Special Factory for Electrical Tools.”

In **1914**, Fein launched the first drill hammer with an electrical-pneumatic hammer mechanism on the market. It considerably reduced the strain involved in what was previously hard physical work. The first jigsaw was also developed by Fein, and a patent was registered.

In **1967**, Fein invented a completely new electrical device: the cast saw. What was particularly novel was that the tool oscillated. This saw, designed for quick and danger-free use in medical technology, was the start of an entirely new product range of oscillating electrical tools.

The latest generation of the Fein MultiMaster, which has been on the market since **2007**, is based on the oscillation principle. It also incorporates a system that considerably reduces the time required to change accessory tools.

The Fein MultiMaster: the universal system for remodelling and renovation



The Fein company invented the first portable telephone in 1885



In 1914, Fein launched the first drill hammer on the market

In 1967, Fein applied for a patent for its oscillating cast saw: a completely new electrical tool

