



HYDRAULIC SYSTEMS

# „Pay per use“ for tube connection technology

For joining line systems in high pressure applications or under strong vibrations, Stauff recommends its Stauff Form Evo tube forming system with the SFO-F-IOT forming machine at its core. New application models have now been added to the portfolio.

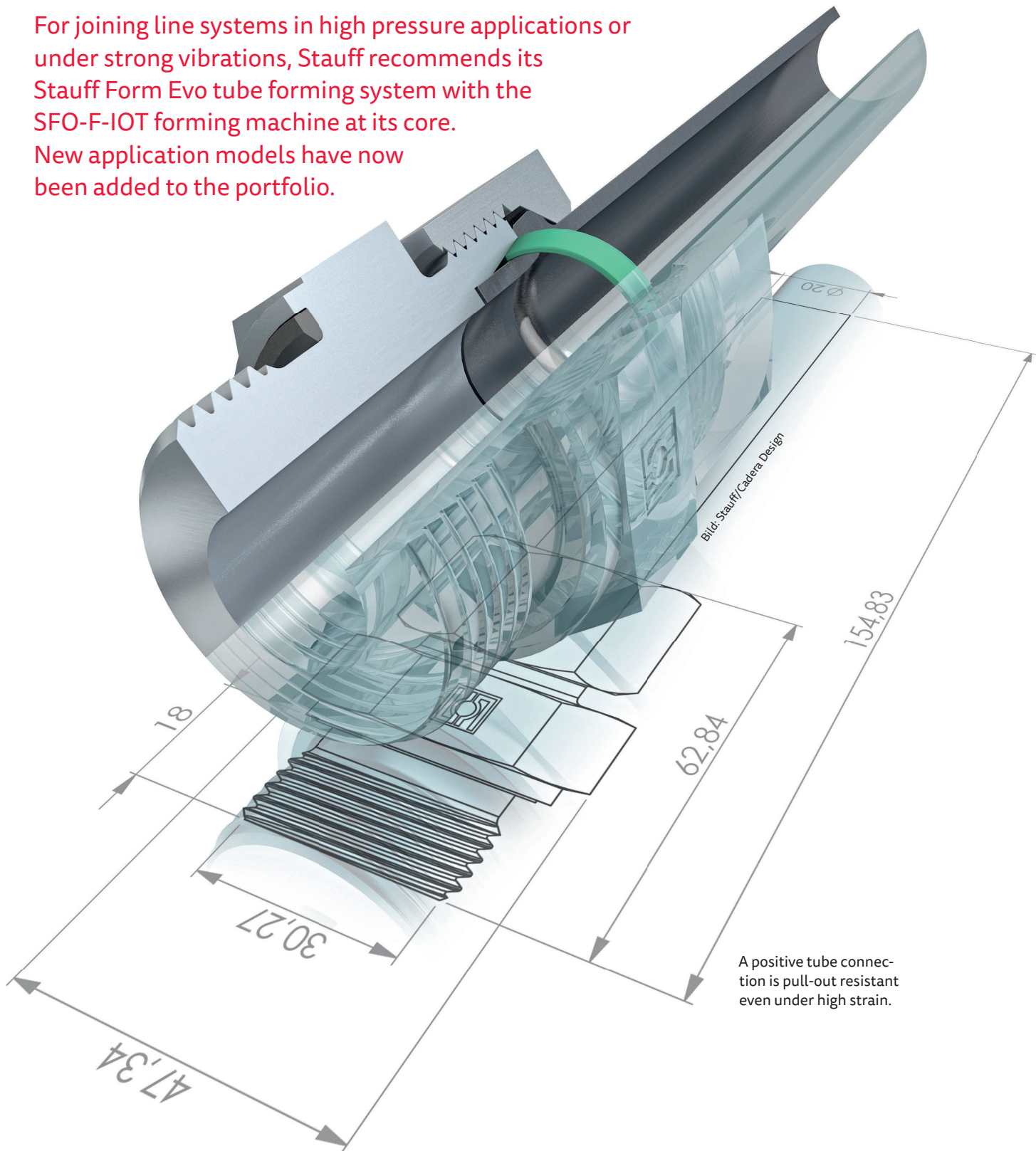




Bild: Stauff



The Stauff advisers personally instruct the assembly teams on site in how to use the machine.

**W**hat are the key features of a high-quality processing machine? It goes without saying that users should expect reliable functioning. Although there are great quality variations in performance, the key differences become evident when it comes to handling, customer service, investment volume and digital connections. For all these aspects, the Stauff SFOF-IOT forming machine is regarded as a pioneering model. Its function: In combination with a conventional fitting body and a metal-on-metal union nut, the formed tube end creates a positive connection for use in extreme conditions. The only conceivable leakage path is additionally sealed with an FKM ring.

### Reliable forming process

The robust table-top machine designed for permanent use in workshops carries out the forming process after a manual start. The path control is monitored based on stored parameters and ensures a consistently high level of process reliability and reproducibility. The tubes are guided and formed with clamping jaws and tube shapers into which internal tube supports are additionally screwed for selected tube diameters. These tools designed for machine-based use can be quickly and easily exchanged manually without any aids (tube shaper with bayonet lock). They are labelled clearly so that incorrect assembly due to use of the wrong tools is virtually impossible. Safe and fast setup of the machine contributes to the cost-effectiveness of the system, as do the short cycle times for efficient series production. A touch screen with an intuitive user interface and four menu languages complete the easy-to-use solution.

### Personal and digital service

The Stauff advisers know that even the most user-friendly digital connections cannot replace personal support and therefore visit the customer on site for the introduction of the forming machines. Manufacturers of, for example, offshore plants, cranes and lifting devices or other complex applications of stationary and mobile hydraulic systems – for which Stauff Form Evo is the most reliable tube connection system – appreciate this level of customer service. The assembly teams are trained

in how to use the forming and assembly process and shown how to use the digital functions. Hydraulics contractors, who often have to form large numbers of hydraulic tube connections at customer sites, use these table-top machines as well. The machines are also used at the international Stauff sites, where customised hydraulic lines are assembled and produced as part of the Stauff Line range of services. The latest generation of the forming machines is equipped with a communication module with a SIM card as standard and connected directly to the Stauff Technology Centre at the company's headquarters in Werdohl. This can be easily retrofitted on previous models.

This connection offers specific advantages for users: General or customer specific software updates are sent online. This includes, for example, parameter sets for deviating, non-standard tube materials that are determined at the Technology Centre at the customer's request. The machine carries out all reporting and documents the completed assembly processes in detail. This data can be used as proof of performance and to verify correct assembly if required, for example by the end customer.

Another big step in customer service is the option of not only viewing and analysing the machine parameters from the headquarters in Werdohl, but to also intervene remotely in order to optimise the settings. The parameters of every single forming process are visualised in a "cockpit", as well as the number of forming processes with the tools for the individual tube diameters. If the machine malfunctions, the cause can be determined and



*"With the pay-per-use model, customers can now decide whether they want to purchase the machine or only the forming service."*

Mark Wever, Global Chief Digital Officer, Stauff

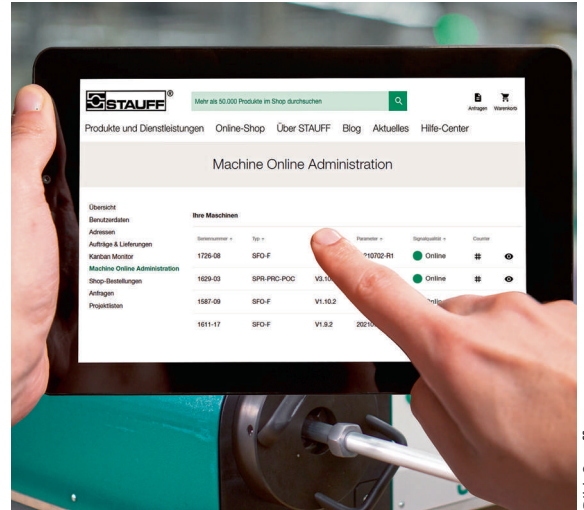


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Users can log in to their customer area at [stauff.com](http://stauff.com) directly from their workstation to view orders and deliveries, order components or connect to the Stauff Technology Centre.

eliminated quickly based on all the data stored in the customer section.

### New pay-per-use business model

With this level of transparency and data availability, Stauff has created the foundation for a business model that has already proven successful in many industries for high-investment machines and devices. Pay-per-use will be presented at *bauma*, the world's leading exhibition for construction machinery, construction materials machines, mining machinery, construction vehicles and other construction equipment. "Customer can now decide whether they want to buy the machine from us or only the forming service," explains Mark Wever, Global Chief Digital Officer. "Since its introduction in 2015, Stauff Form has been very popular in the market, just like its most recent derivative Stauff Form Evo. Those who have tried it are quickly convinced by the function, handling and digital connection and by our personal service. Purchasing a forming machine, however, is quite a big investment that some manufacturers of hydraulic systems or service providers shy away from."

Until now, Stauff offered different rental solutions, for example for the duration of a project. Pay-per-use goes one step further: Every single forming process is a defined item in the planning and calculation of a hydraulic line system. Stauff is one of the first providers to offer this business model for assembling tube connections. Mark Wever, Global Chief Digital Officer, says: "For hydraulic applications in extreme conditions, Stauff Form Evo offers the highest level of reliability. We want to introduce many customers to this process – not only the manufacturers or service providers who work with large batches, but also users with smaller numbers or quantities that are difficult to estimate."

Until now, the data were exchanged over a cloud maintained by Stauff. As part of the digital enhancement, the communication module integrated into the machine has a SIM card and is now connected to the Stauff shop. The security level remains unchanged. The data exchange is encrypted in both directions. "Our customers

In the SFO-F-IOT, the formed tube end in combination with a conventional fitting body and a metal-on-metal union nut creates a positive connection.

now use their customer section for all processes and no longer have to change back and forth between two platforms," explains Mark Wever. "There is no longer any need to work with two access points. Installers can reorder components from the Stauff shop directly at their workstation and can access all services offered at [stauff.com](http://stauff.com)."

This includes tracking the order status in real time, including shipment tracking and the order history with the option of downloading invoices and delivery notes. One special service from Stauff is the Online CAD Database, from which users can directly download 3D models and 2D drawings of thousands of original Stauff products from different product areas, without any limitations. An animated live preview makes it easier to select the correct parts.

## INFORMATION

### Customer Consultations on Four Wheels

Interested customers can have Stauff products, machines and digital applications demonstrated directly at their facilities. The Stauff Liner is the mobile demonstration and presentation vehicle that has been booked since 2018 by business and trade partners as well as by interested parties who want to get a first impression of the portfolio. After the break due to the coronavirus pandemic in the past two years, the Stauff Liner is now in demand again for in-house and external events, presentations and training courses in Germany and neighbouring European countries. It is usually accompanied by a sales employee who can issue the training certificates. The Liner can be equipped to meet individual requirements. The options for digital connections and new rental and usage models are presented using the example of the Stauff Form Evo forming system and the associated SFO-F-IOT machine.