

Industrial-level clipping

The Schirnhofen Group is one of Austria's largest family-owned and -operated meat and sausage producers. The company's plant in Kaindorf (Eastern Styria), where its headquarters are also located, is operated by Managing Director Karl Schirnhofen as a "transparent factory". Employees take groups of visitors on tours of production areas daily so that they can see for themselves how the company implements its own high quality standards.

► **The company's development** is amazing: some 1,500 employees now work at the main plant and the company's 220 branches; its product assortment consists of 650 products. The company started out as Schirnhofen's small butcher shop in Kaindorf. After the early death of its founder Josef Schirnhofen, its future was uncertain. But Josef's wife Theresia succeeded in keeping the company afloat during the difficult war years. In 1966, her son Karl Schirnhofen Sr. took over the company's operations and continually expanded it. His son Karl Schirnhofen Jr. has led the company since 1992.

Karl-Heinz Schirnhofen, son of the Managing Director, accompanies us on our tour of the Kaindorf facility. Anyone who takes a closer look at the production rooms sees one name any number of times: Poly-clip System. In addition to two automatic FCA 160 double clippers, which is the focus of this practical test, six other clipping machines and various bench models can be seen. "We have used Poly-clip System machines for many years," explains Karl-Heinz Schirnhofen. For the practical test, he calls over butcher Christoph Pichler to talk to us. The Assistant Manager in the sausage department is highly familiar with the FCA 160 and regularly uses it himself.

Fast and versatile

It is no coincidence that the Schirnhofen company has two FCA 160s. Both the machine's performance and versatility have proven themselves. It closes all fibrous and collagen casings with calibers ranging from 38 to 120 mm (depending on the material thickness)

as well as synthetic casings up to calibers of 160 mm. It can achieve speeds of up to 160 cycles per minute. Pichler gives the machine top grades for working speed: "Of course, it depends on how employees set up the FCA, but it can run really fast." Although Pichler and his colleagues seldom use the machine's top speed, it has enough reserves to be able to react, should the company need to respond to increased production pressures. The menu navigation on the display also helps. Pichler is thoroughly convinced of it. The FCA 160 aptly carries its moniker of "automat": it completes its work aided by automatic, self-monitoring processes. The FCA 160 prevents setup errors through independent recognition of the clip size and the die. Operators set up the FCA 160 via the touchscreen.

This so-called "Easy Touch" control panel enables storage of all relevant product parameters as a program that can later be retrieved by operators. In case of deviations from the stored recipe parameters, the control corrects either independently or displays a message.

"That might get complicated," Pichler notes; "not everyone has grown up with this technology." But the touchscreen panel clearly differentiates between types of users, which include operators, setup and service staff, who are all distinctly separated from each other. This means, for example, that an operator is technically prevented from permanently changing parameters by mistake or deleting programs. The various user types have different passwords. As Pichler remembers, it does not take long to learn how to use the machine.



The FCA 160 closes all fiber and collagen casings with calibers from 38 to 120 mm as well as synthetic casings with calibers up to 160 mm.



The "Easy Touch" controls enable storage and retrieval of all relevant product parameters as a program.

“Some employees learn rapidly; after a very short time, however, everyone knew how to run it.”

Quiet and safe

One of Christoph Pichler's first positive surprises with the FCA 160 was something he remembers to this day: “I first thought that the machine wasn't working properly because I could hardly hear anything. But everything was fine. The FCA 160 is simply much quieter than many older-generation machines. When you work with it every day, it makes a big difference.”

A low noise level – particularly with such automatic machines whose stainless steel housing offers a certain resonator – is not often found, but the result of a well designed machine concept that Pichler praises. “The material and its workmanship couldn't be better.” Pichler includes both safety as well as cleaning in this judgment: “When working, one's hands are never in danger; nothing can happen.” He expressly praises the machine's easy handling. The clip spacing can be rapidly changed without tools and spreading is likewise quick and easy. A further advantage is the comfortable maneuvering through an integrated front wheel and the retractable steering bar.

That the machine is “very easy to clean”, as Pichler states, is due to its smooth surfaces on which no sausage mixture can stick to and from which all cleaning water drips off. The fact that all surfaces are made of high-quality stainless steel makes them resistant to aggressive cleaning agents.

The maintenance system is also well thought-out: thanks to central lubrication, maintenance is easy and fast to complete. Such tasks are carried out by Schirnhofen Ges.m.b.H.'s own technicians, who can also carry out more extensive work if necessary. They are supported by the Easy Touch controls. The



Karl-Heinz Schirnhofen reports on his good experiences with the FCA 160 and other Poly-clip machines that he has worked with.

Specifications: FCA 160, Poly-clip System

Measurements:		Power consumption:	4 kW
Width:	1,650–1,710 mm	Protection:	16 A
Depth:	1,120–1,660 mm	Compressed air:	5–7 bar/0.5–0.7 MPa
Height:	1,975–2,150 mm	Air consumption:	1.6 NL/cycle
Weight:	610 kg	R-ID Clip:	M, L, XL
Voltage:	200–230 VAC, 380–460 VAC, 50 or 60 Hz	Spreading:	26, 30, 36, 44 mm Including overspreading to 110 mm



Schirnhofen Ges.m.b.H. uses two FCA 160 automatic double clippers.

display tells the technician both in plain text as well as graphic representations where something must be done.

The manner in which technicians can access parts that need maintenance is also good, according to Pichler: “Technicians can easily open the machine; this gives them access to all parts.”

The swiveling exterior is one of the major reasons why service tasks can be done so quickly, ensuring that machine downtime is short.

At Schirnhofen Ges.m.b.H., one of Austria's largest family-owned and -operated meat and sausage producers, Poly-clip System machines have always had a good reputation. The FCA 160 is held in high esteem particularly due to its high performance together with its low-noise level, its well thought-out, hygienic design, user-friendly, safe controls and first-class, high-quality workmanship.

Dirk Bongardt

Conclusion

Karl-Heinz Schirnhofen and Christoph Pichler rate the Poly-clip System FCA 160 automatic double clipper as follows:

Work speed/time savings:	++
Display/controls:	+
Familiarization period:	+
Expansion options:	+
Value for the money:	+
Maintenance:	+
Noise level:	++
Required space:	+

++ = excellent, + = good, o = average, – = poor