



Future-oriented machine concepts for the efficient and economic production of windows and doors



Cutting, Milling, Drilling, Gluing, Dowel driving, Printing

We have the right manufacturing concept for every requirement for utmost flexibility and attractive production costs.

50 years of creative machine concepts for the efficient manufacture of windows and doors. Our wood-working machines have proven their worth in thousands of small to large window and door plants worldwide and have become synonymous with high quality cost effective solutions for this kind of production. If your workpiece requires cutting, milling, gluing, drilling, doweling or printing Stegherr has the most efficient, customized and practical solution for the job.

Decades of experience

We maintain our most fundamental and important commitment of creating the highest quality practical production solutions for window and doors.

Stegherr's decades long reputation for producing the highest quality most reliable and best valued machinery is proven daily in thousands of shops worldwide. All our machines have been developed from the necessities prompted by practice and are being continuously adapted to the latest requirements of the state-of-the-art technology. The main concerns are precision, service life and the price-performance ratio.

We place great value on Innovation, Quality and Tradition

Stegherr Engineering Works is a second-generation family owned and operated manufacturer of specialty machinery. Located in Regenstauf, 10km north of the town of Regensburg in southern Germany, the current production facility is housed in a 2,500sq/m state of the art facility.

An experienced development team designs on modern CAD systems and transfers the production data directly to the computer-controlled production lines. This guarantees the proverbial quality of our machines. In the large operational showroom we can demonstrate our complete range of equipment in real production scenarios.



Our experience and expertise is your resource

Our decades long continuous involvement in the daily production activity of our customers has made us into what we are today: A specialist in the efficient processing of wood. We are a global leader in the manufacture of cross joints. There are more than 1,000 installations worldwide producing cross joints in the proverbial Stegherr quality as evidence.

Durability

With increased pressure to meet exacting production schedules, down times related to machine problems are unacceptable. Our machines are designed for durability in all aspects of design, machine control and ease of use.

However, should any problem arise we will react quickly and competently.

We offer Custom Solutions for Windows and Doors

Stegherr designs and manufactures customized machinery in the complex field of windows and doors manufacturing and the processing of profiled bars.

Due to this specialization, our machines meet all requirements one hundred percent. We offer the perfect equipment for each requirement: Single manufacturing and small series or fully automatic NC machines for large-scale production.

Innovative machine concepts for the manufacture of windows and doors

- 1 Coping 2 Milling for lock sockets 3 Glazing bar joints (curved-straight) 4 Glazing bar joints (straight)

KF Coping Center 1 4 5 7

for cutting to length, end profiling, drilling and dowelling

The Coping Center KF is a machining center for cutting to length, end profiling, drilling and dowelling of window and door components profiled on the long side for the end scribed corner joints fastened with dowels or screws. The excellent quality of the corner joints is ensured by milling the ends with two counter rotating spindles. The machine also drills the profiles for dowels.

Depending on the machine version, the KF is suited for these operations:

- Tear free end profiling
- Cutting to length with a cross cut saw
- Drilling for dowels or screws
- Program controlled glue injection and dowel driving
- Fully automatic tool changer
- Milling spindles power: 4.0 to 7.5 kW

Coping Center KF with automatic tool change

The machine ensures absolutely tear free end scribing by means of two HSK63 counter-rotating milling spindles which can hold up to three tooling sets. All drilling operations for screws, dowels including for spacer blocks are effected axis controlled, via the machine program. Automatic glue injection and dowel insertion are available optionally. The profile is cut to length by a cross cut saw. For a fully automatic processing of window casements and frames without change over times, the machine can be provided with a tool changer which can hold two or more tooling sets. Output: Up to 60 casements and frames per shift.



KF-1 Coping Center 1 4 5 7

With its two vertical milling spindles rotating in opposite directions the KF-1 ensures tear free coping of already profiled stock.

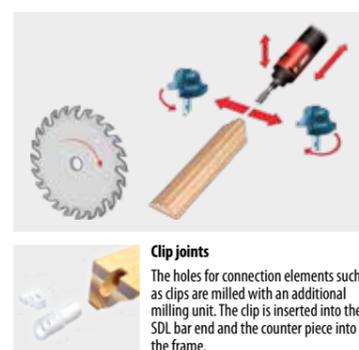
The working process is fully automatic on the fixed work piece. Pneumatic clamping. Expendable to ensure complete processing of SDL bars.

Optionals:

- Cross cut saw
- Additional drilling / milling unit
- Dowel insertion
- Servo controlled axis for freely programmable drilling or milling positions (long side)
- Easy program changes over USB stick or Windows Editor



Dowel joints
In addition to the drilling unit, the machine can be equipped with a high pressure glue injection and a dowel insert station.



Clip joints
The holes for connection elements such as clips are milled with an additional milling unit. The clip is inserted into the SDL bar end and the counter piece into the frame.

Our flexible customer solutions are right for these

KF-mini Coping Center 1

Distinctive feature of the KF-mini station are the two high-speed milling spindles, rotating in opposite directions. The result is perfect, tear-free profiling of the SDL bar ends.

An optional cross cut saw with a fence can be added to the machine for cut-to length production.

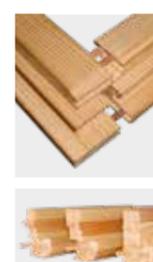
If provided with the optional miter table, the machine can end scribe bars for angle joints (swiveling range -45° to +45°).



DS Drilling and Dowelling Station 5 7

The Drilling and Dowelling Station DS is employed for drilling and dowelling the workpiece ends.

The machine has three servo controlled axes which make it possible to drill in any position on the workpiece. The working cycles (drilling, glue injection and dowel insertion) are program controlled. The DS has a numeric control with a color touch screen for simple operating both in the manual and in the online mode and for the alternate processing of the workpiece ends without any waste of time.



NF The Notching Machine 4

for notching several bars up to a total width of 400 mm in one working cycle.

On the NF the bars are accurately cut to length and notched from top and bottom.

The machine can be equipped with either one milling unit (bottom) or with two units (top and bottom).

The powerful milling motors of 4.0 or 5.5 kW (spindle diameter 30 mm) contribute to the overall sturdy execution of this machine, suited for the manufacturing of various types of grilles and frames.

The new user interface allows fully language-independent and intuitive operation by using graphical icons.

Very easy programming over a touch screen and user interface. The operation is user oriented and intuitive with clear icons, no special programming knowledge required. The machine operator can store up to 500 individual programs.



BRF Stretcher Bars Milling Machine

The BRF can mill pre-cut profiles (c. 250 – 3000 mm long) for the manufacture of stretcher bar frames (tongue and groove). Two machine versions are available: For double end and for single end processing.

On the double end BRF the profiles are fed fully automatically from a horizontal feeder. An original patented outfeed system returns the finished workpieces underneath the machine table to the operator.

The single end BRF ensures a flexible handling of a wide variety of frame lengths by milling simultaneously two profiles at one end. For milling the opposite end the bars are turned manually by 180°.



ors, for single production or large series and for companies of any size

- 5 Connection of workpiece ends 6 Milling for hardware 7 Drilling, gluing, doweling 8 Cutting of glazing beads



imized machines applications:

FD-E NC Machining Center

for drilling, milling and dowelling in the manufacture of windows and doors

With the Machining Center FD-E you can machine even profiled components on up to six sides in one passage, depending on the equipment version. The standard machine has four servo controlled axes enabling it to execute any drilling and milling pattern. Horizontal and vertical scanning for accurate milling depth.

The flexible modular machine concept allows for optimal customized solutions up to fully automatic operation. The milling and drilling units can be mounted horizontally or vertically, to suit each customer's specific application.

The machine can execute these jobs:

- Drilling, glue injection, dowel driving
- Drilling for metal fittings and hinges
- Drilling for concealed hinges and olives
- Milling for lock cases and striker plates
- Fully automatic sorting, feeding and assembling of fasteners
- Special milling and drilling jobs

The programming of drilling and milling patterns is done intuitively, special programming knowledge is not required.

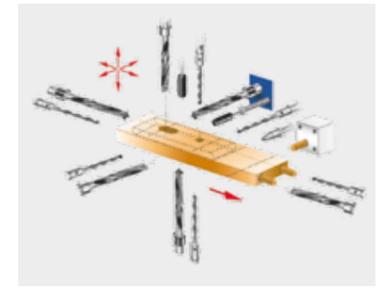
The user friendly machine control ensures easy operation, both in the manual and in the online mode.

Available with label printer – alternatively inkjet or laser printer – for marking the workpieces.

- 2 5 6 7



Machining of all six sides in one passage



KSF-2 Cross Joint Milling Machine 4

The Closed Halving Joint Cutter KSF-2 is successfully in use worldwide

Our customers appreciate the accuracy, robustness and the vast field of application of this well proven machine. The additional notching unit (the fourth milling unit, mounted on the front side of the machine) ensures that any profiled bar can be milled tear free on the top (view) side of the joint.



KSF-2A Cross Joint Milling Machine 4

The KSF-2A is equipped with an electronic positioning unit (NC-Stop) which pushes the workpiece exactly in the programmed position.

The new user interface allows fully language-independent and intuitive operation by using graphical icons. Very easy programming over a touch screen and user interface. The operation is user oriented and intuitive with clear icons. No special programming knowledge required.



Suited for storing up to 500 individual programs.

KSF-R Cross Joint Milling Machine 3 4 5

for curved or diagonal glazing bar joints

With the milling machine KSF-R you can produce any type of cross joint: Cross joints from round, segment and more centered arches with straight bars. With a special fence it is also possible to produce diagonal joints from 35° to 90°. The KSF-R machine is working with two profile cutters and one slot miller. Milling work follows the climb cutting principle.



KSF-mini Cross Joint Milling Machine 4

The perfect small sized milling machine for all usual cross joints

Owing to its good value for money the KSF-mini is the ideal machine for companies which are not currently processing cross joints. The absolute accuracy of milling is achieved due to its unique design by which all three cuts are done in one single clamping.



KSF-2E Cross Joint Milling Machine 1 4 5 8

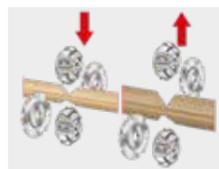
Besides the classic cross joint in excellent quality this cross joint milling machine can perform one or several of the following optional operations accurately and efficiently:

- End scribing of SDL bars (tear free, by means of two counter rotating cutter heads)
- Cutting to length of glazing bars
- Cutting to length of glazing beads
- Drilling of fastening holes for fixing glazing bars onto frames

The fully program-controlled machine is operated manually via a touch screen or online. Remote maintenance is possible as well. The operator can optimize the KSF-2E at any time and adapt it to new requirements by using self-designed macros. The machine efficiency can be increased by having an infeed conveyor and an outfeed belt or table mounted to the machine. The connection of a label, inkjet or laser printer is possible as well.

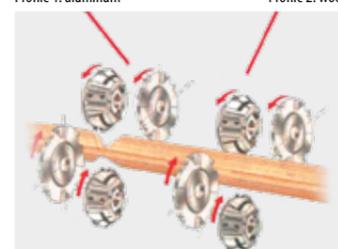
The height-adjustment of the milling units

helps adjust the machine automatically to different profile widths. Instead of using the usual profile brackets or supports for SDL bars, the milling units are adjusted in height program controlled over a servo axis. The device ensures a faster setting between bar dimension changes, saves the associated changeover times and helps compensate for profile width inaccuracies.

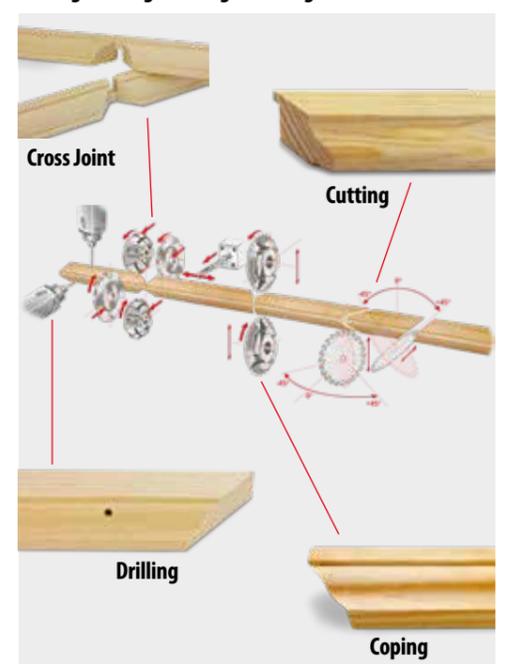


Suited for milling Wood - Aluminium - PVC - MDF

A new version of the long tried and tested fully automatic cross joint milling machine KSF-2E can combine two separate, complete systems for milling profiled bars for cross joints in one machine. Two completely different profile sections can thus be machined accurately and perfectly fitting with a negligible conversion time of only a few seconds.



Cutting - Milling - Drilling - Marking



GLS-2 Profile Machining Center with NC-MILLING UNIT

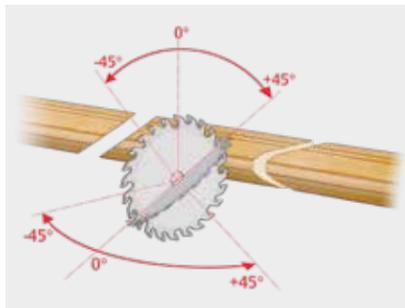


Cutting - Punching - Milling - Drilling - Printing

The NC Profile Machining Center GLS-2 can miter-cut profiles of wood, aluminum, MDF, PV, GFRP or composite materials via program at any angle between +45° and -45° in two planes.

Servo controlled adjustment of the cutting angle in the machine program. The working speed of the saw can also be adjusted over a servo controlled axis.

The NC pusher (NC-Stop) ensures the accurate positioning of the workpieces exactly at the programmed position.



Suited for

Wood · Aluminium · GFRP · PVC · MDF



A horizontal infeed conveyor and an outfeed belt or table will even increase the efficiency of this machine. The perfect complement is a label, inkjet or laser printer which can be installed as well.

The fully program-controlled machine is operated manually via a touch screen or online. Remote maintenance is possible too. The operator can optimize the GLS-2 machine at any time or adapt it to new requirements by using self-designed macros.

The machine does these jobs:



Cut in two planes



Notch with a punching unit



Mill aeration slots



Drill for connection pieces



Mark the workpieces

GLS-A Mitre Saw for Profiled Bars

The Mitre Saw GLS-A with its new user interface allows fully language-independent and intuitive operation by using graphical icons.

Very easy programming over a touch screen and user interface. The operation is user oriented and intuitive with clear icons, no special programming knowledge required. The machine operator can store up to 500 individual programs.



language-independent user interface

KSS V-Notching Saw

for the program controlled cutting of V-notches in glass strips, water drainage channels or similar profiles of wood, aluminum, MDF or PVC at +/- 45°.

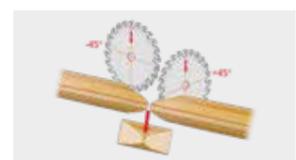
The saw blades are mounted at a 90 degree angle so that the profiles are notched in one cycle.

The NC pusher ensures an absolutely accurate positioning of the components.

Defect detection and length optimization are available optionally. Connection of a label or a laser printer are possible as well.

The machine can be upgraded to fully automatic operation by mounting a customized workpiece conveyor and an outfeed belt or table.

The operator friendly machine program ensures easy operation both in the manual and in the online mode.



Defect detection



Mark the defect

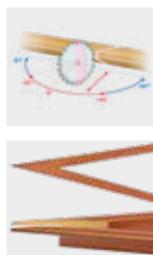


Defect is eliminated

GLS Machining Center for Profiled Bars

The machine can be equipped with additional work stations for punching, drilling, milling or cutting. The connection of a label, inkjet or laser printer is possible as well.

The machine can be upgraded to fully automatic operation by mounting a customized workpiece conveyor and an outfeed belt or table. The operator friendly machine program ensures easy operation both in the manual and in the online mode. On request available in special execution for angles up to +/- 81°.



angle adjustment up to 81°

45° notches in one working cycle

