

All-round expertise when it comes to veneer.



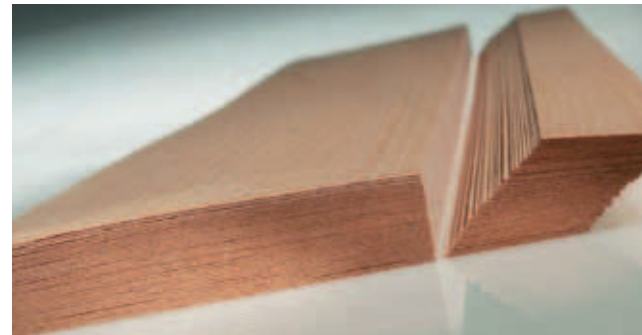
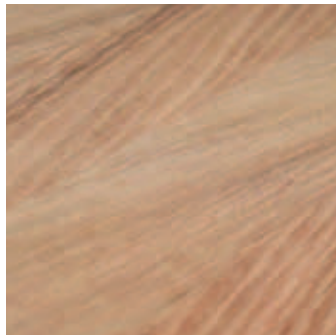
The world of KUPER products.

KUPER

The whole variety of KUPER products.

What once started off as one man's vision has now become one of the world's best known manufacturers of veneer splicing machines. And even more: Today KUPER is the No. 1 in the world. Step by step forward. Ready for the future. KUPER develops, produces and sells innovative solutions all around veneer – for the industry as well as for craft shops. Being the only producer offering the complete range of innovative veneer splicing technologies we establish the standards for the future.

- **Zig-Zag Veneer Splicing Machines**
using the patented **KUPER Zig-Zag-Gluethread System**, for more than 45 years a standard established by KUPER.
- **Longitudinal and Crossfeed Splicing Machines**
Machines for the production of glue-spliced joints. For high-quality veneer joints, spliced almost invisibly.
- **Veneer Fingerjointing and – Joining Machines**
to lengthen veneers for various applications.
- **Veneer Jointing Guillotines**
Fast and economic machines for the cutting of veneers bundles.
- **End Splicing Machines, Veneer Handgluers**
and much more...



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Perfectly suiting the craftshop. Zig-Zag Veneer Splicing Machine for small quantities.

KUPER FWM 630



Technical data

Throat depth	630 mm
Feed speed	approx. 7 m/min.
Veneer thickness	approx. 0.4 – 2.0 mm
Operating voltage standard	230 V, 1 Ph, 50/60 cycl. or special voltage
Total connected load	approx. 0.11 kVA

Very neat, very precise.

The KUPER FWM 630 is a compact KUPER zig-zag glueing machine for efficient splicing of small quantities. The ideal table model with the technical advantages of the KUPER zig-zag machines. Disc-drive with tolerance compensation ensures an absolutely plane glueing surface even when processing veneers of different thicknesses. The special KUPER-glue thread applied in zig-zag fashion guarantees a completely firm and tight joint.

KUPER FWS 920

Technical data

Throat depth	920 mm
Feed speed	approx. 18 m/min.
Veneer thickness	approx. 0.4 – 2.0 mm
Operating voltage standard	400 V, 3 Ph, 50 cycl. or special voltage
Total connected load	approx. 0.97 kVA

Space saving and economical.

The KUPER FWS 920 features the technological advantages of all KUPER Zig-Zag Veneer Splicers: The disc-drive with tolerance compensation and the perfect operation with the genuine KUPER special glue thread. The modern design and the simple operation are absolutely convincing. The KUPER FWS 920 needs just little space and therefore is the ideal machine for craft shops.

More advantages:

- electrical heating system of industry machines
- standstill regulation: adjustment of temperature in standstill and operating mode – no burning of the thread
- outfeed cutting roller
- automatic start by light sensor



Perfectly suiting the industry. Zig-Zag Veneer Splicing Machine for bigger quantities.

The new generation of Zig-Zag Veneer Splicing Machines.

KUPER FWS 1250

Technical data

Throat depth	1250 mm
Feed speed infinitely variable	approx. 35 – 60 m/min.
Veneer thickness	approx. 0.3 – 3.0 mm
Operating voltage standard	400 V, 3 Ph, 50 cycl. or special voltage
Total connected load	approx. 1.80 kVA



Extremely fast – ideal for industrial production.

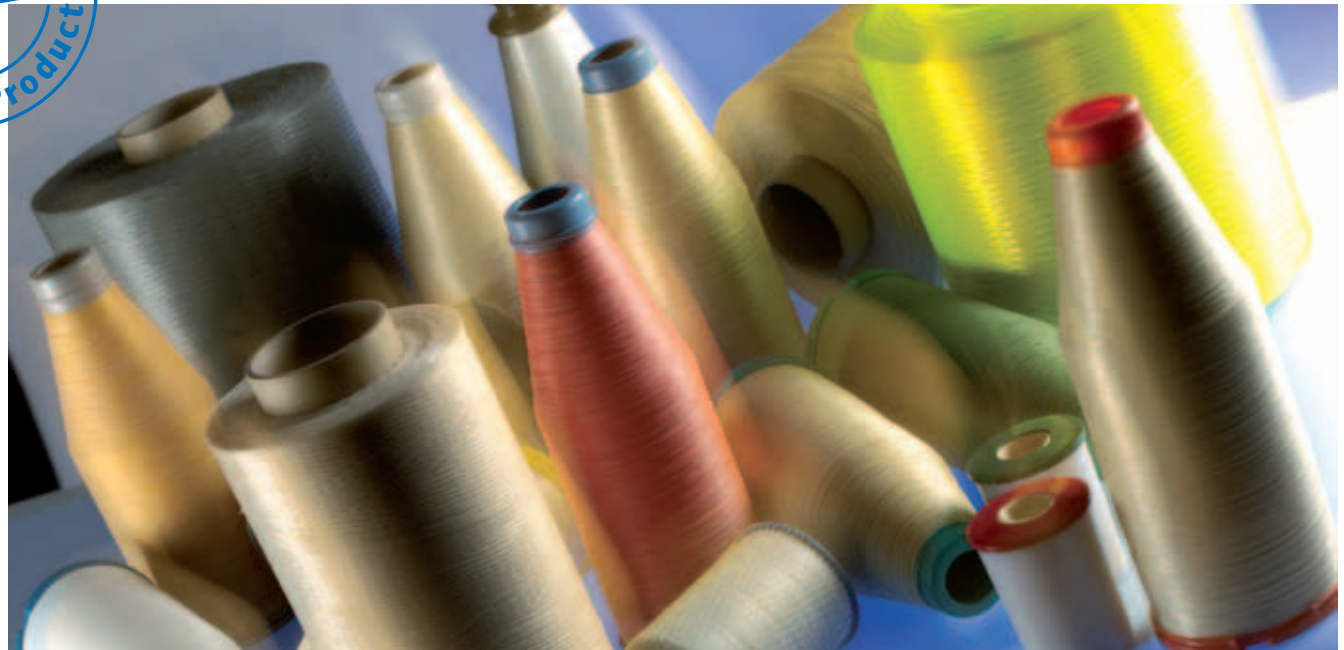
The KUPER FWS 1250 splices veneers at a racingly fast feed speed of 60 m/min. A special KUPER glue thread is applied via a heating tube in a zig-zag or wavy line pattern. This ensures tight joints, strong adhesion and tear resistance even on very wavy veneers. The spliced layons are then placed face down for pressing, eliminating the time consuming need to sand off the glue thread. The convenient glue thread cutting device, the low-noise main drive and the maintenance free SP-control are outstanding and convincing features of the FWS 1250.

Advantages at a glance:

- Touchpanel to control the main functions: heating power in standstill and operating mod, feed speed
- pneumatical lifting of the glueing head

The right one for each requirement.

KUPER Glue Thread



The KUPER Glue Thread at its best.

KUPER has invented the method of veneer splicing and has more than 45 years of experience in the production of glue threads. Today KUPER offers glue threads for all different applications. The threads are technically matching to the different production methods and heating systems of the

KUPER machines and are continuously being adapted to new developments in the machinery sector. Whatever problem you have to solve in veneer splicing – KUPER offers a wide range of different types of glue thread for face veneers, constructional veneers or plywood core-layers.

Precise glue application for veneer bundles.

KUPER KLM 470/700



Option: cooling of the gluepots.
Prolongs the potlife of urea-based
glues considerably.

Technical data

Feed speed	approx. 35 m/min.
Length of veneer bundle	from approx. 250 mm
Width of veneer bundle	50 – 470 mm or 50 – 700 mm
Height of veneer bundle	3 – 50 mm
Operating voltage standard	400/230 V, 3 Ph + N + PE, 50 cycl. or special voltage
Total connected load	approx. 5.7 kVA

Precise glue application and high efficiency.

The KUPER KLM very exactly applies glue to the veneer bundle edges. Both PVAc- and urea-based glues can be used. The parallelly cut veneer bundle is placed onto the transport roller conveyor where the height of the bundle is detected by a laser. Depending on this detected height all parameters for the alignment and glueing of the bundle are set automatically. The new design of the top pressure device makes it possible to press the veneer bundle on both sides absolutely laminary. This safely avoids any glue penetrating into the bundle! The very precise glueing and the high efficiency make the KLM your best choice. By electronic combining the KUPER KLM with the Double-Knife Guillotine KUPER ZFS the efficiency is even further enhanced.

Advantages at a glance:

- maintenance-free drive elements
- easy and fast cleaning of the glueing aggregates
- fast take-out of single rollers from the infeed roller conveyor
- high speed in alignment and feed
- longer potlife of the glue due to reduced rotation speed of the glue rollers in stand-by

Automatic and fast fanning longitudinally and crosswise.

KUPER FFM 470

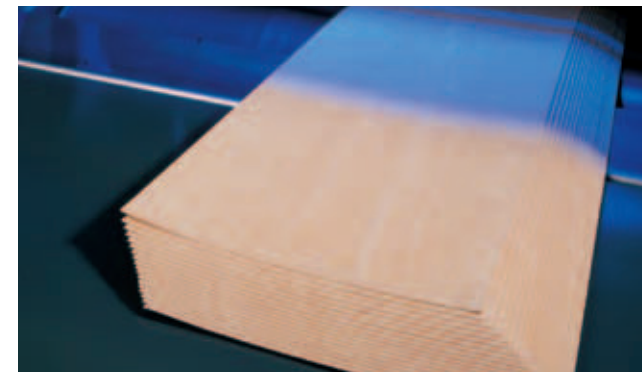


Technical data

Feed speed	approx. 28 m/min.
Width of veneer bundle	max. 400 mm different widths on request
Veneer bundle thickness	approx. 8 – 20 mm
Veneer thickness of single sheets	approx. 0.4 – 1.5 mm
Operating voltage standard	400 V, 3 Ph, 50 cycl. or special voltage
Total connected load	approx. 2.08 kVA

Forget about troublesome manual fanning.

With the KUPER FFM time consuming and often unprecise manual fanning is omitted. Pre-glued veneer bundles coming from e.g. the preglueing machine KUPER KLM are transported through a tunnel of upper and lower transport belts which due to their special arrangement are providing the fanning effect. The FFM is employed as part of a production line with the KUPER KLM and other transportation systems.



First-class veneer joints for highest quality.

KUPER FLI 1000



Outstanding feature of the glue application system is the almost level glue disc. This allows a very exact glue application which excludes glue discharges from the joint almost completely.



The high quality no-lubrication transport chains are 100 % maintenance-free.

Technical data

Throat depth	1000 mm, alternatively 500 mm*
Feed speed	approx. 12 – 55 m/min.
Veneer thickness with internal glue application	approx. 0.4 – 2.5 mm
Veneer thickness with external glue application	approx. 0.4 – 5.0 mm
Veneer strip length minimum	approx. 350 mm
Veneer strip width minimum	45 mm
Operating voltage standard	400/230 V, 3 Ph + N + PE, 50/60 cycl. or special voltage
Total connected load	approx. 11.8 kVA

*Especially designed for production of layons which require just few joints.

Joining precious veneers precisely.

The KUPER FLI 1000 represents a further outstanding result of innovation and approved technology. Veneers which are exposed to high temperatures during the further processing (e.g. wrapping or membranepress technology) are joined preferably with urea based glues. To fulfil this task a special process of heat supply and simultaneous pressure over a longer transport section is necessary. When operating preglued veneers an even higher capacity is achieved. For small series or special applications the KUPER FLI 1000 is delivered with an integrated glueing aggregate as standard component. The glue-cooling system (optional) prolongs the pot life of the glue considerably.

No problem to operate thick veneers.

Veneers of up to 5 mm thickness can also be operated with the KUPER FLI 1000. Before these thick veneers can be processed they need to be specially prepared. This means the veneers have to be sawn and milled at their edges to become right-angled. Thick veneers additionally need to be preglued before splicing.

Advantages at a glance:

- exact glue application
- sensitive pressing system
- no stains or shrinking of the veneer
- extremely narrow heating zone



Efficient crossfeed glue splicing in different widths.

CRC 1200/1600/2800

The right size for every task.

The machine operates with veneers which have been preglued before either with PVAc or urea-based glues. The well-designed and compact construction with modular pneumatic splicing section and the extremely narrow heating zone ensure a tension-free splicing of the veneers. For the splicing of shorter veneers in the production of small furniture elements or cross-veneered doorskins the KUPER CRC is the economic alternative.

Technical data

Veneer thickness	approx. 0.3 – 2.0 mm
Max. working width in grain direction	approx. 1200/1600/2800 mm
Min. working width in grain direction	approx. 350/400/400 mm
Width of veneer strips across the grain	from approx. 75 mm
Operating voltage standard	400 V, 3 Ph, 50 cycl. or special voltage
Total connected load	approx. 9.69/11.07/15 kVA

Advantages at a glance:

- intuitive operation via buttons, regulators and touchpanel
- maintenance-free components
- tables and gliding surfaces made of stainless steel
- operates PVAc and urea-based glues, preglueing preferably to be done on the KUPER KLM
- different stacking systems available
- integrated cut-to-size clipper as option
- compatible with the endsplicing- and trimming unit KUPER EVB (see p. 18)



Finger stacker

The KUPER CRC with finger stacker: This stacking system is available for all machine variants in different lengths.



Tilting stacker

The efficient tilting stacker is available for the KUPER CRC 1200. For discharging of the spliced veneer layons also veneer transport systems of different lengths are available alternatively.



Efficient crossfeed glue splicing for large veneer widths.

KUPER ACR 3200/3600



Touchscreen Cockpit

Technical data

Feed speed	approx. 30 m/min.
Veneer thickness	approx. 0.25 – 2.00 mm
Max. working width in grain direction	approx. 3200/3600 mm
Min. working width in grain direction	approx. 600 mm
Width of veneer strips across the grain	from approx. 60 mm
Operating voltage standard	400 V, 3 Ph, 50 cycl. or special voltage
Total connected load	approx. 21.5 kVA

Sensitive working friction shafts for tight-jointed Veneers.

The KUPER ACR 3200 provides a perfect and highly efficient production of the glue-spliced joint. The preglued veneers are fed into the machine, the alignment of the veneers into the heating section is done photoelectronically: laser-cells register the position of the veneer strip and give impulse to the SIEMENS Motion Control® which controls the servo drives. This method of positioning is 100% exact and considerably faster than a purely mechanic process.

The main advantage of this system is that the positioning is achieved without physically touching the veneer sheet, i.e. damages to the veneer joint are excluded. Sensitive working friction shafts are pulling the veneer strips tightly together which are then spliced within the extremely narrow heating zone.

Advantages at a glance:

- precise alignment
- perfect veneer glueing
- shortest adaption
- integrated veneer clipper
- fully automatic stacker
- modern data-transfer
- easy maintenance
- compatible with the endsplicing- and trimming unit KUPER EVB (see p. 18)
- possible to combine with automatic veneer feeding system



Veneer sheets to size in Zig-Zag operation.

KUPER FWQ



automatic stacking device

Technical data

Feed speed	approx. 40 – 70 m/min. 7 speeds
Veneer thickness	approx. 0.4 – 2.5 mm
Max. working width in grain direction	1900/2800/3700 mm
Min. Working width in grain direction	approx. 550/550/900 mm
Width of veneer strips across the grain	from approx. 65 mm
Operating voltage standard	400 V, 3 Ph, 50 cycl. or special voltage
Total connected load	approx. 13.15 kVA

Perfectly suitable for large veneer sheets. And for small ones, too.

The KUPER FWQ produces so-called endless sheets or pre-programmed fixed dimension veneers from peeled and cut veneer strips of different widths. Easy operation and absolutely tight joints are guaranteed by the world-famous KUPER zig-zag-joint. For many veneer processing companies throughout the world there is no alternative for the unique KUPER zig-zag glueing system. The cost saving and rational processing, the veneer pattern, the surface and the troublefree subsequent processing are the distinguishing characteristics of all KUPER veneer "stitchers".

The FWQ is predominantly employed where large veneer surfaces are required, panel, doors, wall panels, cabinet sides are typical examples. But this fast machine also masters smaller surfaces and veneer patterns. The KUPER FWQ is also a typical 'one man machine' irrespective of whether veneer patterns or fixed dimensions are required. The photo-electronically controlled guillotine knife cuts any pre-selected dimension exactly from the endless veneer – this system ensures highest possible yield.

The KUPER FWQ is available in three different working widths:
1800/2800/3600 mm.



Perfect Finish: Endsplicing and trimming.

KUPER EVB

Fast. Clean. Ready.

The KUPER EVB endbinding and trimming unit and the crossfeed splicers KUPER CRC and ACR form a perfect unit for the complete process. The KUPER EVB is also available as stand-alone machine. The endbinding operation can be realized with glue thread or with adhesive tape. The trimming units are

mechanically adjustable – easy to read out at the counters. Motor-driven adjustment is available as option. The finished veneer layons are being precisely stacked by the approved system of the finger stacking.

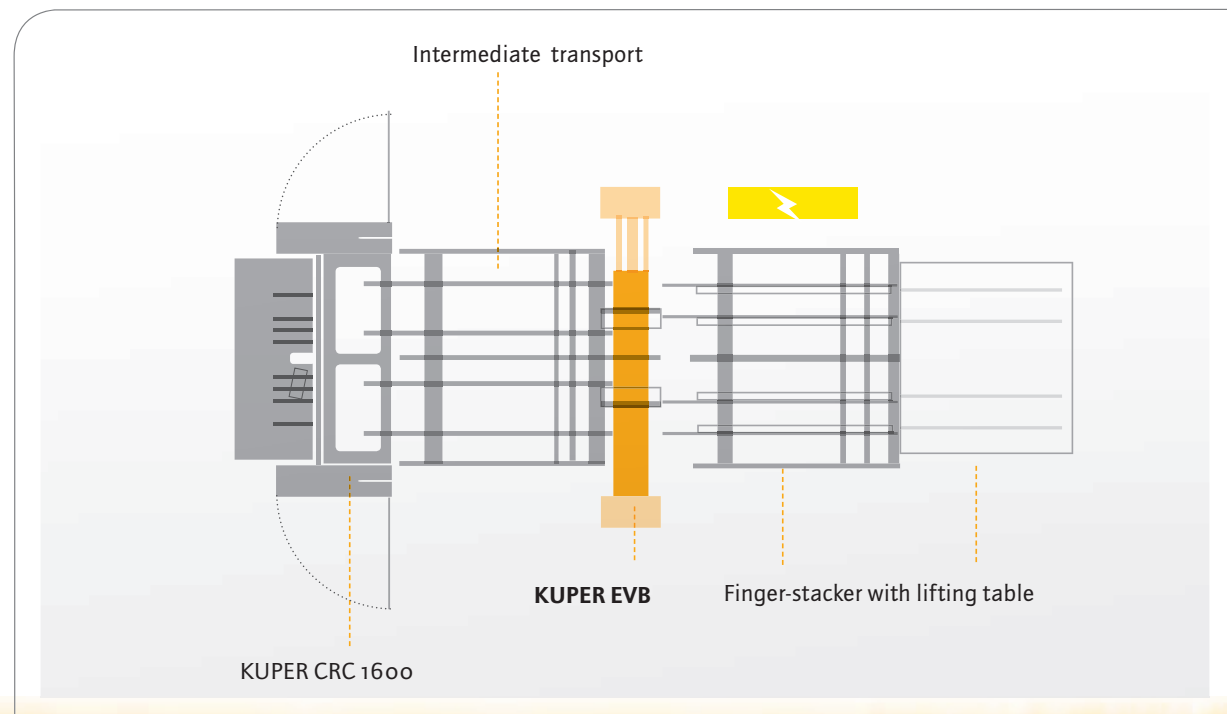
Advantages at a glance:

- sturdy due to solid steel stand construction
- high precision also with big veneer dimensions
- high feed speed
- compatible with the KUPER CRC and ACR (see p. 12 and 14) with its different stacking systems

Technical data

	with adhesive tape heads
Feed speed	30 m/min.
Veneer thickness	approx. 0.3 – 2.5 mm
Working width	1600/2800/3200 mm
Veneer cut-off	min. approx. 10 mm, max. 300 mm
Operating voltage standard	400 V, 3 Ph + PE, 50 cycl. or special voltage
Total connected load	approx. 2.7 – 10 kVA

	with glue thread heads
Feed speed	40 m/min.
Veneer thickness	approx. 0.3 – 2.5 mm
Working width	1600/2800/3200 mm
Veneer cut-off	min. ca. 10 mm, max. 300 mm
Operating voltage standard	400 V, 3 Ph + PE or special voltage
Total connected load	approx. 3.1 – 10.5 kVA





Perfect lengthening of veneers.

KUPER ZIZU

Variation by different construction.

Countless possibilities to use lengthened veneers demand for highest flexibility in the machine technology. The different models and constructions of the KUPER ZIZU allow production of e.g. veneer edgebanding material in rolls, profile-wrapping veneers even for extremely difficult profile radiuses and forms, fixed veneer lengths for wall or ceiling panels, fixed lengths in rolls with signal strips and more. Veneer cut-offs or rests

can be used this way. They are excellently suitable for cabinet backsides, shelves, thicker core layers for plywood boards and formed parts. Depending on the type of ZIZU the finger joints are fixed by a coated fleece or by full glueing of shoulder and tip. Roll lengths of 250 – 400 m are possible.



Finger jointing punching dies with VARIO die form

to produce a nearly invisible joining by a curved line form.



Butt veneer joining with tight joint

from the ZU-Butt 330 F-P with angle cut knives, for fixed lengths only like for example veneer parquetry or furniture fronts.



Micro-die

The micro dies are used with the KUPER ZIZU Combi Glue Line. The new micro die joint is almost invisible like the one made with VARIO-dies.

Available Variants:

F:
for fixed veneer lengths, with electronic length preselection and guillotine

R:
for veneer in roll form, with separate winder

F/R:
combined machine for fixed veneer lengths and for veneers in roll form, accordingly equipped as well with the electronic length preselection and guillotine as with the separate winder

-E:
machines with electronic control

-M:
machines with special equipment for micro veneers

ZU-Stumpf:
machines without finger jointing punching dies, for butt joinings only, with or without winder, with or without angle cut knives

Combi Glue Line: New
Premium model for glued veneer joints – specially made for the production of veneer edgebanding material and profile-wrapping veneers for extremely difficult profile radiuses and forms



Machine with Touchpanel

The all-in-one solution for rotary cut veneers.

KUPER Clipper plus KUPER DMF 1800

Double KUPER speed ahead.

This is efficient: Plywood core layers are produced in this combination of KUPER veneer clipper and the core composer KUPER DMF. Within one production line, with just one operator the parallel cut of the raw strips, the composing, the formatting cut and the stacking is done. Peeled veneer strips are cut parallel at front and rear edge automatically and then transported directly into the composer DMF. Here the strips are composed by KUPER glue threads, cut to the preselected final dimension and stacked automatically. It is also possible to mark and cut out faults in the veneer. For production of face veneers the clipper is also compatible with the KUPER FWQ (see p. 16).

Technical data

Feed speed	20 – 54 m/min.
Veneer thickness	approx. 1.0 – 4.5 mm
Working width	1900 mm*
Min. veneer strip length	900 mm
Max. veneer strip length	1900 mm
Min. veneer strip length	100 mm
Operating voltage standard	400 V, 3 Ph, 50 cycl. or special voltage
Total connected load	approx. 14.00 kVA

* Also available in working width 2800 mm or 3600 mm.

The KUPER DMF is also available in two different working widths: 2800 and 3600 mm.





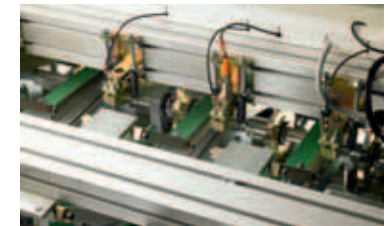
Touchpanel Control

All parameters are put in and read out clearly and simple in the central touchpanel control. All functions of the complete line from clipper up to the automatic stacking of final dimensions are under control at all times.



Precise mechanical scanning

Front and rear edge of the veneer strip are detected via 8 scanning rollers (standard) and the very precise parallel-cut is released without any further loss of material. Additional sensors find possible thickness tolerances which are cut out within a preselectable range.



Long-Life cutting shaft

the extraordinarily big diameter of the cutting shaft of the clipper provides trouble-free discharge of waste strips and has an outstanding long service-life.



Glue thread turning system

With the patented KUPER glue thread turning system the veneers are composed to form a strong and handling-safe final format.



Safely cutting veneer bundles to size.

KUPER QFS 850

System Josting

Safe cutting with KUPER Veneer Guillotines.

The KUPER QFS 850 is perfectly suitable for quick and economic cutting to length of veneer bundles. Due to the narrow construction an excellent view of the veneer and of the area of cut is made possible. The green-coloured light line clearly indicates the cutting line. The lengths are indicated on 2 measuring tapes embedded in the working tables. High accuracy, brake motor, gear drive and crank gear guarantee quick and powerful operation of the knife. The cut is actuated by a two-hand push-button control at the right or at the lefthand side adjacent to the area of cut. The veneer bundle is pressed down by the pressing beam which comes down automatically just before the cut is released. Included in the delivery is a safety-orientated electric control system, a plexiglass-guard and plug-in type angular stops. On request we also deliver work tables of greater lengths with intermediate supports and length stops.



The KUPER QFS 850 can be turned at an angle of 180° if, at the place of operation, a work process in opposite direction should be more favourable.

Technical data

Cutting width	850 mm
Insertion height	60 mm
Max. thickness sheet for sliced and peeled veneers	approx. 3.0 mm
Operating voltage standard	400 V, 3 Ph, 50 cycl. or special voltage
Total connected load	approx. 4.00 kVA



Low noise chopping of veneer waste.

KUPER FAZ 100

System Josting

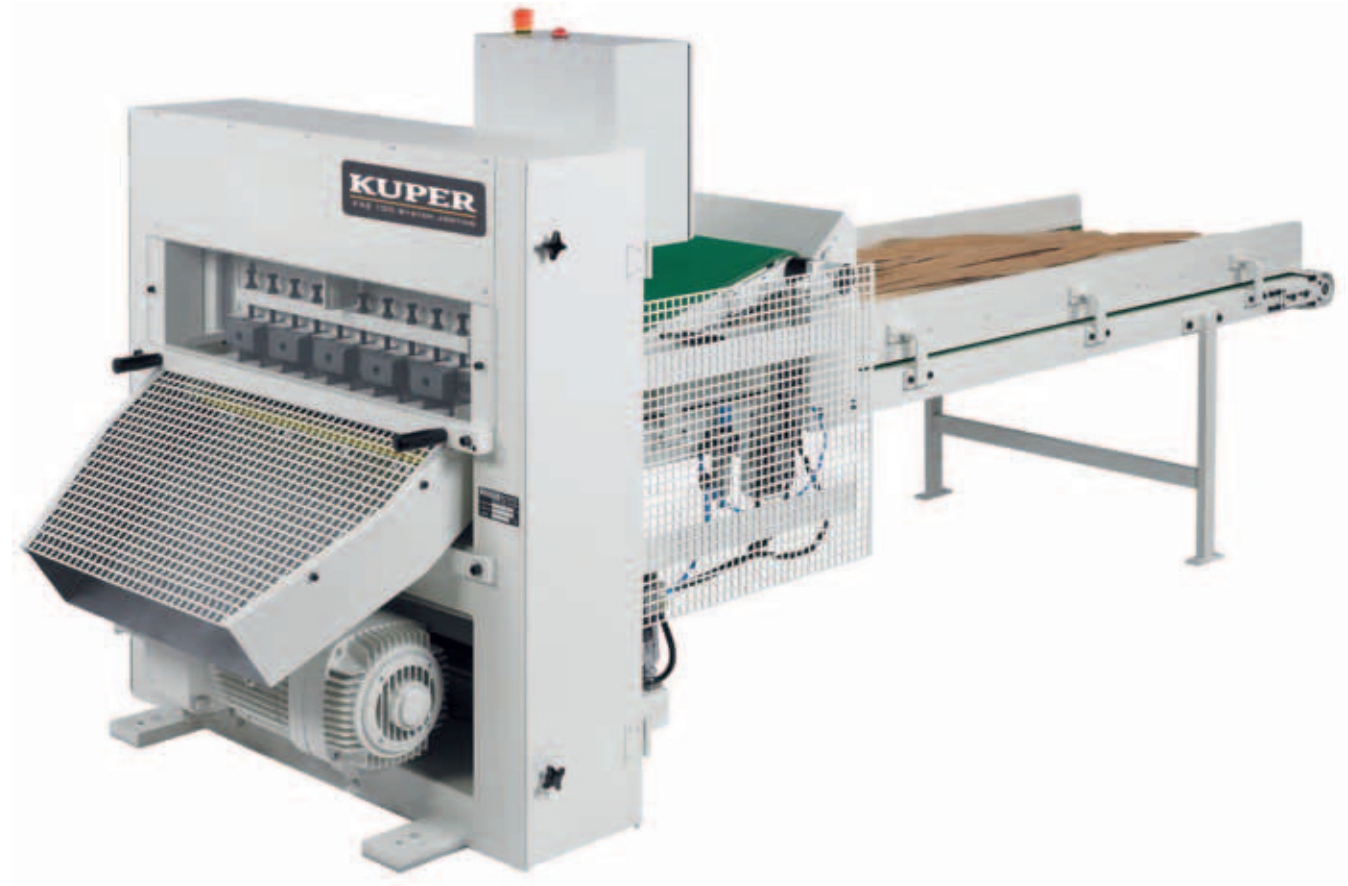
Reliably cares for unobstructed work.

The KUPER FAZ 100 is chopping waste veneer strips and trimmings which occur in the cutting of veneer bundles. The machine works on a very low noise level, operation avoids the tangling of the veneer waste strips as possible in rotary refuse grinders. Veneer scrap can ideally be used as heating material. Machine loading and unloading can be adapted to the specific conditions of your production. A vacuum extractor unit can also be installed on the slide.

Veneer waste of several guillotines can be gathered if a longer veneer transport belt (lowered to floor-level) is installed. The waste is fed stepwise to the FAZ cutting section where the cutting is achieved by one constantly moving cross knife and 10 longitudinal knives against a counter gib. After the chopping the volume of the waste veneer is reduced to approx. 50%, effectively prepared for storing or transport.

Technical data

Cutting width x Cutting height	700 x 90 mm
Conveyor area	2320 x 700 mm
Step measure of conveyor	10 – 25 mm
Step measure of conveyor (without longitudinal knives)	50 mm
Processing quantity	3 – 4 m ³ per hour
Operating voltage standard	400 V, 3 Ph, 50 cycl. or special voltage
Total connected load	approx. 6.5 kVA



Veneer cutting with perfection.

KUPER EFS

System Josting

The straight way to closed-joint splicing.

Straight and parallel cutting is the efficiency „plus“ of the machines KUPER EFS 2300 to EFS 4500. It ensures the tight-joint splicing after the cutting for all kinds of veneer species! The positioning control for the parallel fence features a digital width gauge, a numeric keypad, a cut counter and pushbuttons for selecting the various operating modes. Single and incremental dimensions are positioned by the machine automatically when the start-button is pressed. Up to 99 width dimensions can be saved in the memory. Convenient: Changing from mm to inch-dimensions is just a switch of the button. Veneer edge lippings are cut by step-by-step adjustment of the parallel fence. The KUPER EFS can also cut plastics, papers, foil and other materials.

Technical data

Insertion height	80 mm
Parallel fence range	20 – 720 mm*
Pressure bar	Hydraulic cylinder, 2 pressure stages
Cutter bar	Brake motor, gearing, crank drive
Operating voltage standard	400 V, 3 Ph, 50 cycl. or special voltage
Total connected load	approx. 6 kVA

* Upon request different range possible.

Advantages at a glance:

- Cuts of highest quality thanks to the swinging and powerful drawing motion of the knife at an angle of approx. 20°.
- Parallel fence with high-speed motor-driven positioning, fine adjustment and digital gauge for cutting parallel face veneers and edge lippings.
- Clearly visible marking of the cutting line by means of a green guide light.
- Guide markings and an angular fence on the machine table for easier alignment of the veneer.
- Broad pressure bar for pressing even wavy veneer flat and level prior to cutting.
- Finishing cut facility with hydraulic adjustment of the cutter bar by 0.9 mm, Pre-cutting and finish-cutting of the pressed veneer bundle produces rightangled cut faces.
- Powerful crank drive enables the cutting of veneer across the grain.
- High pressing and cutting forces are reliably absorbed by the heavy-duty construction.
- Precise and permanent parallel guidance of machine components.
- Knife with 30 mm grinding allowance for longest possible use.
- Intermittent operation of the drives results in a low energy requirement and a low level of noise.
- Occupational safety regulations are met by a light barrier safety device, two-hand operation, electric safety control system and protective gratings at the rear.

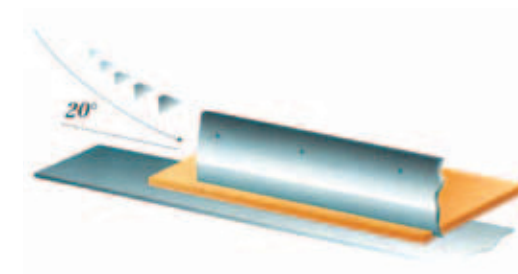


Positioning control as optional equipment



Cutting length

EFS 2300	2300 mm
EFS 2800	2800 mm
EFS 3200	3200 mm
EFS 3600	3600 mm
EFS 4200	4200 mm
EFS 4500	4500 mm



Swinging and powerful drawing motion of the knife at an angle of approx. 20°.

High precision in veneer cutting.

KUPER ZFS

System Josting

Fast due to simultaneous cutting of both knives.

The KUPER ZFS 1600 to ZFS 3800 machines cut veneer bundles exactly parallel and straight on both sides with a top and bottom knife. Tightjointed splicing of all types of veneer is therefore possible without difficulty. The machine table with the bottom knife can be adjusted by means of a high-speed positioning drive in order to obtain the required width dimensions. After the bundle is clamped in position, the top knife cuts downwards the table and the bottom knife cuts upwards towards the pressure bar. Simple operation and safe working inclusive! The veneer bundle is placed on the machine table against the limit stop. The guide light is clearly

showing the rear cutting line while the optimization laser is set to the front cutting position. Using this system the quantity of veneer scrap will be reduced to a minimum. Once the cutting width is selected the cutting cycle is executed automatically: the table moves into cutting position. The pressure bar clamps the veneer bundle in place, the top and bottom knife cut both sides ready for joining. Then the table returns to the alignment position. Precutting and finish-cutting are possible for veneers showing tensions. Veneer strips are cut only with the top knife in incremental mode.

Advantages at a glance:

- Swinging and powerful drawing motion of the knives are guaranteeing cuts of high quality.
- Telescreen positioning control system for diverse modes of operation and storable program operations.
- An adjustable optimization laser reduces the amount of veneer scrap.
- Simultaneous cutting by the top and bottom knife results in fast production cycles.
- Inserting, aligning, cutting and removing the veneer – the machine has a cutting capacity of approx. 2-3 bundles/min.
- Precise and permanent parallel guidance of the pressure bar and table.
- The top knife, bottom knife and protective coverings for table and pressure bar are of identical size and can be interchanged.
- Low energy requirement and low level of noise due to intermittent operation of all the drives.
- Occupational safety regulations are met by a light barrier safety device, electric safety control system and swivelling protective gratings.

Technical data

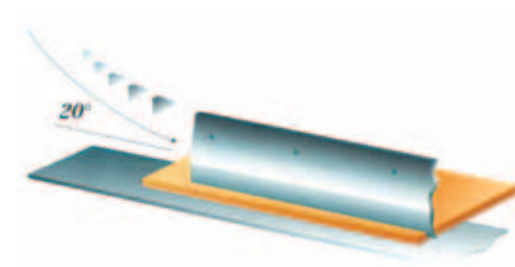
Insertion height	80 mm
Cutting width	20 – 470 mm* ZFS 1600: 45 – 400 mm
Pressure bar	3 hydraulic cylinder, 2 pressure stages
Top knife	Brake motor, gearing, crank drive, ZFS 1600 hydraulic driven
Bottom knife	1 hydraulic cylinder, ZFS 1600 hydraulic driven
Operating voltage standard	400 V, 3 PH, 50 cycl. or special voltage
Total connected load	approx. 12 kVA

*Different widths on request



Cutting length

ZFS 1600	1610 mm
ZFS 2800	2810 mm
ZFS 3200	3210 mm
ZFS 3800 L	3810 mm



Swinging and powerful drawing motion of the knife at an angle of approx. 20°.

Simply convenient: Veneer handgluers from KUPER.

KUPER KHL 1/KHL 2

Easy handling.

The KUPER hand gluer uses the KUPER glue thread as glueing medium. An ideal instrument to patch and bind splitted veneers. The KUPER KHL 2 is an ideal instrument to patch and join very buckled and thick veneer sheets.

Advantages at a glance:

- approx. 5 min. warm-up time
- exact straight splicing
- accurately break of the glue thread
- maintenance-free



Technical data

KHL 1	working with one thread
KHL 2	working with two threads
Operating voltage standard	230 V alternating current
Net weight	1.34 kg 1.59 kg

KUPER HFZ 4

The KUPER HFZ 4 is an ideal device for zig-zag joining small quantities of veneer in an efficient and clean way.



Technical data

Operating voltage standard	230 V alternating current
Net weight	1.9 kg

Well projected: the sophisticated veneer department.

KUPER gives advice for planning your veneer department.

KUPER is projecting your complete enterprise. True to size according to your individual ideas. You name the demands of your production: Furniture veneering, big-size dimensions, veneer species and production output. And we will develop a solution together with you. You want an automatic veneer feeding or transport system? We are happy to fulfill your special demands. The goal: maximum efficiency and minimum costs.



Something for everybody. And the right partner for you – KUPER.



KUPER Trading and Service Enterprise.

Being globally active as a trading house for woodworking machines KUPER has developed to a well-known partner within the last decades. As KUPER provides a comprehensive programme of **woodworking machines of all leading producers**. Standard machinery as well as special machines – from the mobile manual device up to the complete production line. Plus all necessary peripheral devices for the process planning and the suitable processing tools.

The service package is rounded off with planning, financing, delivery and assembly services of machines and complete production facilities, training and after-sales services, of course. KUPER offers these services for all of their divisions. A competent partner, also for plastics technology and packing machinery or used machines.

If your new one should be a used one.

The KUPER Used Machinery Division at the headquarters in Rietberg holds a **giant number of used woodworking machines** of well-known makes – for all different production sizes and every field of employment. With KUPER „used“ not necessarily equals „used“. In accordance with your requirements we deliver your new used machine in one of three possible quality levels. All used machines you will also find on our website!

KUPER

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