

IFRAMESAWFRAMESAW TECHNOLOGY

MÖHRINGER

MARKET LEADER IN FRAMESAW TECHNOLOGY

With a Möhringer Framesaw you benefit from **more than 125 years of technological experience** in Framesaw design, production, and operation.

We are market leader in the field of Framesaw technology because we up-date the design of our Framesaws by teaming up with our customers and the concept matches the various applications in Germany and abroad.

In order to offer you a reliable and cost effective modular system Möhringer Framesaws are designed to use those components:

- Easy extending with optional equipment at any time
- Fast and economical exchange of all parts on site
- Fast assembly and use of standardized parts creating short delivery time

All Framesaw types have the following standard equipment:

- Electric frequency-controlled feed speed
- Independent electronic control for feed and overhang with numerous adjustment possibilities for an optimal rate between speed and overhang
- PLC control with touch screen display for individual adjustment by client i.e. lubrication times
- User-friendly menu navigation, does not require any PLC knowledge
- Integrated counter for operation and service hours
- Large CPU hardware: all software options can be upgraded
- · Hydraulic engaging and disengaging
- · Automatic overhang adjustment
- Central lubrication system
- Framesaw hydraulic
- Complete set of foundation screws and special tools
- · Steel shaker chute
- Single pulley drive

Optionally available:

- Logging: automatic logging of output per day, shift or customer demand, output of loggings on a memory stick
- Automatic feed: optimized feed depending on diameter, number of saws and type of timber
- Automatic rollers: automatic control of upper rollers
- Fully-automatic system: in connection with Möhringer fast infeed as an automatic Framesaw operation
- Steel roller inserts
- Electrical width adjustment with 2-way or 4-way adjustment
- Hydraulic engaging and disengaging
- Hydraulic brake
- Belt conveyor instead of shaker chute
- · Automatic feed control
- Electronic sawing interruption



Steel construction with 20 years of warranty



Steel roller inserts



Frequency-controlled drive

The rule for all our Framesaws: Proven quality of Möhringer steel construction with 20 years of warranty against fracture of the frame

Cold stress-relieved ductile frames avoid fractures. Frame out of one single piece - without base plate - completely assembled in the factory generates fast installation on site and commisioning.

iFRAMESAW 500

FRAMESAW

The steel construction has proven its value during decades of continuous operation in various climatic conditions:

- Absolute security against fracture of the frame due to steel construction
- High-stressed parts like crank tenons, main shaft and saw frame are made of highgrade special steel

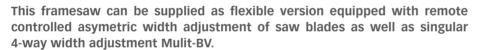
The iFRAMESAW 500 will be offered on an extraordinary favourable price level.

Innovative standard equipment features:

- Electric frequency-controlled feed speed
- Independent electronic control for feed and overhang with numerous adjustment possibilities for an optimal rate between speed and overhang
- PLC control with touch screen display for individual adjustment by client
- User-friendly menu navigation, does not require any PLC knowledge
- Integrated counter for operation and service hours
- Large CPU hardware: all software options can be upgraded

Optionally available:

- Logging: automatic logging of output per day, shift or paid cutting, logging of diameter, slip-free logging of running meter by separate measuring roller, output of loggings on a memory stick or a printer
- Automatic feed: optimized feed depending on diameter, number of saws and type of timber
- Automatic rollers: automatic control of upper rollers
- Fully-automatic system: in connection with Möhringer fast infeed as an automatic frame saw operation



- Due to variable and fast adjustment of width during running operations an optimal yield of the lumber can be achieved.
- The position of each saw pack is controlled through a programmable display



iFRAMESAW 500/45



iFRAMESAW 500/71 with 8 rollers

The iFRAMESAW 500/45 is specially designed for soft wood up to a diameter of 45 cm and highly efficient due to high speeds of blades.

Both, the iFRAMESAW 500/45 and 500/71 types may be equipped with 8 rollers for short timber.

iFRAMESAW	Passage width	Passage height	Stroke	Diameter	Drive pulley width	Max. revolutions	Max. feed
500/45	450 mm	450 mm	500 mm	1000 mm	200 mm	350 U/min	15 m/min
500/71	710 mm	710 mm	500 mm	1000 mm	200 mm	300 U/min	12 m/min
500/75	750 mm	750 mm	500 mm	1000 mm	200 mm	300 U/min	12 m/min

iFRAMESAW 550 / 600 / 700

HEAVY DUTY FRAMESAW

Designed For High Output

iFRAMESAW 550 / 600 / 700 heavy duty Framesaws are designed for any type of cut due to their universal use. They match with highest demands on sawing capacity and industrial multiple shift operations.

In both, soft and hard wood saw mills they succeeded due to their high endurance and little maintenance cost only. All types may be equipped with remote controlled asymetric width adjustment as well as the variable 4-way width adjustment Multi-BV.

Superior technology

- With an O-stroke pump no oil heating and only a minimal energy consumption
- The oil circuit is dimensioned amply: connection of other hydraulic consumers possible
- Electronically controlled central lubrication, directly from the 200 I barrel
- Electrical frequency-controlled feed drive
- Framesaw feed up to 24 m per minute

Special quality features

- Especially big chain wheels of the upper rollers ensure that there is a trouble-free climbing, even with dirty and knotty logs
- All gear racks, gear and chain wheels are milled out of massive steel, resulting in extraordinary stability and low grade of wear
- Main bearings designed for lifetime

User-friendly concept

- No traverse required on the infeed side, thanks to reinforced frame, thus easy access when changing the blades
- Flywheels made of solid steel
- No risk of cracks
- Easy running

IFRAME SAW

Framesaw with width adjustment Mulit-BV

All Framesaw types have the following standard equipment:

- Electric frequency-controlled feed speed
- Independent electronic control for feed and overhang with numerous adjustment possibilities for an optimal rate between speed and overhang
- PLC control with touch screen display for individual adjustment by client i.e. lubrication times
- User-friendly menu navigation, does not require any PLC knowledge
- Integrated counter for operation and service hours
- Large CPU hardware: all software options can be upgraded

- Electrical remote control
- · Automatic overhang adjustment
- Central lubrication system
- Framesaw hydraulic
- Complete set of foundation screws and special tools
- · Steel shaker chute
- Single pulley drive

Options: see iFRAMESAW 500 on page 3.

iFRAMESAW	Passage width	Passage height	Stroke	Diameter	Drive pulley width	Max. revolutions	Max. feed
550	710 mm	710 mm	550 mm	1.000 mm	200 mm	300 U/min	15 m/min
	750 mm	750 mm	550 mm	1.000 mm	200 mm	300 U/min	15 m/min
600	710 mm	710 mm	600 mm	1.200 mm	200 mm	300 U/min	18 m/min
	750 mm	750 mm	600 mm	1.200 mm	200 mm	300 U/min	18 m/min
700	710 mm	710 mm	700 mm	1.200 mm	200 mm	300 U/min	24 m/min
	750 mm	750 mm	700 mm	1.200 mm	200 mm	300 U/min	24 m/min

iFRAMESAW

INTELLIGENT FRAME SAW CONTROL - HIGHER PERFORMANCE - LOWER CONSUMPTION

The control of the iFRAMESAW offers various options which are expandable by modules.

Automatic feed control:

- Feed speed is controled depending on diameter, number of saws and type of timer
- Easier work for operator
- Consistent high cutting quality no deviation of saw blades
- 10 15 % higher yield in comparison to conventiona Framesaws

Fully-automatic control:

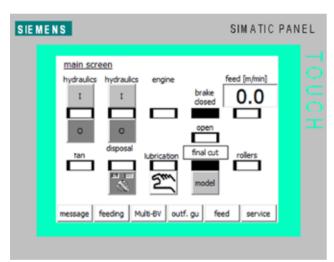
- Automatic log feed with fast-infeed system
- Automatic feed and roller control
- No operator necessary, only monitoring on the outfeed side

Logging of performance:

 Automatic logging of output per day, shift or paid cutting, output of loggings on a memory stick or a printer



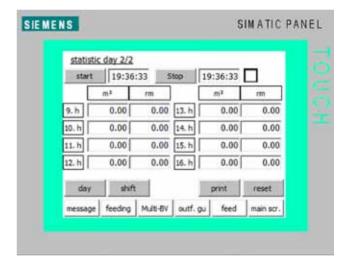
One operator controls two frame saws at the same time.



iFRAMESAW touch screen



Fully-automated frame saw operation



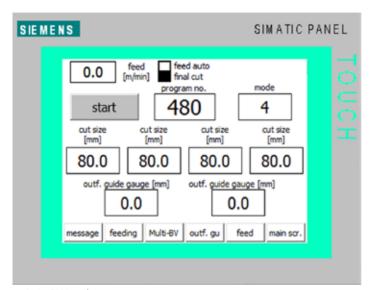
Logging of performance



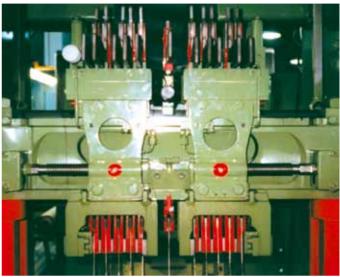
WIDTH ADJUSTMENT AUTO-BV

ADJUSTING THE SAWS AT THE PUSH OF A BUTTON

Higher rate of return: time saving, flexibility and value adding result in a considerable annual profit at unchanged production capacity and personnel. Thus, investing in an Auto-BV amortises in a very short time.



Auto-BV touch screen



Width adjustment Auto-BV

Saves time and avoids errors

- By means of the automatic preselection control, the saws are positioned rapidly
- Two speed steps additionally accelerate the adjusting process
- Even while one log is being cut, the next cutting programme can already be preselected.
- The Auto-BV switches automatically as soon as the log has left the Framesaw.
- The automatic adjusting process and the comfortable remote selection by abbreviated numbers relieve the operator considerably
- Moreover, the electronic system allows for highest dimensional accuracy

Creates flexibility

- 250 programmes allow highest flexibility when choosing the cutting dimensions
- Individual dimensions such as dry or planing measurements can be differenciated precisely
- Numerous cutting combinations, which are set up systematically are preinstalled to facilitate the entry work

Offers synergies

- The intended data interface allows a linkage to the logyard, in order to take over the cutting programmes of the construction lists, for example
- This offers you openness and expandability for the future.

Functional characteristics of Auto-BV

- Clearly arranged operator panel for fetch and entry of the cutting programmes
- Preselection of programmes

4-WAY WIDTH ADJUSTMENT MULTI-BV 2.0

MUITIPI F WIDTH ADJUSTMENT

The Multi-BV is the innovation from company Möhringer:

with more than 50 installed units, Multi-BV has proven its essential function for more flexibility and yield. **The original - only by Möhringer!**

Additionally to the two saw packages of the Auto-BV, two more individual saws can be positioned independently. This has decisive advantages:

More flexibility and customer orientation

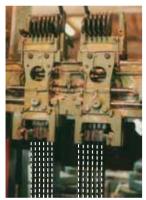
Thanks to the four adjustable saw units, nearly any dimension with one to three different widths can be sawn without further adjustment of the saws. By adding 1 additional fixed centric saw blade, 1 to 4 variable widths are possible.

Increased value

The Multi-BV considerably adds value. The operator can concentrate on sawing high quality products that can be sold at a higher price - an activity that has been very time consuming up to now, since the saw packs had to be adjusted manually. Instead of fixed side board dimensions you can now gain side planks of high value and of various different dimensions.

Multi-BV 2.0: even better, even saver

The single saws are fixed with four clamping cylinders. The hanger for the saw blade cannot tilt and is always parallel to the saw packs. Highest dimensional accuracy is guaranteed.



1-piece ...



2-pieces ...



3-pieces at the push of a button





Additional functioning characteristics of the Multi-BV

- Multi-Function-Terminal with display for indicating and programming of the sawing dimensions, 1000 stored programmes
- Optional indication of riving knife position
- Robust drive and fixing of the saw packs

Backfitting

For all Möhringer Framesaws, provided that frame and tensioner are checked.



FRAMESAW ALIMENTATION

LOG CARRIAGE

Heavy-duty log carriage SWeh1 / SWvh1

This series have proven itself in many sawmills as universal Framesaw alimentation of logs and cants: a robust, heavy-duty all-steel construction, extremely powerful clamping head and dogs, high load log table and ball-bearing mounted wheels, hydraulic dogging and automatic de-dogging, hydraulic lateral movement of the clamping head, hydraulic moving device, return system for auxiliary carriage. Also available as remote controlled log carriage SWvH1.



Remote controlled log carriage SWvh1



Log carriage SWvh1



Log carriage Robocontrol

Log carriage ROBOCONTROL – remote controlled alimentation line

For especially heavy load and high capacity, we have developed the remote controlled, completely hydraulic log carriage Robocontrol. It allows to cut butt to butt, even with high feed speeds. Thanks to the extremely low design you save long moving distances, as the log does not have to be gripped at its end. It is possible to cut longer logs with the same rail length, which is very advantageous with construction wood.

Robocontrol allows a alimentation from both sides. Hydraulically driven and pivoting chains turn the log to the ideal position without any effort. The dogs adjust and fix the log to avoid it from twisting.

	Electro-hydraulic log carriage SWeh1	Full hydraulic log carriage SWvh1	Robocontrol	
Track width	790 mm - 980 mm	980 mm	980 mm	
Support height	350 mm - 430 mm	430 mm	480 mm	
Dog opening	800 mm	800 mm	800 mm	
Dog turning	Electric 360° by special gear brake motor	Hydraulic 360°	Log turning by toothed chain	
Moving speed fore and reverse	100 m/min.	100 m/min.	100 m/min.	
Drive capacity	5,1 kW	4 kW	5,6 kW	
Lateral movement	310 mm	310 mm	310 mm	
Total lenght	3.150 mm	3.200 mm	3200 mm	
Weight (approx.)	1.250 kg	1.350 kg	1.700 kg	
Control	Two-lever-control of the hydraulic, control desk	Cable boom with control desk, resp. remote controlled	Remote controlled	

LOG FEED

AUXILIARY CARRIAGE, CONTROL CABIN

Framesaw Control / Control Cabin

Installed on the log carriage or remote controlled from a control cabin or operators stand. Several operator's stands have ergonomically designed seats with back cushions and foldable arm supports. As well as mechanical sprung operator's seat where weight, sitting height and seat-back are steplessly adjustable.

Our cabins are made of a robust steel construction with 2 doors, swivelling panorama windows, sound insulation, heating and illumination.

Following cabin types are available:

- Movable suspended cabin
- Movable standing cabin
- Fix suspended cabin
- Fix standing cabin



Operator's seat



Movable standing cabin

Auxiliary carriage



Auxiliary carriage KW2

Auxiliary carriage Robocontrol

Auxiliary carriage KW1 vek:

- · Reinforced with rotating chain,
- Drive through worm gear motor with integrated with overload clutch
- Tipping stool and adjustable log support

Auxiliary carriage KW2:

- As reinforced type with tipping stool
- Rotating roller chain for cantsl
- With hydraulically tiltable stool for logs

Auxiliary carriage Robocontrol:

- · An extremely heavy duty design
- Hydraulically driven and swivelling chains for logs and cants



Log carriage and auxiliary carriage Robocontrol

Type of auxiliary carriages

Туре	KW1vek	KW2	Robocontrol	
Track width	790 mm - 980 mm	980 mm	980 mm	
Support height	430 mm	430 mm	430 mm	
Drive capacity	0,37 kW	0,37 kW	External hydraulics	

LOG FEED

FAST INFEED SYSTEM

Fast infeed system - increase in production due to butt-to-butt Framesaw feeding.

Specially designed for a rational sawing procedure for short and small diameter logs.

Special advantages:

- Butt-to-butt sawing process also with short logs and high feed speeds
- Better recovery due to semi-automatic respectively automatic centring of the log
- Easy sawing process of extremely short logs on a 4-roller frame saw
- The feed dog avoids short logs to kick up
- Precise straight guidance of the log
- Torsion-free sawing even with twisted and knotted logs
- Relief of the operator through semi automatic working resulting in an higher output

Technical execution:

Fast infeed system existing of:

- 2 hydraulically driven steel tube rollers with welded logitudinal rips which can be turned in both directions through a hydraulic drive
- The feeding of the log is realised by a carriage with mounted block feed dogs
- The carriage is located under the tube rollers and running on two round hard chromed guide shafts.



Fast infeed system

Technical data:

Max. log length: Version 4 m / 5 m / 6 m / 7 m

Version XXL till 12 m

Min. log length: 1,5 m Min. diameter: 50 mm

Max. diameter: 700 mm (depending on log length)

Drive: full hydraulic

The carriage is moved for- and backwards with an hydraulic driven endless precision roller chain.



Fast infeed system

FRAMESAW ACCESSORIES

RIVING KNIFF

Möhringer riving knifes - quality for highest demands

Möhringer riving knifes are designed in a modular way and can be added to all Framesaws, even to Framesaws from other manufactures.

Our riving knives are constructed in two versions:

- Riving knife SK63/73 with driven slab outfeed rollers and driven horizontal roller
- Riving knife SK732/733 with driven slab outfeed rollers and driven chain bed

Hard-wearing construction

- Extremely solid guiding plate double guided on 2 very strong shaftscanting impossible
- Riving knife made of special steel ST70
- Optional: extended knife version made of Hardox special steel
- Knife adjustment: electrical or hydraulical drive as option available
- Connection to width adjustment possible for freely programmable riving knife position (SK73 B/MB, SK732 B/MB, SK733 B/MB)
- Connection to central lubrication possible (SK732K, SK733K)
- Driven chain bed, short slabs and boards are reliably transported out of the riving knife (SK732, SK733)



Riving knife SK73



Riving knife SK733 with chain bed

Туре	Length of knives	Drive	Hydraulical ope- ning of rollers	Chain bed for short slabs	Min. opening	Max. opening	Opening width of Framesaw
SK73	1.330 mm	Electrically	No	No	45 mm	600 mm	Up to 750 mm
SK732	1.750 mm	Hydraulically	Yes	Yes	78 mm	600 mm	Up to 750 mm
SK733	2.260 mm	Hydraulically	Yes	Yes	78 mm	600 mm	Up to 750 mm

FRAMESAW ACCESSORIES

CIRCULAR CROSS CUT SAW VKK3

This crosscut saw can be integrated in almost any Framesaw and resaw line between the riving knife and the roller conveyor. Both swivel-arm pillars are connected to the riving knives and follow each of their movements. Even with width adjustment, the swivel-arm pillars move with the riving knives.

The feed system is interrupted automatically for a few seconds for the crosscut. The clamping arms to hold the side slabs and the two swivel-arms with the circular saws are moved fully hydraulically. The crosscut unit can be connected to any hydraulic station of suitable size. Otherwise, we offer you various hydraulic systems corresponding to your capacity.

Advantages for you

- Relief of the operator in charge of cross-cutting, especially when cutting long construction timber
- Higher throughput volume at the edger because of crosscut side products
- Less investment in conveyor sytems
- Excellent wood utilisation by exact positioning
- Right-angled crosscut boards also behind the resaw
- Less risk of injury in comparison with manual pre-crosscutting using a chain saw
- Minimal feeding interruptions due to very fast crosscut process
- Low top-energy consumption thanks to sequential start of the circular saw motors
- Robust and functional design
- Reliable and low-maintenance operation



Circular crosscut saw VKK3

Technical data:

Cutting height:600 mmMax. opening:750 mmBlade diameter:600 mmNumber of measuring points:2 or moreMotor capacity:11 kW eachFeed interruption:3 - 4 sec.



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- Complete solutions for saw mills and secondary processing
- Chipper canter profiling technology
- Circular saw technology
- Edging technologyFramesaw technology
- Bandsaw technology
- Timber sorting lines
- Multirip installations
- Stacking and restacking technology
- Electronic and computer control systems