UniRip 310







Closed frame design

Frame closed on left side

Welded construction of laser-cut parts

Vibration-optimised with FEM analysis

Your advantage

Higher profit thanks to superior cutting quality and better material yield due to smaller cutting dimensions

■ 40 % greater rigidity and stability as "open" constructions → superior cutting quality; this enables the pressure unit and the anti-kickback fingers to be supported on both sides

■ High production precision → high inherent stability → high cutting → quality up to 10% extended tool life

Maximum stability for reliability and a long service life

UniRip 310 Machine frame





Closed frame design



Optimised by means of FEM analysis



Welded construction



Chain feed

- Feed by means of a chain
- Prismatic guides on both sides
- Closed chain
- Frequency-controlled feed system
- Chain width 340 mm
- Automatic chain lubrication with monitored filling status and feed shutdown

Your advantage

Greater profit thanks to higher productivity and quality of the sawn products

- Full-surface support of the work piece → the chain moves and not the work piece → that way you have the wood under full control at all times
- Guidance absolutely free of play made from specially matched alloys for a maximal service life → exact material conveyance = prerequisite for a precise cut
- No jammed knots or splinters \rightarrow high reliability
- Feed speed infinitely adjustable to meet all material requirements → optimal performance
- Larger than the cutting width → all splinters are transported out of the machine → high reliability
- No danger of running dry → easy maintenance → longer chain service life → high operating reliability
- Optimal transportation of raw boards and sawn strips
 → less stress from the side on the saw blades → greater dimensional accuracy → longer service life → narrower cutting kerfs feasible

Spikes

UniRip 310 Feed system







Closed chain

Prismatic guides on both sides



Full-surface support

Chain width > cutting width



Spikes



- Supported on both sides of the machine frame
- 4 pressure rollers
- Flat angle of inclination
- Motorized height adjustment
- Double parallelogram movement of pressure rollers
- Pressure shoe, infeed side

Your advantage

- 40% more stiffness for optimal cutting quality
- Reliable material guidance for outstanding cutting results
- Gentle material infeed and optimised top pressure
- Easy to operate
- Constant small distance between pressure rollers and the saw blades irrespective of the thickness of the timber
 → optimised pressure
- Optimal guidance of the timber in the cutting area

UniRip 310 Pressure unit





Parallelogram movement of the pressure rollers



4 pressure rollers



Motorized height adjustment



Pressure shoe, infeed side



Quickfix quick clamping system

- Hydraulic clamping with Quickfix
- Saw arbor made from high strength, low-tension special steel
- High precision angular ball bearing
- Run-in and test cycle for each saw arbor
- Motorized height adjustment

Your advantage

Higher profit due to great flexibility and high productivity thanks to short changeover times

- Simple, fast changeovers without any tools → average time savings compared to conventional sleeves with spacers: 10 minutes at minimum per changeover
- Excellent wear resistance; Quickfix saw arbor patented since 10 years → experience gained from over 2,000 delivered machines
- Quality bearing with long service life for maximum reliability; Special layout for utmost quiet running
 → little vibration → extended tool life
- Run-in cycle with variable speed and temperature monitoring of the bearings → guarantees long service life → concentricity 0.02 mm → maximum reliability
- Easy-to-operate when changing saw blades; easily adjusted to accommodate new saw blade diameter
 → saw blades can be moved completely out of the cutting area; high operating reliability thanks to limit switch

UniRip 310 Saw arbor







Insert wood samples and adjust saw blades

Loosen central nut



Tighten central nut and remove samples → average time saved: 10 minutes per changeover



Motorized height adjustment



Quickfix quick clamping system

Quickfix clamping flange

Your advantage

Higher profit due to great flexibility and high productivity thanks to short changeover times

■ Fast changeover without tools for gang rip applications → high productivity

Example: Changing 5 arbor setups in 1 shift

Conventional saw with sleeves and spacers: On average 10 min per change \rightarrow 5 x 10 min = 50 min per shift

With Quickfix: On average 1 min per change → 5 x 1 min = 5 min per shift

→ Time saved = 45 minutes per shift!

Sleeve and spacers / extended sleeve with spacers

Maximum accuracy and cutting height: strips < 25 mm; large series, e.g. middle layer; for pre-sorted ingoing widths

UniRip 310 Saw arbor set-up





Quickfix clamping flanges

Sleeve with spacers



Easy operating concept

- Centrally arranged operating elements
- Limit switches for saw arbor height adjustment
- Laser for cut visualisation
- Infeed fence

Your advantage

More profit thanks to high productivity and reliability

- Easy-to-handle machine; ergonomic arrangement of all important operating elements
- Prevents cutting into the chain; good accessibility of the limit switches for easy adjustment
- See what is being cut → better timber yield; 20 mW output for excellent visibility even in bright surroundings
- Easy infeed of edged and partially-edged boards

UniRip 310 Machine operation





Centrally positioned operating elements



Infeed fence



Saw arbor limit switches to protect the chain



Laser – see what is being cut



Weinig Machinery Directive 2014

Clever design

- Saw motor
- Peed gear
- Oil pump
- **4** Saw arbor height adjustment
- **S** Limit switches for saw arbor height adjustment
- Pressure unit height adjustment
- Oil reservoir with monitored filling status
- Energy-saving motor in compliance with IE 2 standard
- Flow-optimised dust extraction

Your advantage

Higher productivity thanks to reduced fitting and maintenance times

- Good accessibility, easy operation, adjustment and maintenance
 - Energy-saving motor in compliance with IE 2 standard
 - Energy-saving motor in compliance with IE 2 standard
 - Consumption-controlled lubrication
 - → high operating reliability
 - Easy operation by push-buttons
 - **S** Simple to adjust \rightarrow prevents sawing into the chain
 - **G** Easy operation by push-buttons
 - ✓ No danger of running dry → high operating reliability
- 92.5% efficiency → up to 15% less power consumption at the same output → lower operating costs; lower connected load required
- Highly efficient dust extraction → less energy required; higher productivity thanks to reduced cleaning requirements; improved cutting results

UniRip 310 Machine design





Machine design

Flow-optimised dust extraction



Multiple kickback protection

Comprehensive kick-back and splinter protection



- Low noise level
- Hood lock with standstill monitoring of the saw arbor
- CE safety certificate issued by independent test institute

Your advantage

Maximum operator safety

- Bottom row of anti-kickback fingers for a minimum of 30 mm overlap
- Anti-kickback fingers for splinters
- SafetyPlus to seal the cutting area
- Row of anti-kickback fingers prevents raw material kick-backs
- A row of anti-kickback fingers on the outfeed prevents the sawn material from falling apart, especially the thin splinters
- Kevlar and polyurethane curtain to seal the cutting area, a Raimann patent!
- Sound emission only 76.6 dB(A) in idle operation
- Access protection
- Maximum safety guaranteed when operating the machine









Max. cutting width	310 mm
Chain width	340 mm
Max. outlet width	650 mm
Max. cutting height with Quickfix flanges	110 mm
Min. timber length	500 mm
Feed speed	5 - 35 m/min
Motor power (option)	22 (37) kW
Saw blade diameter min./max.	300 mm / 350 mm
Weight	1,850 kg
Dimensions: length x width x height	1.75 x 1.75 x 1.50 m
Working height	850 mm
Dust extraction diameter	250 mm
Required dust extraction volume	5,300 m³/h
Quickfix incl. 4 clamping flanges and 4 saw blades	
Motorized height adjustment of saw arbor	
Motorized height adjustment of pressure unit	
Operating Manual / Spare parts lists	
Set of tools	
Spikes	•
Infeed fence	•
Laser cut visualisation	
Sleeve and spacers	
Pressure shoe	•

UniRip 310 Technical data



Dimensions



Required motor power for dry hardwood (e.g. beech)





Cutting width - outlet width



Required motor power for dry soft wood (e.g. pine)



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