

www.wravor.com



WOODWORKING MACHINERY

HORIZONTAL BANDSAWS		MACHINES FOR	
CIRCULAR SAVVS	DEBARKING AND SORTING LINES	CIRCULAR AND BANDSAW BLADES MAINTENANCE	SLOVENIA

EVERYWHERE WITH YOU



WRAVOR d.o.o. production, trade, transport, import - export

Stranice 27/a, 3206 Stranice, Slovenia Tel: .+386-3-757-19-10 Fax: +386-3-757-19-20 E-mail: wravor@wravor.si

GPS: 46°21' S, 15°21' V

f: https://www.facebook.com/wravor.doo?fref=ts

: https://twitter.com/WravorDoo



www.wravor.com

Rakova Steza

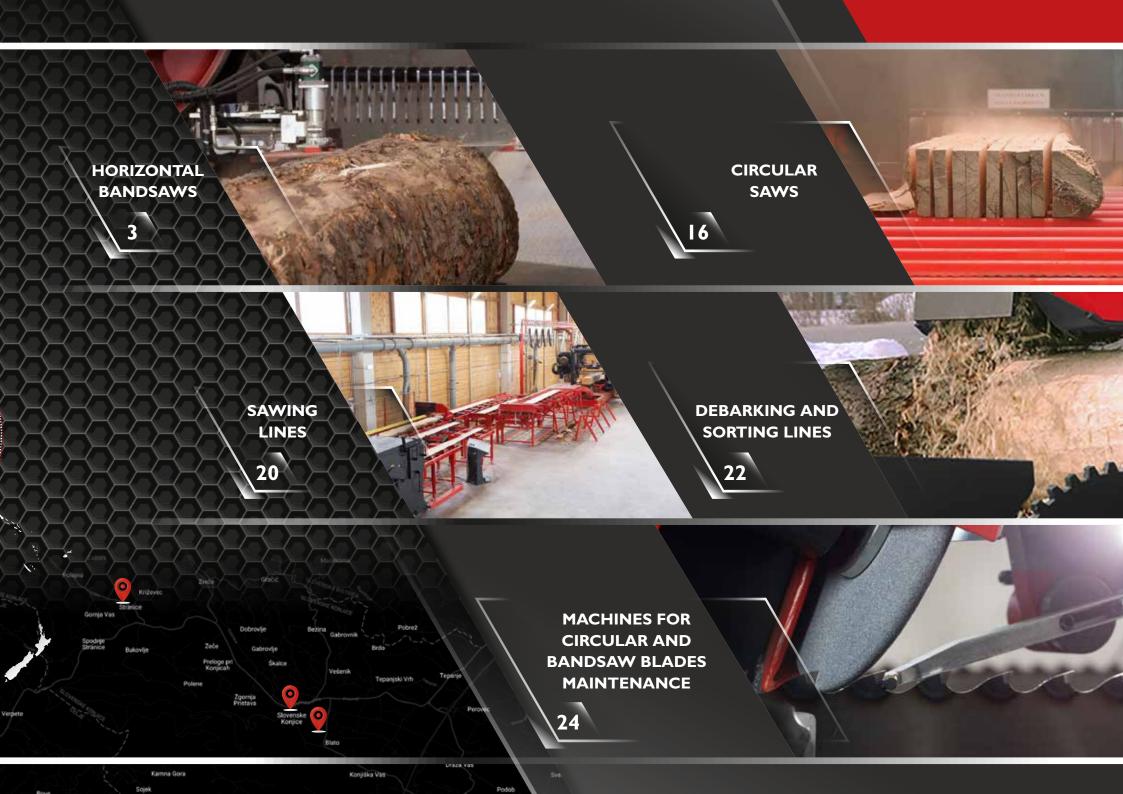
Stražica

Zlateče

Razdeli

Ljubljana Slovenske Konjice

PREMIUM · QUALITY ·



This company has its roots in experienced sawmilling family.

1985

After years of producing bandsaws in the garage at his house, his desire to display innovative technologies led Vladimir Wravor to the establishment of the WRAVOR company.

TRADITION

1934

And Soos And WRAVOR was born and grew in the heart of the Pohorje forests where dealing with timber is in people's blood. Having started as a small company, with its roots in the love for wood and its processing, grew a successful company with a tradition and experience, known worldwide and with solid foundation for the future.

Company's main activity is to design and build machines for sawmills.

Principally horizontal logbandsaws which can be installed either independently or in connection with conveyors and multirips in sawing line, and resulting as a combination of high technology with a minimal cost of labour and premium cutting capacity.

We are proud to see our machines provide work and income to small and middle sized sawmills or they are integrated in big sawmills all around the world. WRAVOR machines are cutting huge amounts of diverse wood pending from domestic to exotic hardwood. What truly fills us with pride is that customers who run our machines, always come back to us for a next need.

Once Wravor, always Wravor.

One family ...

QUALITY

High - tech level of production and mounting high quality components from recognized suppliers.



We do not offer standard machines, but all custom made according to requirements of the customer.

CUSTOMER SERVICE

We are open for any questions and help also after the warranty period has expired, with our service team all over the world we enable that our machinery never stop.

RESPONSIVENESS & SERVICE

Quickly respond to all customer queries and in case of problems we solve them as soon as possible.

WRAUOR

www.wravor.com



... many innovations.

VISION

CERTIFICATES & ACHIEVEMENTS

Founder and general manager of the company Vladimir Wravor received the award for outstanding business achievements from Chamber of commerce and industry Slovenia. WRAVOR became a famous and wellknown brand and standard of quality in its branch. it received awards as exhibitors for best technical achievements in the field of woodworking technology.

All products are certified according to CE quality norms and Russian GOST standard of quality.

INNOVATION AND OWN DEVELOPMENT

We are always looking for new solutions how to improve machines and we constantly introduce new technologies which are followed by competing companies.

HQ, INDUSTRIAL PRODUCTION & warehouse in more than 10000m² in three locations

With all qualities that we can offer to customers is our vision clear. **»BE THE BEST«** !

VO



WRC 1550 AC

OR

LUEC ISSO RC

10 A 10

Horizontal bandsaws for cutting hard exotic wood with big diameter

Specialty of these bandsaws is a robust and wide construction with additional reinforcements. All manipulation and control components including electronics are adapted to harsh weather conditions. We have also perfected form for easy transportation and installation.

WRC 1550 AC

TECHNICAL DATA

1.1

STATISTICS.

Diameter of main wheels:1350 mmWidth of main wheels:160 mmMax. log diameter:Ø 1550 mmCutting lenght:ON DEMANDBandsaw blade lenght/width:9800 / 180 mm*Main motor power [kW]:55 Kw/75 KwCutting capacity:up to 80 m³ / 8h **doublesided blade is +20mm wider

* Option / additional equipment (page 14)

Twin log turners – movable for big logs

Controled in a separate operator cabin.

ELOPENIA

Luge isso Re



Horizontal bandsaws for high productivity sawmils

WRC 1250 AC

Lunc iaso AC

12

ATTATETISS:

See.

TECHNICAL DATA

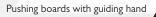
Diameter of main wheels:1250 mmWidth of main wheels:135 mmMax. log diameter:Ø 1250 mmCutting lenght:ON DEMANDBandsaw blade lenght/width:9045 / 160 mm*Main motor power [kW]:45/55 KwCutting capacity:up to 55 m³ / 8h **doublesided blade is +20mm wider

* Option / additional equipment (page 14)

Continuously controled cutting proces with video & eye visualization

Fast and precise cut

Precutter follows log shape



C IESO RC



Fast manipulating with log

Strong rails with extra weld hardened material, movable log turners, reinforced support, each roller movable (hight) + driven



1.1

IIIIII C

Horizontal bandsaws for sawmills with high cutting capacity

WRA V OR

Ciess AC

These saws in addition to its strong construction are distinguished by a high degree of automation, which contributes to high cutting capacity with minimum labour. They are upgraded with fully automated system with automatic setting of cut thickness and movements. In most cases are connected in production line with logdeck, outfeed conveyors and multirips.

WRC 1225 AC

TECHNICAL DATA

Diameter of main wheels:1200 mmWidth of main wheels:125 mmMax. log diameter:Ø 1250 mmCutting lenght:ON DEMANDBandsaw blade lenght/width:8685 / 150 mm*Main motor power [kW]:30-45 KwCutting capacity:up to 43 m³ / 8h **doublesided blade is +20mm wider

WRG V

C IBES AC

* Option / additional equipment (page 14)

WRC 1150 AC

Horizontal bandsaws for smaller sawmils

www.wravor.com

WRC IISO AC

w.wraver.com



Double threaded spindle

Automatical lubrication and cleaning

Guiding hand

WRC 1150 AC

TECHNICAL DATA

Diameter of main wheels:1150 mmWidth of main wheels:115 mmMax. log diameter:Ø 1150 mmCutting lenght:ON DEMANDBandsaw blade lenght/width:8190 / 140 mm*Main motor power [kW]:22-45 KwCutting capacity:up to 20-40 m³ / 8h **doublesided blade is +20mm wider

* Option / additional equipment (page 14)

Double precutter



Hydraulics covered under the deck in the rails with galvanized hydraulical pipes



Horizontal bandsaws for sawmills with smaller cutting capacity

Horizontal bandsaws are designed for individuals for which sawmilling is not main activity but only supplementary. This bandsaws are simple, but still sufficiently equipped with hydraulic components for simple and easy work. Saws are customized for easy installation and minimal use of labour.

WRC 1050 AC

TECHNICAL DATA

WIC 1050 RC

Diameter of main wheels:1050 mmWidth of main wheels:100 mmMax. log diameter:Ø 1050 mmCutting lenght:ON DEMANDBandsaw blade lenght/width:7470 / 120 mm*Main motor power [kW]:18.5-45 KwCutting capacity:up to 30 m³ / 8h **doublesided blade is +20mm wider

* Option / additional equipment (page 14)

Air-conditioned cabin on the sawmill.

Lug C lasa AC



Special horizontal bandsaws

Automatical bandsaws for cutting veneer

This type of bandsaws are designed and manufactured with years of engineering and testing on field directly with customers. A lot of patents distinguishes a fully automatic bandsaw , 2 side cutting veneer with accuracy of 0.1 mm!, automatical setting of thickness, movement and removal of lamellas.

WRC 1050 VENEER

TECHNICAL DATA

Diameter of main wheels:1050 mmWidth of main wheels:100 mmDimension of prisms:850/750 mmCutting lenght:ON DEMANDBandsaw blade lenght/width:7470 / 140 mm*Main motor power [kW]:30-55 KwCutting capacity:up to 850 lamels/8h *

* Option / additional equipment (page 14)



... and outfeed conveyor with

robot manipulator.

It can be equipped with prism loading ramp ...



... or automatical logdeck ...

Machine can operate independently or connected in multi-line with several veneer bandsaws

Machine has special prism turners.

Adjustable hand for boards

Additional sawdust exhauster system with ventilator on machine.

WRAUOR

d t

C IOSOFURNIA

Cutting glass wool and glulam

This machine has special holders that can be set with pressure and high level of automation and manipulation of cut material.



This machine is equipped with vacuum holders or with robotic arm for handling workpieces.

Bandsaw with edgers

WRA V OR

SALC HER P

We can add circular saws on every machine for edging boards at the same time.



Options/additional euipment

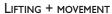




mounted in concrete



LOG TURNER



ANGLE





grip with one cylinder



standard



mechanical holder

angle





Elevated rails with automatical system for waste cleaning.

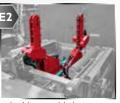




movable logturner



lifting



double movable logturner



grip with two cylinders + hydraulical lifting of grip pins







lifting + movement of roller

0



WRAVOR



multifunctional joystick



rearview mirror





magnifying glass



light



automatical blade cooling and greasing

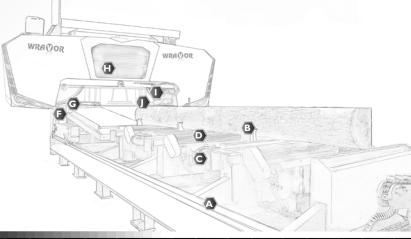
camera



central greasing



central greasing



www.wravor.com





MOVEMENT UP/DOWN

with spindles



with chains



fast spindels - servo controled





manual



hydraulical

pressure with oil mist



Bandsaw blade

manual – hydraulic



automatical-hydraulical tensioning +accumulator

COMMAND PANEL



WHEELS

welded



cast steel



Precutter

electrical



hydraulical



double hydraulical or electrical

EXHAUSTER



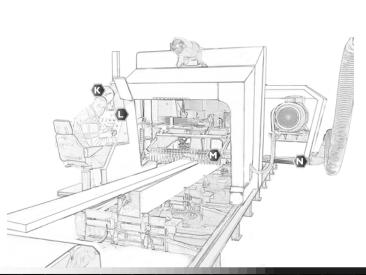


steel rope





plastic cable carrier – chain



Setting of CUT THICKNESS



manual on the scale



with computer





with computer, automatical setting





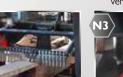
air-conditioned command panel separate or on machine



HAND FOR

PUSHING BOARDS

hydraulical









15























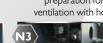








ventilator



















mechanical opening

Circular saws for cuting boards by width

CIRCULAR SAW 60 GR



TECHNICAL DATA

Technology:	under table pneumatic
Main motor:	6 kW
Diameter of circular saw Ø (mm):	500/30
Pneumatic:	YES (30m3/H)
Max. Cutting width (mm):	585
Max. Cutting height (mm):	160
Opening for exhauster for sawdust	t connection Ø (mm): 125

CIRCULAR SAW 70W







TECHNICAL DATA	
Technology:	above table crassaw manual
Main motor:	3 kW
Diameter of circular saw Ø (mm):	400/30
Pneumatic:	OPTION
Max. Cutting width (mm):	700
Max. Cutting height (mm):	100
Opening for exhauster for sawdust	connection \emptyset (mm): 100

INCLUDED IN THE LINE

MACHINES CAN BE INDEPENDED OR INCLUDED IN LINE WITH MEH/AUTO. TRANSPORTERS







CIRCULAR SAW 80M







Ma

Ma

TECHNICAL DATA	
Technology:	unde
Main motor:	7,5/
Diameter of circular saw $Ø$ (mm):	600,
Pneumatic:	YES
Max. Cutting width (mm):	800
Max. Cutting height (mm):	165

nder table pneumatic 5/11 kW 00/40 ES 00 Opening for exhauster for sawdust 55 connection Ø (mm): 160+100

CIRCULAR SAW 100W



ECHNICAL DATA			
chnology:	above table	e crossaw pneumatic	
ain motor:	6 kW		
ameter of circular saw Ø (mm):	550/40	Max. Cutting height (mm):	160
eumatic:	YES	Opening for exhauster for sawdust	
ax. Cutting width (mm):	1000		100

CIRCULAR SAW 100M







dust

TECHNICAL DATA		
Technology:	under table p	oneumatic
Main motor:	7,5/11 kW	
Diameter of circular saw Ø (mm):	700/40	Max. Cutting height (mm): 130
Pneumatic:	YES	Opening for exhauster for saw
Max. Cutting width (mm):	1000	connection Ø (mm): 160







Crossaws for cutting boards by width – circular saws

750 20-100 (single axis - edger)







I ECHNICAL DATA	
Main motor:	22kW
Min/max cutthickness	20/100mm
Max cutting width :	600mm
Diameter of circular blade :	350/80mm
Max number of circular blades:	4 pieces
Number of movable blades:	l piece
Option: computer setting of cuttv	vidth / brushes / additional laser / sawdust colector with automatical belt

750 20-160 (single axis) / (2 x) / (3 x) / (4 x) / b - brushes



TECHNICAL DATA

Main motor Min/max. Cutthickness Max cutting width Max. diameter of circular blade Ø 500 / 90 mm Max. number of circular blades 10 pieces Number of movable blades

30 / 37 /45 / 5<u>5 k</u>W 20 mm / 160 mm 900 - 1000 - 1250 mm l piece /2x - 2 pieces /3x - 3 pieces / 4x - 4 pieces

Lav	
exhauster	Ø 200

dust length	1600 m
er (number depends from wable blades)	15 m₩

opening for

aut

aw

las

mo

Option: computer setting of cutthickness V 130 / V280, automatical infeed conveyor with centrator, automatical outfeed conveyor with sorting

750 20-120 (single axis) / (2 x) / (3 x) / (4 x) / B - brushes



TECHNICAL DATA

22/30/37 kW main motor: min/max cutthickness 20/120mm max cutting width : 900-1000 mm diameter of circular blade : 400/90mm max number of circular blades: 8 pieces number of movable blades: computer setting of cuttwidth **Option**: brushes / additional laser / sawdust colector with automatical belt

I piece $/ 2 \times - 2$ pieces $/ 3 \times - 3$ pieces $/ 4 \times - 4$ pieces

750 40-200



TECHNICAL DATA Main motor 37 /45 /55 kW Min/max. Cutthickness 40mm / 200 mm 800 - 900 Max cutting width Max. diameter of circular blade Ø 400 mm /90 mm Max. number of circular blades 10 + 10 pieces opening for exhauster Ø 250

automatical conveyor for sawdust length 2200 mm laser 15 mW

Option: automatical outfeed conveyor with sorting



750 40-250



TECHNICAL DATA

Main motor	45 /
Min/max. Cutthickness	40 n
Max cutting width	600
Max. diameter of circular blade	Ø 4
Max. number of circular blades	10 +
opening for exhauster	Ø 2

/55 / 75 kW mm / 250 mm - 700 mm 150 mm / 90mm - 10 pieces 50

automatical conveyor for sawdust length 2200 mm **Option**: automatical outfeed conveyor with sorting



INCLUDED

IN THE LINE











































MACHINES CAN BE INDEPENDED OR INCLUDED

IN LINE WITH MEH/AUTO. TRANSPORTERS





Sawing lines

SAWING LINE PROFI



Combination of selected bandsaw and circular saws provide maximum output of finish products in small area. Min/ max diameter of log: depend of type of machine 120- 1500mm Min/max lenght of log: depend of type of machine 1- 16m



- sawdust extraction
- circular crossaw for cutting boards by lenght
- loading ramp
- bandsaw
- exit & transversal auto transporters
- multiblade circular saw for cutting boards by width

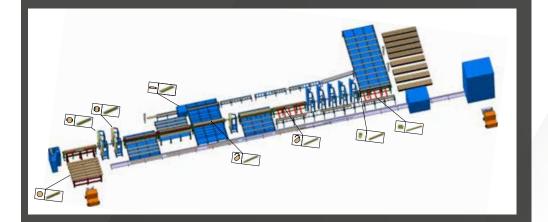
Sawing line WMH (Wravor multi head)

Sawing line is designed for sawmills which cut mainly small diameter logs and need automatic manipulation and operation.



SAWING LINE IS COMBINED WITH 2 different types of bandsaws, for optimum efficiency of different log diameters.

On separated lines we can cut small to big diameter and each line is optimized for their orders. Crossaws and circulars saws are computer- controled for fast changing of different measures. Automatic conveyors collect final products on sorting and stacking lines.











SAWING LINE CS with circular saws

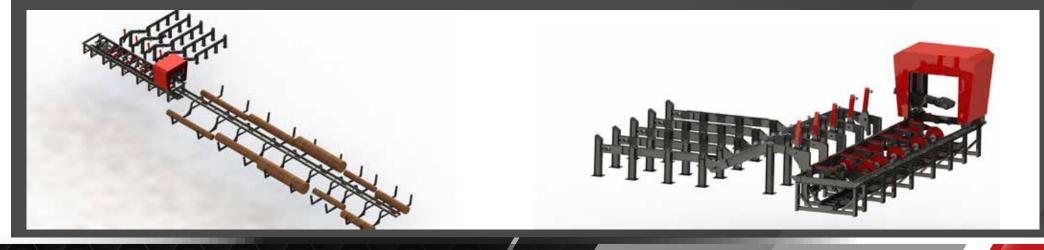
DEBARKERS



Automatic sawing line with multirip enables high productivity of cutted boards. It can be installed as parts of bandsaw cutting line or separately.



Debarkers for diameters from 200-1500mm with milling edges of log ends. We also offer sorting for debarked logs by lenght and diameter.



Loading and sorting



Loading ramp i200 / i240 / i270 / i300



Optimum cutting capacity depends also from fast log feeding. We can offer wide range of logdecks for smal/big, short / long logs with automatical logloading.

Transversal conveyor





Transversal conveyors round line with multirip and edger into fully automatical line.

Self loading arms are recomended for middle to small sized bandsaws, with lower capacity of manipulated logs.

Conveyors for boards and prisms



Robust outfeed conveyor for boards works in automatical mode with sorting left/ right or straight.

www.wravor.com

Outfeed conveyors + brushes







Conveyor for prisms



Cutted boards are removed from bandsaw by mechanical or automatical conveyor. Boards can be cleaned with brushes.

Mechanical roller conveyor



Is located infront of the band saw, where prisms move automaticaly to side transversal conveyor.

Automatical cleaning conveyor for waste

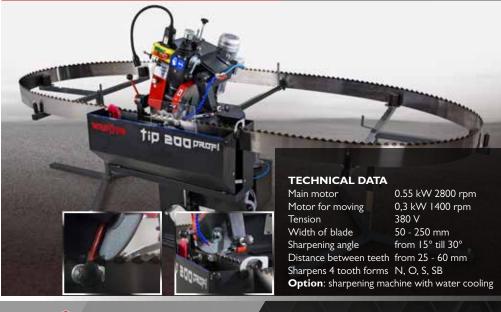


Machines for circular and bandsaw blades maintenance

Machine for manual sharpening circular blades type WCM



Sharpening machine for bandsaw blades type 200 PROFI



Automatical machine for sharpening circular blades type WCA



 TECHNICAL DATA

 Motor
 I - 0,37 kw 2800 rpm

 Tension
 380 V

 Diameter of sharpening
 90 - 180 mm

 Distance between teeth
 0 - 500 mm

Machine for welding bandsaw blades type WW



We offer wide range of machines for circular and bandsaw blades maintenance

Machine for rolling bandsaw blades type WR with straighting table



Automatic stellite tipping machine type Wravor WWS





from 5300 mm 70 - 280 mm (300 - 350 +)Bandsawblade thickness 0,9 - 3,6 mm Lenght of welded stellite from 3 - 8 mm all types 6 mm 25 - 50 mm (15 - 60 mm) 15 - 30°

Machine for automatic pressing and egalizing bandsaw blades type WAE



Automatical machine for side grinding stelite tipped blades type WCS







TECHNICAL DATA

I,I kW I400 rpm Motor Tension 380 V Thickness of blade Tooth height Distance between teeth from 25 - 60 mm Width of blade Pressing speed

0,9 mm till 1,4 mm from 10 mm 70 - 250 mm 30 t/min

Options: Machine for manual egalizing bandsaw blades type WE, Machine for manual pressing bandsaw blades type WP



TECHNICAL DATA

Bandsawblade thickness 0 - 9 mm Tooth shape: all types Tooth step 5 - 50 mm from 0° - 8° Tooth side angle from 5500 mm Bandsawblade lenght 70 - 280 (300-350) mm Bandsawblade width



www.wravor.com

performance by black series

Robust and raised rails with

automatical waste cleaners





Combination of high – tech equipment with frequency contolled motors and movements.

Soft start & stop starting



Boards pushing hand with adjustable hight & additional side holders



Pressurized blade guidances with oil mist cooling Automatical oil and grease lubricating Tracking forecuter



All possible equipment for manipulating with log; movable logturners, patented fast log & prism turners, 2 levels of log grippers



Separated self standing control panel with seat and 2 joystick controling.

