

**BRAUN-CANALI**  
Band Saw Technology

**MÖHRINGER**  
makes timber fit



**BAND SAW TECHNOLOGY**  
HIGHEST PRECISION AND DIVERSITY  
OF APPLICATIONS

# CANALI - A NAME KNOWN WORLDWIDE FOR HIGH-PERFORMANCE BAND SAW INSTALLATIONS

The machine manufacturer Gebr. Canali, Maschinenfabrik was founded in 1945 at Speyer, Germany. Through superior engineering and quality workmanship Canali became soon a leading band saw manufacturer worldwide. Well over 10,000 band saws were manufactured and commissioned over the years. From Patagonia to Malaysia, Canali machinery is in operation in nearly every country in the world. Möhringer is continuing this great tradition and manufactures and trades the Canali brand since 1999 with great success. The classic range of products has been extended by implementing innovations for new applications and developments, i.e. thincutting band saws, loading systems, etc. Möhringer offer the complete range of sawing technology such as chipper/canter, circular, band saw and Framesaw technology.

With the acquisition of Braun-Canali band saw technology, we have completed our program and are now able to offer you, single source supplier, the full diversity of modern sawing technique. We will lead the first-class technology, known as Braun-Canali, to new applications.

## LOG BAND SAWS



Single or Tandem, inclined or not, for forward or backward sawing – we manufacture your band saw according to your individual desires.

**For further information, please see page 3.**

## LOG CARRIAGES



The new log carriage **FLEXIDRIVE** is the specialist for the sawing of hardwood: high flexibility, gentle log manipulation, precise cutting.

**For further information, please see page 4.**

## RESAWS



Single, twin or quad, vertical or horizontal: resaws for every use.

**For further information, please see page 6.**

## THINCUTTING BAND SAWS



If finest saw kerf and highest surface quality are your essential demands, you should rely on our thincutting band saws.

**For further information, please see page 8.**



# LOG BAND SAW TECHNOLOGY

## HIGHEST QUALITY FOR THE PROCESSING OF BIG DIAMETERS

### Positioning of machine base:

#### Single

- Band saw is fix
- Band saw with base frame to position according to cutting thickness. An advantage for sawing large construction timber; the main product's edge is positioned at the zero-line and the side board thickness is obtained by the positioning of the bandsaw. Cross-cuts through several sideboards down to the main timber edge are possible.

#### Tandem

- First band saw is adjustable
- Second band saw is fix
- Both band saws are adjustable
- Cutting thickness of sideboards is defined by positioning of band saws: advantage during toolchange!

Preferably the configuration of BBS.V-ML series are Tandem versions. By means of the cantilevered band saw roller bearings a distance between first and second bandsaw of only 90 mm is required.

#### Inclined by 17°

- Gentle sliding of sawn timber
- Waney edge at the upper side
- Fast alignment of the log

#### Forward and backward sawing

- Increase of performance
- Including full sawblade service upon request

#### Tensioning support

- Hydraulic clamping movement with linear guiding
- Large stroke (up to 600 mm) allows the use of blades with various lengths



BBS.V-17° inclined execution during production



BBS.V 1.800 - Single execution

#### Sawblade tension equilibration (pneumatic)

- Precise setting and constant tensioning pressure, even with different sawblade thickness
- Extremely short reaction time for adjustment of tensioning pressure upon peak tensions avoiding blade stress

#### Guiding of sawblade

- Top and bottom as pressure guides, optionally automatic height adjustment of upper guide available
- Fast change of guides
- Master jig included for maintenance and precise adjustment of spare set

BBS.V	Wheel Ø	Wheel width	Drive capacity
1.100	1.100 mm	120 mm	30/37 kW
1.250	1.250 mm	150 mm	35/45 kW
1.400	1.400 mm	160 mm	45/55 kW
1.400 S	1.400 mm	180 mm	55/75 kW
1.600 S	1.600 mm	240 mm	75/90 kW
1.800 S	1.800 mm	280 mm	90/110/132 kW
2.100 S	2.100 mm	280 mm	110/132 kW
2.500 S	2.500 mm	340 mm	132/160 kW

# UNIVERSAL LOG CARRIAGE FOR ALL APPLICATIONS

The log carriage **FLEXIDRIVE** is the specialist for soft- and hardwood: high flexibility, gentle log manipulation, precise cutting!

## Optimal log fixation with adjustable clamping heads

Minimisation of cycle times and high flexibility - important for band saw cutting, which is often affected by considerable idle times. The **FLEXIDRIVE** offers a new dimension for the value optimised sawing:

- Separately adjustable clamping heads
- Modular, energy-saving construction
- Integrated measurement and automatic carriage run

The **FLEXIDRIVE** offers the following advantages:

1. The new designed clamping heads are positioned separately and precisely by a very fast servo adjustment.
2. The divided Canali carriage was developed consequently: each of the 3 clamping heads or more can be adjusted lengthwise, therefore every log length can be tensioned optimally
3. The hydraulic power pack is located stationary outside of the carriage, therefore a weight saving and a higher carriage dynamic is achieved.
4. The log carriage is equipped with an energy-efficient drive which saves money at every carriage return by recovering the brake energy.

## Log Carriage Drive

- Cable winches with hydrostatic or electromechanical drives
- Cable drum diameters 500, resp. 750 mm

Alternatively:

- Wheel and disc drive or movement through hydraulic servo-cylinder



**FLEXIDRIVE** with hydraulic log turner



Each clamping head longitudinally movable

FLEXIDRIVE type	Clamping head opening	Clamping claw opening	
			Track width
1.000	1.000 mm	1.000 mm	1.370 mm
1.200	1.200 mm	1.000 mm	1.370 mm



V-turner for big logs



Precise fixation for longer logs

**BLUECOMPETENCE**  
Alliance Member  
Partner of the Engineering Industry Sustainability Initiative

# LOG BAND SAW TECHNOLOGY ACCESSORIES

## Circular saws

- For longitudinal cuts, horizontal direction
- For cross cuts, vertical direction
- For cross cuts, vertical direction and longitudinal cuts, horizontal direction (combined aggregat)
- Automatic singularization of half boards



Circular saw with automatic singularization of both half boards

## Chipper canter head

- Execution with long knives or as multiple knives head

## Scoring circular saw

- Scoring circular saw for cleaning of log surface along the cutting line of the band saw
- Automatic control of height adjustment of pendulum and support

## Automatic control of log carriage

These operations are controlled automatically:

- Forward and reverse movement of log carriage
- Return to loading position
- Automatic stop at turning points within cm-margin: in front or behind the band saw in front of chipper head and circular saw
- Automatic feed control
- Automatic drive of optimized cutting pattern
- Automatic command for log turning: clamping heads are positioned automatically into ideal turning position, log turners are retracted automatically; it is made sure that the log is turned during return drive only
- Automatic ejection of the last timber piece



Möhringer chipper head with chipping height up to 800 mm

## Optionally available

- Modem for remote maintenance and control
- Interface to external PC
- Interface to Optiline alignment
- Automatic log alignment for sawing of tapered construction logs
- Automatic log alignment (parallel to wane or symmetric)



Automatic control of log carriage



# RESAW TECHNOLOGY

## FOR SAWMILL, PLANING MILL AND SECONDARY PROCESSING

The band saw technology benefits from Canali's long-term experience in drymills and valueadding plants. Band resaws are supplied in vertical, horizontal and tilted version combined with various infeed and outfeed systems. Aside the standalone version multiple lines may be configured, i.e. Twin, Triple and Quad.

### Band resaw base

Our band resaw technology benefits from Canali's many years of experience of sawmills and planing mills. The machines are available with wheels from 1,100 up to 2,500 mm diameter and all come with a very robust frame. Wheels' width and drive capacity are defined according to the individual application.

### Flexible modular design

- Mostly identical parts are used for the different versions of vertical, horizontal and tilted version band resaws
- Every size of band saw version is interchangeable with every infeed device
- Every band resaw and infeed device is available as right-hand or left-hand design

### Customizing

Version and size of band resaws are individually configured according to customer's needs considering the type of application and requirements to feeding and automatic separation of sawn timber resp. excess piece.

### Infeed device

- For resaw, centre and diagonal cut
- Roller height from 200 up to 500 mm
- For up to 10 driven rollers

Resaw ML	Wheel Ø	Wheel width	Drive capacity
1.100	1.000 mm	max. 120 mm	37 kW
1.250	1.250 mm	max. 150 mm	45 kW
1.400	1.400 mm	max. 160 mm	55 kW
1.400	1.400 mm	max. 180 mm	75 kW
1.600	1.600 mm	max. 240 mm	90 kW
1.800	1.800 mm	max. 280 mm	110 kW

### TB 1.100 Unimaster 2

- The economic universal machine for processing of prismatic timber
- If desired with diagonal sawing facility



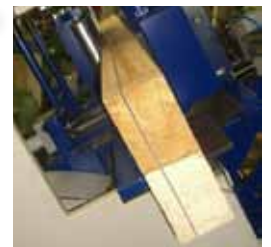
Resaw ML



Infeed device



Diagonal cut



Resaw cut



Resaw 1.100 Unimaster 2

# RESAW TECHNOLOGY EXECUTIONS

## Vertical version

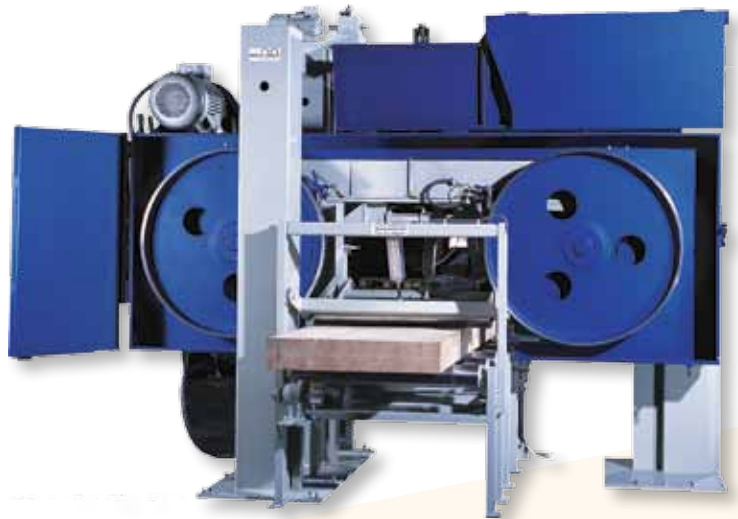
- Separation of cants
- If desired with diagonal sawing facility

## Inclined version

## Horizontal version

Separation of heavy timber, i.e.

- Glued timber
- Special applications: separation of:
  - Polystyrene,
  - Mineral fiber boards,
  - Plastics,
  - Cork boards,
  - Cardboards, etc.



Horizontal band saw

Passage widths of up to 2,000 mm are available.



Inclined execution for automatic separation



Unit for diagonal cut



Precision cuts for boards and parquet

## Reducer band saws

In combination with profiling chippers, reducer band saws are manufactured as Twin or Quad execution.

For each band saw there is a digital hydraulic positioning unit that allows a precise and fast adjustment.

The advantage of this technology is a smaller kerf also with larger cutting heights.

Depending on the requirements, we can supply reducer band saws with wheels of  $\varnothing 1400/1600/1800$  mm.



Reducer band saws in Twin or Quadro setup

# THINCUTTING BAND SAW

## SMALL SAW KERF, HIGH PRECISION

Thincutting band saws are designed for highly precise production of high-value products, i.e. parquet lamellas, strips for floorboards, door components, saw-cut veneer, pencil timber, parts for music instruments.

### Highly precise sawing

Even thin products are sawn highly precise with a very small kerf.

This high precision cut is guaranteed by:

- Precise sawblade tensioning and special crowning of the wheels
- Innovative sawblade guiding
- Adjustment of high precision infeed devices in steps of 1/100 mm

### Minimal kerf

- Saw kerf from only 1,2 up to 1,6 mm with cutting speed between 7 and 40 m/min (depending on type and humidity of timber and cutting width)
- Economic consumption of raw material despite high feed speeds
- Long saw blade life contributes to low running costs

### Types Available

Thincutting band saws may be operated as a stand-alone unit with manual infeed. However, normally the feeding is done automatically and the timber is processed by several machines in line.

### Technical Data

- |                       |                                      |
|-----------------------|--------------------------------------|
| • Max. timber height: | 400 mm                               |
| • Feed speed:         | 7 till 40 m/min frequency controlled |
| • Saw kerf:           | 1,2 till 1,6 mm                      |
| • Cutting tolerance:  | +/-0,1 up to +/- 0,2 mm              |

Referring to the corresponding distribution percentil (depending on cutting depth, type and humidity of timber)



Thincutting band saw **PRECISION CUT**



Minimal saw kerf



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- Complete solutions for saw mills and secondary processing
- Chipper canter - profiling technology
- Circular saw technology
- Edging technology
- Framesaw technology

- Band saw technology
- Timber sorting lines
- Multitrip installations
- Stacking and restacking technology
- Electronic and computer control systems