



# STEEL BELTS FOR THE WOOD INDUSTRY

The name Berndorf Band is synonymous with decades of experience in the production of high quality process belts.

## Tradition and innovation

Sustainable development - in other words, meeting the needs of the present generation without neglecting the opportunities of future generations - is a permanent and active element of the corporate philosophy of the Berndorf Band Group.

A safety and environment management team at Berndorf Band is responsible for ecological questions. This team ensures that neither the environment nor employees are put at risk.

Continuous improvements, innovative manufacturing methods and special materials make it possible to adapt belt characteristics to specific customer requirements.

The steel belts that Berndorf has developed for the new generation of doublebelt presses exhibit properties specifically customized to this application. These provide:

- improved running properties
- greater thermal capacity
- special resistance to deformation

Our maxim of „continuous reliability“ stands for: high-quality steel belts, worldwide service, the latest service equipment, and specific training sessions for our customers' employees.

## Continuous reliability

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Quality from Austria





## Innovative software from Berndorf increases productivity



We developed our Belt Manager Software specially for the application of steel belts in the wood processing industry. This makes it possible for belt users to store and evaluate all inspection data of their steel belts.

This Belt Manager Software is an aid to locating the cause of a problem, and it also helps you to choose the right repair method. Repairs can be carried out more effectively thanks to detailed documentation.

The software also enables our customers to contact Berndorf Band specialists online, and to initiate suitable repair or maintenance measures. Early detection and location of belt damage contributes to a reduction in costs.

The software is deployed worldwide and is available in nine different languages.

### Benefits:

- Optimization of downtime and repair times
- Clear overview of magnitude and position of damage
- "Send repair function" for support from Berndorf



**We are at your disposal 24/7**



Apart from supplying high quality steel belts, we also have a steadily expanding service organization operating in more than 25 locations worldwide to provide first class, reliable on-site service.

Under the **berntfixx**<sup>®</sup> umbrella brand, Berndorf Band has developed a mobile training facility (MTC) designed to ensure suitable on-site training of the customer's own personnel under the guidance of a certified trainer.

Thanks to its well thought-out, compact design, the **berntfixx**<sup>®</sup> Mobile Training Centre contains all the equipment needed for training. A certified trainer teaches the basics of steel belt repair on three fully equipped workplaces. Each participant receives a certificate on successful conclusion of training.

#### **Benefits:**

- Cost savings  
(no need to send employees to outside training sessions)
- Time savings  
(no travelling time for employees)
- Realistic working conditions
- Worldwide availability



## Technical data

Physical and mechanical properties.  
Typical values.

Material			NICRO 52.6	NICRO 62.5	CARBO 13	CARBO 24
Type			CrNiCuTi 15 7	CrNiCu 15 5	Ck 67	-
Similar Material	DIN AISI		- -	- -	1.1231 -	- -
Tensile strength	at 20 °C	N/mm <sup>2</sup>	1550	1450	1200	1420
0.2% yield offset strength	at 20 °C	N/mm <sup>2</sup>	1500	1410	970	1320
Hardness		Rockwell HRC	48,0	46,0	36,0	44,5
		Vickers HV 10	480	460	350	440
Elongation 50 mm		%	6	8	8	6
Welding factor			0,80	0,75	0,80	0,75
Fatigue strength under reversed bending stress*)	at 20 °C	N/mm <sup>2</sup>	700	650	450	550
Modulus of elasticity	at 20 °C	N/mm <sup>2</sup>	200.000	200.000	210.000	210.000
	at 200 °C	N/mm <sup>2</sup>	188.000	-	-	-
Density		kg/dm <sup>3</sup>	7,74	7,80	7,85	7,85
Mean coefficient of thermal expansion	20-100 °C	10 <sup>-6</sup> m/m°C	10,9	10,8	11,1	12,0
	20-200 °C	10 <sup>-6</sup> m/m°C	11,5	10,8	11,9	12,5
	20-300 °C	10 <sup>-6</sup> m/m°C	11,7	11,3	12,5	12,9
	20-400 °C	10 <sup>-6</sup> m/m°C	-	-	12,9	-
Specific heat		J/g°C	0,50	0,42	0,46	0,45
Thermal conductivity	at 20 °C	W/m°C	16	16	46	40
Specific electric resistance	at 20 °C	Ohm mm <sup>2</sup> /m	0,80	0,77	0,13	0,20
Max. permissible operating temperature		°C	350	300	400	250
		°F	660	572	750	480
Tensile strength at max.permissible operating temperature		N/mm <sup>2</sup>	1250	1160	850	1300
0.2% yield offset strength at max. permissible operating temperature		N/mm <sup>2</sup>	1180	1130	720	1100

\*) 50 % of the test specimens withstand 2,000.000 load cycles.  
If not otherwise specified, the values given apply at room temperature.  
Subject to change due to technological progress. Errors and omissions excepted.