

## STEEL BELTS FOR PANEL MANUFACTURING

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

### Tradition and innovation

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

In collaboration with leading manufacturers of presses for the continuous

production of chipboard, MDF, OSB and LVL, Berndorf Band has played a key role in numerous innovations.

Our maxim of "continuous reliability" stands for:

high quality steel belts, world-wide service, the latest service equipment and training for our customer's maintenance staff.



### Continuous reliability

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## New customer's specifications - new developments



Starting with the development of 1.2 mm thick steel belts right through to steel belts with a thickness of 3 mm, Berndorf Band has always been a step ahead of the trends in the wood processing industry.

We are the only company on the market making 3.5 mm thick belts, which are used for the new generation of double-belt presses for the manufacture of OSB and ultra thin MDF/HDF boards.

New customer specifications coupled with increasingly long and wide presses necessitate special band characteristics, which only the new 3.5 mm steel belts from Berndorf Band take completely into account:

- improved running properties
- greater thermal capacity
- enhanced resistance to deformation.

## Perfect world-wide customer's service

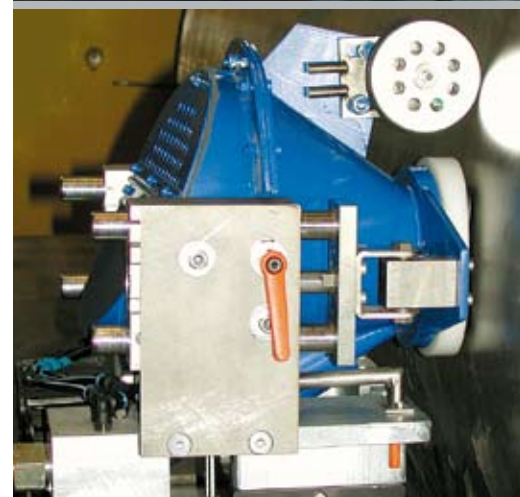
Apart from supplying top quality steel belts, we also have a steadily expanding service organisation operating world-wide to provide first class, reliable on-site service.

A team of engineers at the service centre in Berndorf works with local service organisations to provide expert advice and schedule installation and maintenance work together with the customer.

We are continually developing new service equipment and adapting existing equipment to changing market requirements. This enables us to respond to the continually rising quality requirements of the panel manufacturing industry and to keep any unavoidable downtime to an absolute minimum.

Berndorf Band service-engineers receive regular training on the latest equipment and working methods.

Under the guidance of Berndorf Band service specialists at our modern training centre, our customers' service-engineers and technicians are able to benefit from our extensive know-how in the treatment of steel belts.





## 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	-	-	1.1231	-
		AISI	-	-	-	-
Tensile strength	RT	N/mm <sup>2</sup>	1550	1450	1200	1420
0.2% yield offset strenght	RT	N/mm <sup>2</sup>	1500	1410	970	1320
Hardness		Rockwell HRC	47,5	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*)	RT	N/mm <sup>2</sup>	700	650	450	550
Modulus of elasticity	at 20 °C=68 °F	N/mm <sup>2</sup>	200.000	200.000	210.000	210.000
Density		kg/dm <sup>3</sup>	7,74	7,80	7,85	7,85
Mean coefficient of thermal expansion	20-100 °C= 68-212 °F	10 <sup>-6</sup> m/m°C	10,9	10,8	11,1	12,0
	20-200 °C= 68-392 °F	10 <sup>-6</sup> m/m°C	11,5	10,8	11,9	12,5
	20-300 °C= 68-572 °F	10 <sup>-6</sup> m/m°C	11,7	11,3	12,5	12,9
	20-400 °C= 68-752 °F	10 <sup>-6</sup> m/m°C	-	-	12,9	-
Specific heat	at 20 °C=68 °F	J/g°C	0,50	0,42	0,46	0,45
Thermal conductivity		W/m°C	16	16	46	40
Specific electric resistance	at 20 °C=68 °F	Ohm mm/m <sup>2</sup>	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.