



## Steel belts for the woodworking industry

### Premium-grade steel belts made by Berndorf Band

Berndorf Band manufactures endless steel belts for the production of wood-based panels. Suitable for all types of belt presses, they offer the high thermal storage capacity and exceptional operating characteristics that are necessary for efficient production and, thus, low-cost operation. Their outstanding product quality, which will last over the lifetime of the product, is ensured by extremely narrow manufacturing tolerances.

To adapt the belt properties to customer-specific requirements, a continuous development of the production methods and material selection is needed. Berndorf Band devotes tremendous attention to research and development both in terms of production flows and the processes that are essential to the customer. Living up to their reputation as a technology leader, the Austrian company offers, aside from their high-quality endless steel belts, customer service that is second to none and effective training centered around the steel belt. Thanks to their mobile training center, the company is also capable of providing customers with training measures on their own premises.



#### Highlights

- Laser welds
- Exceptional operating characteristics
- Ultimate strength and stability
- Long lifetime
- Minimum flatness and thickness deviations
- Different sizes and belt dimensions
- Global customer service

## High-end stainless steel belts made in Berndorf

The high-quality processing of raw materials is absolutely essential when it comes to manufacturing products for interior decoration. To guarantee only the finest product quality, a large number of manufacturers is relying on the dependable stainless steel belts made in Berndorf. Whether they are used for the production of particle boards and MDF boards used in furniture or for creating premium-quality surfaces on furniture, kitchen countertops or laminate floors, Berndorf belts are synonymous with dependable and premium quality made in Austria. Manufacturers also count on Berndorf steel belts for the continuous production of OSB, which is widely used in home building.

“Our exceptional steel belts are instrumental in affording customers maximum comfort in their own four walls. Anyone who wishes to offer their customers only the finest quality will choose stainless steel belts made in Berndorf.”

Udo Ofenböck  
Director Sales



Material			NICRO 52.6	NICRO 62.5	CARBO 13	CARBO 24
Type			CrNiCuTi 15 7	CrNiCu 15 5	Ck 67	-
Similar material no.		DIN	-	-	1.1231	-
Tensile strength	at 20 °C	N/mm <sup>2</sup>	1,550	1,450	1,200	1,420
0.2% yield strength	at 20 °C	N/mm <sup>2</sup>	1,500	1,410	970	1,320
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>	1,250	1,160	850	1,300
0.2% yield strength at max. permissible operating temperature		N/mm <sup>2</sup>	1,180	1,130	720	1,100

\* 50 % of the test specimens withstand 2,000,000 load cycles.

Typical values. If not otherwise specified, the values given apply at room temperature. Subject to change due to technological progress. Errors and omissions excepted.