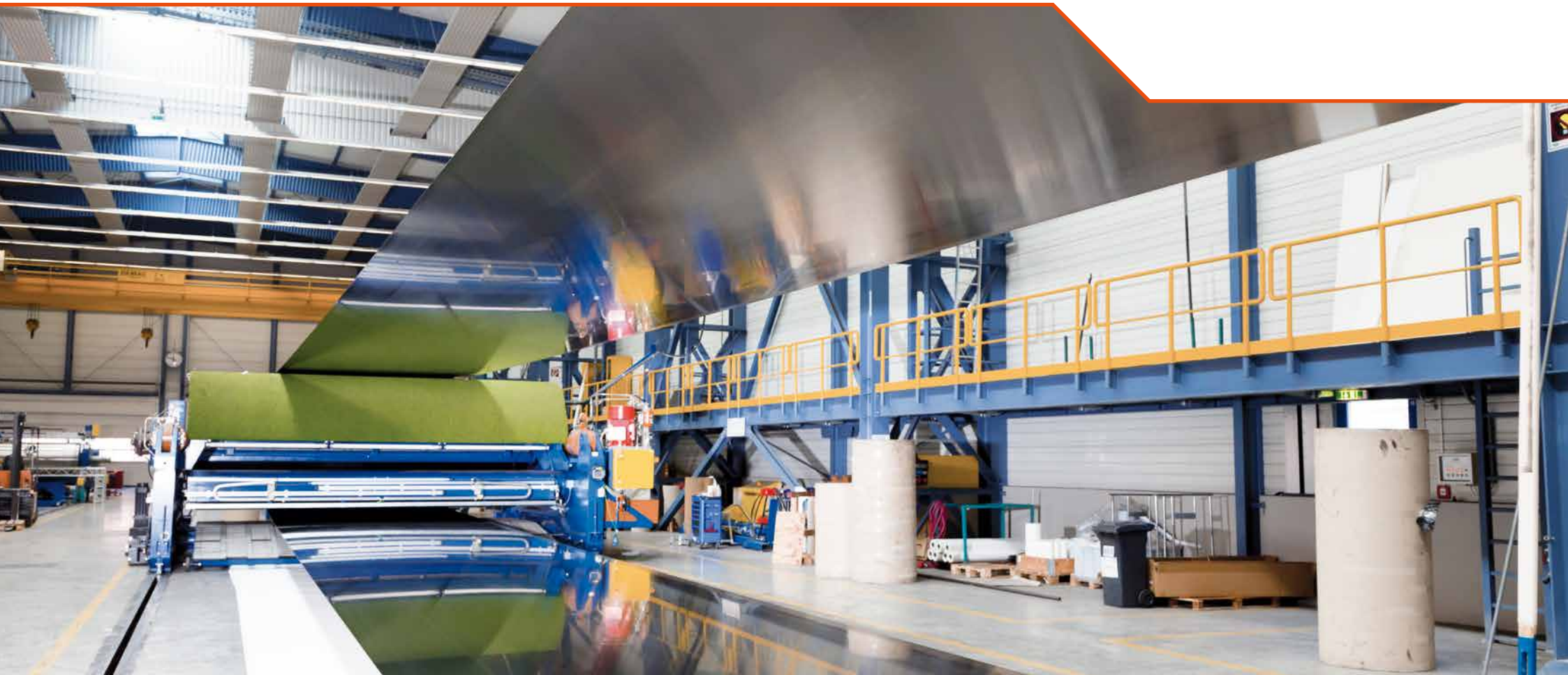


STEEL BELTS FOR THE WOOD BASED PANEL INDUSTRY



YOUR SOLUTION FOR THE WOOD INDUSTRY

UNMATCHED QUALITY & INNOVATION

The Berndorf Band Group manufactures endless Steel Belts for the production of wood-based panels. Suitable for all types of belt presses, our Steel Belts offer high thermal storage capacity and exceptional operating characteristics, which are necessary for efficient production and, thus, low-cost operation. Our outstanding product quality, which will last over the lifetime of the product, is ensured by extremely narrow manufacturing tolerances. To adapt the Steel Belt properties to customer-specific requirements, continuous development of production methods and material selection is needed.

The Berndorf Band Group devotes significant attention to research and development, focusing on production flows and processes that are essential to the customer. Upholding our reputation as a technology leader, the company not only offers high-quality endless Steel Belts but also provides exceptional customer service and effective training centered around the Steel Belt.

- » **Long-term partnership as a total solution provider:**
Complete solution for your needs with Steel Belts, inspections, sparring and maintenance.
- » **Precision in perfection:**
Worldwide leading OEM's trust our Steel Belt as original equipment for double belt presses.
- » **Reliability through innovation:**
Fast response times, punctual delivery and consistently high quality that is further improved through research & development.
- » **Highest quality made in Austria:**
Our Steel Belts are manufactured in Austria and delivered all over the world.



HIGH-END STAINLESS STEEL BELTS MADE IN BERNDORF

Continuous development is necessary to adapt Steel Belt properties to customer-specific requirements. At Berndorf Band Group, we pay attention to find the right solution for each client, from the material selection of our high quality endless Steel Belts to the entire production process. Our products stand for precision, durability, and efficiency. Manufactured using advanced welding technology and a unique endless production process, our Steel Belts deliver exceptional running properties, stability, and significantly extended service lifetime. This unmatched quality makes our Steel Belts the ideal choice for demanding applications such as in the wood industry.

ADVANTAGES

- ✓ **WE KEEP OUR PROMISE: HIGHEST QUALITY & THIGHTEST SPECIFICATIONS OF OUR STEEL BELTS**
- ✓ **ADVANCED WELDING TECHNOLOGY: IMPROVED WELDING SEAM & EXTENDED STEEL BELT LIFETIME**
- ✓ **UNIQUE ENDLESS MANUFACTURING PROCESS: OUTSTANDING RUNNING PROPERTIES & STABILITY**
- ✓ **HIGH-SPEED PRODUCTION: SPEEDS UP TO 2.500 MM/S FOR THIN BOARD PRODUCTION SUITABLE FOR DIRECT PAINTING OF MDF* WITHOUT SANDING**
- ✓ **RELIABLE SUPPORT: WE ARE ALWAYS ON SITE, BOTH IN EMERGENCIES OR FOR REGULAR MAINTENANCE WORLDWIDE**
- ✓ **SPECIALLY TRAINED SERVICE PERSONNEL: EQUIPPED TO HANDLE PATENTED SERVICE TOOLS FOR THE WOOD INDUSTRY**

*MDF = Medium-density fiberboard



VERSATILE RANGE OF END PRODUCTS

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 rely 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 Steel Belts are synonymous with reliable and premium quality made in Austria. Manufacturers also count on our Steel Belts for the continuous production of OSB, which is widely used in home building.



MEDIUM DENSITY
FIBERBOARD (MDF)



HIGH DENSITY
FIBERBOARD (HDF)



LAMINATED VENEER
LUMBER (LVL)



PARTICLE
BOARD (PB)



ORIENTED STRAND
BOARD (OSB)



WOOD FIBER
INSULATION BOARD (WFIB)

YOUR PRODUCT IS NOT IN THE LIST? GET IN TOUCH WITH US AND WE
CAN DEVELOP A SPECIAL SOLUTION FOR YOUR NEEDS.

STEEL BELTS FOR THE WOOD BASED PANEL INDUSTRY

PHYSICAL AND MECHANICAL PROPERTIES. TYPICAL VALUES.

Material			Nicro 52.6	Nicro 62.5	Carbo 13	Carbo 24
Type			CrNiCuTi 15 7	CrNiCuTi 15 5	Ck 67	
Similar material		DIN AISI			1.1231	
Tensile strength	at 20 °C at 68 °F	N/mm² psi	1,550 224,800	1,450 210,300	1,200 174,000	1,420 206,000
0.2 %-offset yield strength	at 20 °C at 68 °F	N/mm² psi	1,500 217,600	1,410 204,300	970 140,700	1,320 191,500
Hardness		Rockwell HRC Vickers HV 10	48.0 480	46.0 460	36.0 350	44.5 440
Elongation 50 mm 1.97 in		%	6	8	8	6
Welding factor			0.80	0.75	0.80	0.75
Fatigue strength under reversed bending stress*	at 20 °C at 68 °F	N/mm² psi	700 101,500	650 94,300	450 65,300	550 79,800
Modulus of elasticity	at 20 °C	N/mm²	200,000	200,00	210,000	210,000
	at 200 °C	N/mm²	188,000			
	at 68 °F	ksi	29,000	29,000	30,500	30,500
	at 392 °F	ksi	27,300			
Density		kg/dm³	7.74	7.80	7.85	7.85
		lb/in³	0.28	0.28	0.28	0.28
Mean coefficient of thermal expansion	20-100 °C	10 ⁻⁶ m/m°C	10.9	10.8	11.1	12.0
	20-200 °C	10 ⁻⁶ m/m°C	11.5	10.8	11.9	12.5
	20-300 °C	10 ⁻⁶ m/m°C	11.7	11.3	12.5	12.9
	20-400 °C	10 ⁻⁶ m/m°C			12.9	
	68-212 °F	10 ⁻⁶ in/in°F	6.1	6.0	6.2	6.7
	68-392 °F	10 ⁻⁶ in/in°F	6.4	6.0	6.6	6.9
	68-572 °F	10 ⁻⁶ in/in°F	6.5	6.3	6.9	7.2
	68-752 °F	10 ⁻⁶ in/in°F			7.2	
Specific heat		J/g°C BTU/lb°F	0.50 0.12	0.42 0.10	0.46 0.11	0.45 0.11
Thermal conductivity	at 20 °C	W/m°C	16	16	46	40
	at 68 °F	BTU/lb°F	9.3	9.3	26.6	23.1
Specific electric resistance	at 20 °C	Ω mm²/m	0.80	0.77	0.13	0.20
	at 68 °F	μΩ in	31.50	30.31	5.12	7.87
Min. permissible operating temperature		°C °F	- -	- -	- -	- -
Max. permissible operating temperature		°C °F	350 662	300 572	400 752	250 482
Tensile strength at max. permissible operating temp.		N/mm² psi	1,250 181,300	1,160 168,200	850 123,300	1,300 188,500
0.2 %-offset yield strength at max. permissible oper. temp.		N/mm² psi	1,180 171,100	1,130 163,900	720 104,400	1,100 159,500

Special materials available upon request. | *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.

GLOBAL SERVICE THAT NEVER STOPS

To ensure that your operations run at the highest productivity possible, the Berndorf Band Group offers extensive services and pioneering service equipment centered around Steel Belts and Belt Systems. We support and advise you on how to get the best use out of your machine. With our highly qualified service technicians and our innovative methods, we ensure satisfied customers around the globe.



**QUICK AVAILABILITY ON ALL
CONTINENTS**



**WORLDWIDE INSTALLATION,
MAINTENANCE & REPAIRS**



**HANDS-ON EXPERT
KNOWLEDGE**



**TRAINING FOR YOUR
IN-HOUSE TECHNICIANS**



**INNOVATIVE WELDING & REPAIR
TECHNOLOGIES, PATENTED
EQUIPMENT FOR THE INDUSTRY**



**MORE THAN 70 SERVICE
TECHNICIANS TRAINED FOR THE
WOOD INDUSTRY**



WE USE INNOVATIVE SERVICE EQUIPMENT THAT REFLECTS THE CUMULATIVE EXPERTISE OF OUR EXPERIENCED ENGINEERS AND TECHNICIANS. OUR FOREMOST OBJECTIVE IS TO PROVIDE YOU WITH THE SERVICE AND TECHNICAL TOOLS YOU NEED TO HANDLE SUCH ISSUES AS BELT DAMAGES OR OTHER PROCESS DISRUPTIONS AND THEREBY RESTORING OPTIMAL PRODUCTIVITY.

MAGNETIC CLAMPING DEVICE

For gap- and offset-free continuous welding of high-quality Steel Belts up to a thickness of 3.5 mm / 0.1238 in in the wood processing industry, the Berndorf Band Group has developed a special magnetic tensioning device. Due to the powerful tensioning system, even used and slightly deformed Steel Belts can be welded without misalignment.

PATCHING TOOL

With the patching tool, damaged parts of Steel Belts with a diameter of up to 400 mm / 15.75 in can be quickly and easily cut out. Innovative welding processes are used to incorporate circular inserts, known as patches, into the Steel Belt in the highest quality. The Patching Tool developed by the Berndorf Band Group has revolutionized the repair options for Steel Belts.

HIGH-POWER SHOT PEENER

The cross curvatures on Steel Belts pose particular challenges due to the high stresses in the belt edges. However, this challenges have now met their match with the high-power shot peener designed by the Berndorf Band Group. This innovative equipment allows for a significant reduction of deformation, even while production is in a full swing.

MOBILE BELT SANDER

With the mobile belt sander, grinding and deburring of longitudinal defects on the Steel Belt, such as scratch marks, can be performed quickly and efficiently during running production. The lightweight and mobile design allows for flexible and easy on-site repair.

BELT EDGE MAINTENANCE TOOL

The belt edge maintenance and repair tool is used to restore the defined belt edge geometry effectively preventing future edge cracks in Steel Belts. This tool significantly contributes to extending the lifespan of the Steel Belt.



OUR WORLDWIDE SALES & SERVICE NETWORK

**Berndorf Band GmbH &
Berndorf Band Engineering GmbH**
Leobersdorfer Strasse 26
2560 Berndorf, Austria
T: +43 2672 800 0
E: band@berndorf.co.at

**Berndorf Belt Technology, Inc. &
SBS Steel Belt Systems USA, Inc.**
59 Prairie Parkway
Gilberts, Illinois 60136, USA
T: +1 847 841 330 0
E: sales@berndorf-usa.com

Berndorf Band India, Pvt. Ltd.
925, Iconic Shyamal
Shyamal Cross Road
Satellite, Ahmedabad
380015, Gujarat, India
T: +91 93276 77183
E: band@berndorf.co.in

Berndorf Band Spain S.L.
Avinguda Diagonal 463
BIS 08036 Barcelona, Spain
T: +34 697172386
E: band@berndorf.co.at

Berndorf Band Latinoamerica S.A.S.
Calle 62 sur # 30 a 75
Barrio las Brisas, Sabaneta
Antioquia, Colombia
T: +57 313 605 31 99
E: office@berndorf-lat.com

Berndorf Steel Belt Systems Ltd., Co.
#15, Bodeum 2-ro
Seo-gu, 22664 Incheon,
South Korea
T: +82 328 160 432
E: bsbs@berndorf.co.kr

Exclusive Agent for Brazil

BBS do Brasil
Avenida Guido Caloi, 1985
Prédio 9 05802-140
São Paulo-SP, Brazil
T: +55 11 4450 1677
E: contato@bbsdobrasil.com.br

**ベルンドルフバンドジャパン株式会社
Berndorf Band Japan Co., Ltd.**
1-24-6, Kanda Suda-cho
Chiyoda-ku 101-0041,
Tokyo, Japan
T: +81 3 3257 3050
E: info@berndorf.co.jp

**Beijing Berndorf Technology
Development China Co., Ltd.**
No 17, Xinggu West RD, Xinggu
Economic & Development Zone,
Pinggu 101200 Beijing, China
T: +86 108 072 390 1
E: sales@berndorf.com.cn



FIND YOUR LOCAL CONTACT

