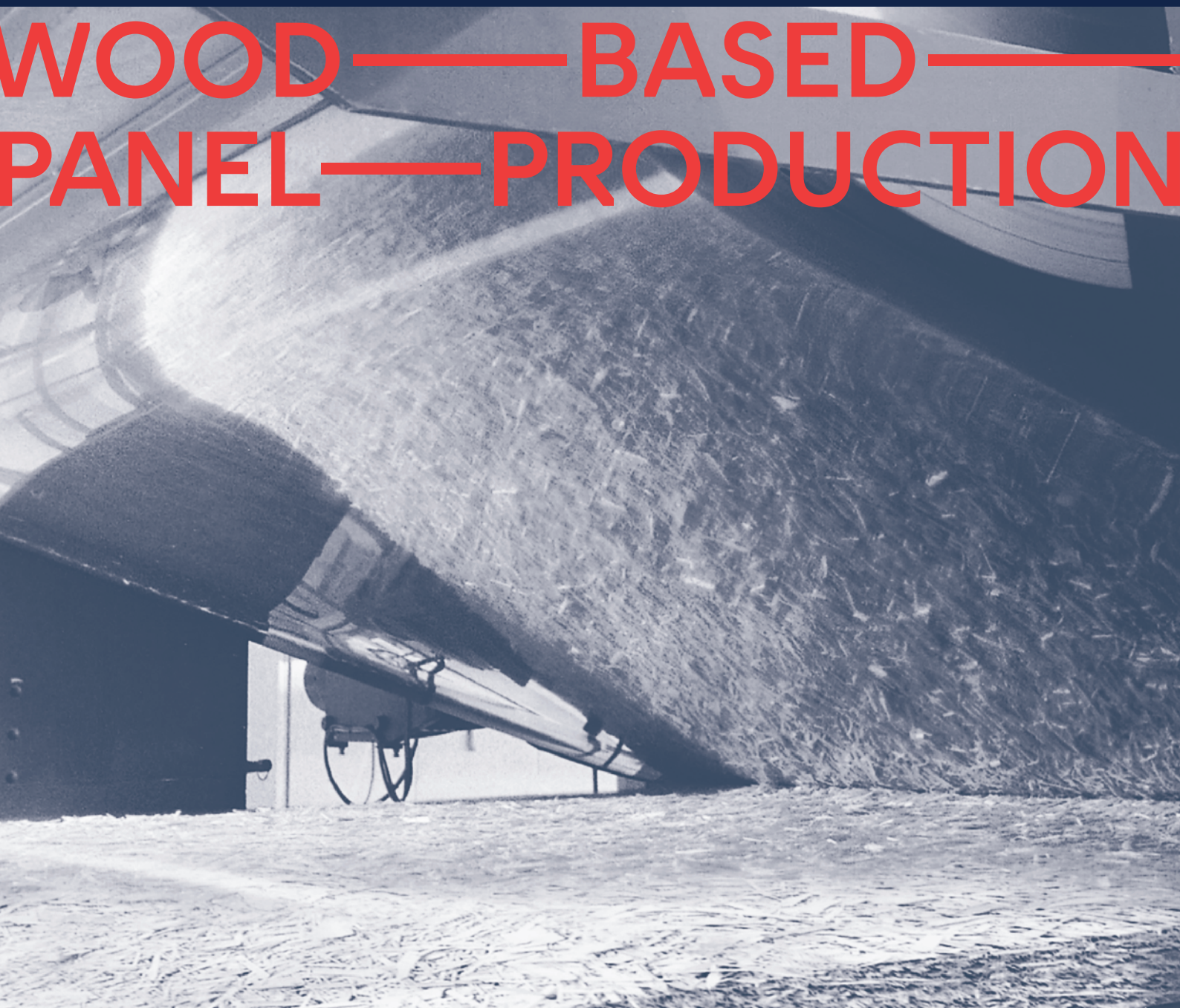




We are world leaders in the supply of premium quality steel belts for the high productivity manufacture of WBP products including particle board, MDF and OSB. Our global service network provides responsive local support to ensure maximum press uptime.

ipco.com

—STEEL—PRESS— —BELTS—FOR— WOOD—BASED— PANEL—PRODUCTION



——STEEL BELTS PLUS —— TOTAL SERVICE FOR THE WBP INDUSTRY

IPCO is one of the world's leading manufacturers and suppliers of premium quality steel press belts used in the production of particle board, MDF, OSB and coated boards.

Our experience of working with the wood industry extends back more than 120 years to 1901 when the world's first steel belt was used to transport waste from a Swedish sawmill. Since then, our business has been responsible for a series of industry firsts, including the first stainless steel belt, the first endless steel belt, the first 3 mm thick steel belt, and the largest WBP steel belt ever produced.

We also developed the world's first continually operating double belt press, establishing the principle that remains the basis of modern day WBP presses.

Today we are a trusted and experienced supplier to all major press manufacturers and to end users in every corner of the world.

As well as supplying high-quality press belts, we help manufacturers achieve optimum product quality – an important differentiating factor in what is an increasingly competitive market – through high quality service, while at the same time maximizing press productivity:

- Engineering expertise
- Research & development
- Unique steel grades/properties
- World's widest steel belts
- Patented service tools





World-class manufacturing capability

We manufacture belts in a choice of steel grades and sizes to meet the needs of different press types.

	IPCO 1100C	IPCO 1650SM
Press type	Single opening press	Double belt press
Thicknesses	1.2, 1.4 mm	2.0-3.5 mm
Max. width	3 500 mm	4 620 mm

Our range of belt materials enables us to supply products delivering the optimum combination of tensile strength; elasticity and thermal conductivity; and resistance to corrosion and general wear and tear.

With the market moving towards ever thinner boards – produced at speeds up to 2 500 mm/sec – the need for near perfection in belt quality is intensifying, and we continue to invest in the precision technologies necessary to deliver to the highest standards.

IPCO press belts are ground to a thickness tolerance of just 50 microns (0.05 mm) over the entire belt. For press belts wider than 1 500 mm, two or even three single belts are welded together longitudinally to create a belt of the required width.

We continually work to improve the tolerances we can offer – thickness deviation, flatness and straightness – and our ability to meet demanding delivery schedules.

Quality and environmental management

We aim to meet customer expectations and requirements for all products and services, and to minimize our impact on the environment. We do this by implementing stringent quality controls throughout the manufacturing process, from selection of raw materials, through production systems and technologies, to rigorous checking of the final product. We are certified to ISO 9001, ISO 14001 and ISO 45001:2018.



Global service network for premium productivity

The supply of press belts is just the beginning of a relationship; we also help our customers maximize belt lifetime, product quality and plant productivity through a global service operation manned by specialist service teams.

Press downtime can be extremely costly so we are geared up to providing a rapid and efficient response to any belt related issues.

As well as carrying out repairs, our engineers can ensure maximum return on investment through planned maintenance and preventative work:

- Service line for 24/7 support.
- Easy access to specialist service technicians worldwide.
- Steel belt inspection, repair and replacement.
- Spare parts, consumables and tools for in-house teams.
- Customer seminars and in-house training.

Training for in-house teams

We also support customers through on-going programmes of technician training. By passing on the knowledge and expertise to carry out preventative maintenance in-house, the risk of unnecessary downtime is immediately reduced. As well as delivering practical training on specific issues such as maintenance, trouble-shooting and repair methods, we also aim to build an understanding of the importance of planned service routines.

And by equipping a customer's technicians with the skills and tools to complete repairs without having to call out an IPCO engineer, we can help deliver significant savings in both time and cost.

Tools for fast, high quality repairs

Our engineers are equipped with specialist tools designed to enable fast, high quality repairs.

QuickDisc Plus 500

QuickDisc is a tool used for removing the damaged area of a belt and cutting a replacement disc from the spare section supplied with every IPCO belt.

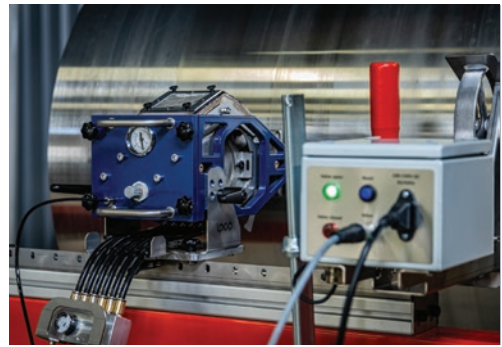
The most advanced model is the QuickDisc Plus 500, a self-contained system used to replace damaged areas up to 480 mm in diameter. Once the damaged area has been removed and the replacement disc produced, the cutter is replaced in the jig by a track welding unit. The weld area is then ground down and the repair is complete.

QuickCutter

The QuickCutter enables efficient and precise on-site cutting and end preparation of belts up to 4 mm thick, and can be tailored to almost any belt cutting need.

Shotpeener Pro

This advanced tool is used to repair deformities that can appear in a press belt over time, and can be employed without stopping production or dismantling the belt. The Shotpeener Pro incorporates a number of technical advances, resulting in increased blasting effect for faster results and 30% greater flattening capacity.



QuickGrinder

The IPCO QuickGrinder is used for smoothing out cross welds with minimal thickness deviation.

QuickDresser

This fully adjustable unit enables the redressing of belt edges to a quality of finish comparable with that of a new belt. This tool is also used after edge slitting. As the operation is carried out with the steel belt still on the press, special nozzles and aspirators are used to ensure that all shavings are completely removed.



Belt grades and technical data

We supply two main steel grades to the wood based panel market: IPCO 1100C, a carbon grade for single opening presses, and IPCO 1650SM, a stainless grade for double belt presses.

IPCO 1100C

Belt grade characteristics

This is a hardened and tempered carbon steel belt grade that offers:

- Very good static strength.
- Very good fatigue strength.
- Very good thermal properties.
- Excellent wear resistance.
- Good reparability.

Sizes

IPCO 1100C is available in thicknesses of 1.2 mm and 1.4 mm and belt widths up to 3 500 mm.

Mechanical and physical properties (at room temperature)

	IPCO 1100C
Proof strength, MPa (ksi)	1 100 (159)
Tensile strength, MPa (ksi)	1 100-1 300 (160-188)
Density, kg/m ³ (lb/in ³)	7 850 (0.284)
Modulus of elasticity, MPa (ksi) x 10 ³	196 (28.38)
Thermal expansion, 1/°C (1/°F) x 10 ⁶ , 20 – 100°C (68 – 212°F)	10.4 (5.8)
Thermal conductivity, W/(m·°C) (Btu/(ft·h·°F))	39 (22)
Specific heat capacity, kJ/(kg·°C) (Btu/(lb·°F))	0.46 (0.11)

IPCO 1650SM

Belt grade characteristics

This is a low carbon, martensitic, precipitation hardened stainless steel belt grade that offers:

- Excellent static strength.
- Excellent fatigue strength.
- Good corrosion resistance.
- Very good wear resistance.
- Very good reparability.

Sizes

IPCO 1650SM is available in thicknesses from 2.0–3.5 mm and belt widths up to 4 620 mm.

Mechanical and physical properties (at room temperature)

	IPCO 1650SM
Proof strength, MPa (ksi)	1 580 (229)
Tensile strength, MPa (ksi)	1 450-1 600 (210-232)
Density, kg/m ³ (lb/in ³)	7 740 (0.280)
Modulus of elasticity, MPa (ksi) x 10 ³	197 (28.6)
Thermal expansion, 1/°C (1/°F) x 10 ⁶ , 20 – 100°C (68 – 212°F)	10.9 (6.1)
Thermal conductivity, W/(m·°C) (Btu/(ft·h·°F))	15 (8.7)
Specific heat capacity, kJ/(kg·°C) (Btu/(lb·°F))	0.50 (0.12)

For further information, contact your local IPCO office or visit our website ipco.com

Data given in this document are nominal values and are not guaranteed. Information relating to material, specifications, properties and/or performance is intended as guidance on determining suitability, and may be subject to change without notice.





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