

Advantages of using colour label in furniture manufacturing



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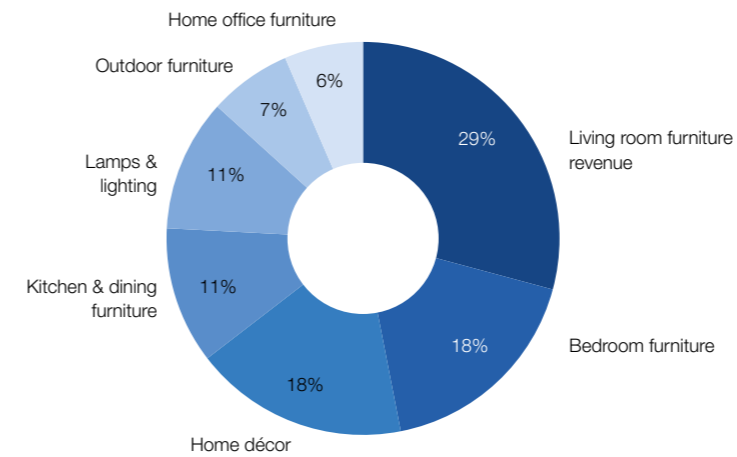
Introduction

The furniture manufacturing industry is a sector that encompasses the production of various types of furniture, including residential, office, commercial, and outdoor furniture. It involves the design, manufacturing, assembly, and distribution of furniture products to consumers, businesses, and other entities.

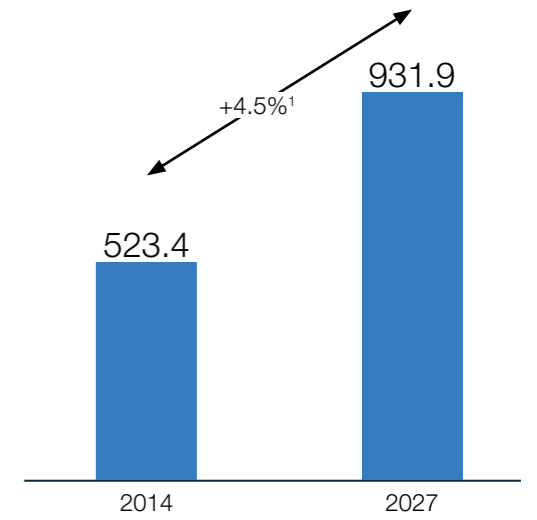
The industry plays a significant role in both the global economy and people's daily lives. Furniture is an essential component of interior design and serves functional, aesthetic, and ergonomic purposes. From basic necessities like beds, tables, and chairs to elaborate pieces of art and craftsmanship, furniture serves as a means of creating comfortable and functional living and working spaces.

The furniture manufacturing industry is characterised by a diverse range of players, including large multinational corporations, small and medium-sized enterprises (SMEs), artisanal craftsmen, and specialised niche manufacturers. Manufacturing processes can vary depending on the type of furniture and materials involved. Common materials used in furniture production include wood, metal, plastic, fabric, leather, and various composite materials.

Worldwide revenue share in 2022



Worldwide revenue in billion US\$



Importance of colour labelling in the furniture manufacturing supply chain

Colour labelling enables manufacturers and suppliers to categorise, track, and manage inventory based on different colours of furniture items. It helps in efficient order fulfilment, quality control, supply chain visibility, and branding efforts. By replacing black and white with colour labelling practices, companies can streamline their supply chain operations and enhance customer satisfaction. Epson industrial ColorWorks colour label printers allows manufacturers and suppliers to reap all these benefits whenever and at whatever volume they want, due to the unique quality of printing on demand.



Impact of colour labelling on the supply chain

3.1 Introducing colour enables effective inventory management by providing clear identification of furniture items based on their colours. This categorisation helps in tracking inventory levels, preventing stockouts, reducing excess inventory, and optimising storage space. Manufacturers can efficiently manage their inventory and ensure the availability of desired coloured furniture items to meet customer demands. Epson's ColorWorks C7500 can print at 300mm/s which allows manufacturers to produce vast amounts of quality labels in quick time, to supply those short notice orders.

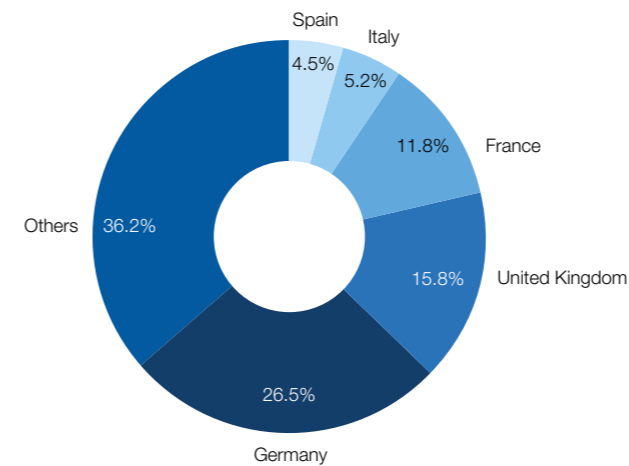


Streamlined order fulfilment

3.2 Epson ColorWorks labelling simplifies the fulfilment process and allows staff to quickly locate specific stock items for each order. This streamlined process helps improve productivity, picking, packing and shipping. Customers receive their orders knowing that the colour will perfectly match their preferences; this leads to improved customer satisfaction and a higher probability of repeat business. Accurate colour labelling has become even more relevant with the rise of omnichannel and eCommerce for furniture sales. Customers are familiar with using online tools such as fabric swatches, 3D product visualisation and AR (augmented reality) when making their purchasing decisions. Therefore, it's essential that the colour label is an accurate representation of the furniture's fabrics and materials. The ColorWorks C6500 achieves this with ICC Profiling and spot colour management so any colour combination can be faithfully reproduced on the label.



eCommerce furniture revenues in Europe in 2023



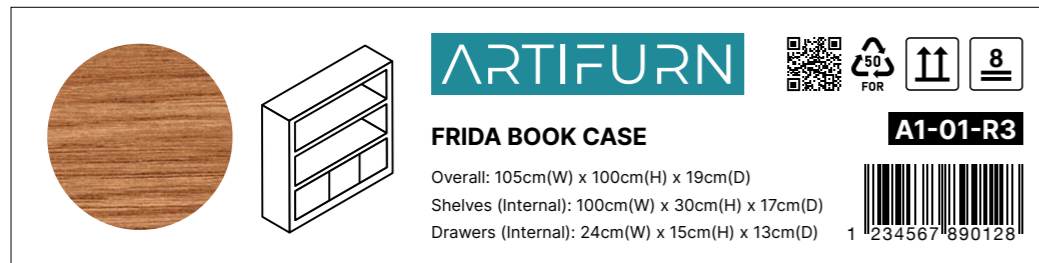
The biggest specialised shops in the top 6 countries



Efficient supply chain visibility colour labelling

3.3

Colour labelling enhances visibility throughout the supply chain. By using standardised colour codes or labels, stakeholders can quickly identify and understand the status, location, and characteristics of furniture items. This visibility enables better coordination between manufacturers, suppliers, distributors, and retailers, resulting in smoother operations, reduced lead times, and improved overall supply chain efficiency. Printing on-demand with the CW-C6000AE allows manufacturers to rapidly respond to any supplier changes in label specifications or design, without the hassle of wasted labels or lead time pressures.



Effective marketing and branding colour labelling

3.4

Effective marketing and branding colour labelling plays a crucial role in marketing and branding efforts. Specific colours may be associated with a company's brand or product lines, creating recognition and differentiation in the market. Consistent colour labelling across packaging, labelling, and promotional materials reinforces brand identity, attracts customers, and helps establish a strong visual presence. When a manufacturer is producing the same furniture but under multiple brands, it's imperative they have the correct amount of brand specific labels. By including the Epson ColorWorks range into their label production process, the manufacturer can produce the correct amount of labels to match the batch order of furniture.

Key players worldwide

Company				
Sales ² 2020	US\$30.6bn ⁵	US\$14.1bn	US\$6.7bn ⁴	US\$5.0bn ⁵
Key brands		Joss & Main ALLMODERN BIRCH LANE Dwell Studio PERIGOLD	N+ Shimachu ニトリ HOMES DECO HOME	DREAMZONE ¹ JUTLANDIA ¹ KRONBORG ¹ WELLPUR ¹ ROYAL OAK ¹



Case study: West Four Manufacturing C7500G

4.1



Profile

Name: West Four Group of Companies Inc.
Location: Saskatoon, SK
Founded: 1947
Website: www.westfour.ca

Challenge

Implement a comprehensive colour label printing solution that would complement and complete West Four's automated distribution centres.

Solution

By using Epson's ColorWorks® C7500G colour label printers along with CYBRA Corporation's MarkMagic® Bar Code Labels, RFID Tags and Forms Software, West Four reinforced brand recognition, helped increase production efficiency, and simplified operations in the distribution centres.

Moving to colour labels in manufacturing

West Four Group of Companies builds a better distribution centre with Epson ColorWorks label printers and CYBRA software

"Our finished product needs to be the best, complete with our brand messaging and information that directly speaks to the customer," says Jay Fafard, executive vice president, West Four Group of Companies Inc. "And that can only be communicated with a colour label. Black and white labels just won't cut it anymore."

West Four Group of Companies specialises in the manufacturing and distribution of residential and commercial hardware, including doors, frames and building specialties, and serves home builders, general contractors, renovators, and the public across western Canada.

"Our focus is on quality," says Fafard. "We want to make sure the products we release into the market are top notch. It's what our customers demand and expect."

An automated solution

For help implementing a new colour label solution that would better complement their fast-paced operations, West Four turned to their technology partner, CYBRA, a company that has specialised in comprehensive AutoID software solutions since 1990, serving thousands of customers worldwide.

"Our finished product needs to be the best, complete with our brand messaging and information that directly speaks to the customer, and that can only be communicated with a colour label."

Jay Fafard, Executive Vice President, West Four Group of Companies Inc.

Case study: In with the colour ColorWorks and Indy

4.2



CYBRA recommended the Epson colour label printer. “The next day, the folks at Epson were at our office helping us learn more and working with our developers to create a native printer driver, ultimately merging our MarkMagic® Bar Code Labels, RFID Tags and Forms Software with the Epson ColorWorks C7500G,” says Chuck Roskow, vice president of operations at CYBRA. “When we presented the combined solution to West Four, they absolutely loved it.”

“We asked CYBRA to create a label for us to use on over a thousand products live in our database,” says Fafard. “The label contained a 300 dpi full resolution image. After seeing the speed and output, we ordered the ColorWorks C7500G without hesitation.”

Opening new doors with colour

The Epson on-demand label printer has helped to truly automate and streamline operations in West Four’s distribution centres. With the C7500G, West Four is now able to print dynamic labels on demand – even specialty labels required for commercial and residential doors that range from as small as 3-inches wide and 18-inches tall and up.

Roskow notes that having colour label capabilities at the point of printing is a breakthrough for West Four. Now, instead of ordering stock of colour -only labels, then using a thermal printer to add black text to the pre-printed colour labels, West Four is able to create custom, on-demand colour -enhanced labels while also helping to reducing waste and saving on costs. “Why wouldn’t you use colour to make your brand more visible in both the warehouse and the retail environment?” he asks.

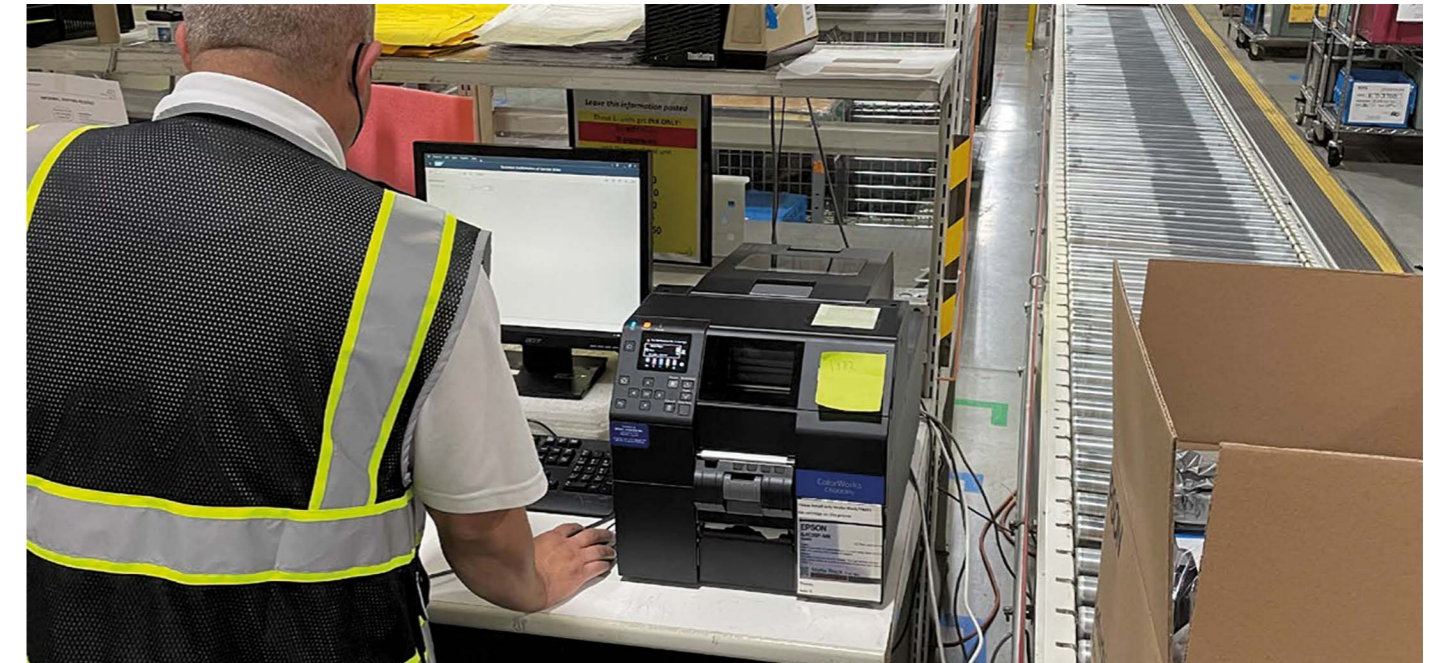
Bringing on the C7500G has helped to improve and reinforce West Four’s brand recognition, as well as increase production efficiency and reduce errors in the distribution centres, ultimately streamlining and simplifying the printing process.

“We asked CYBRA to create a label for us to use on over a thousand products live in our database. The label contained a 300 dpi full resolution image. After seeing the speed and output, we ordered the ColorWorks C7500G without hesitation.”

Jay Fafard, Executive Vice President, West Four Group of Companies Inc.

Fafard also testifies to the performance and reliability of the C7500G, calling it a game-changer. “It’s unbelievable how fast the printer is. We can print labels directly from our system that incorporate all of the information that the customer wants, including an image or diagram of the product, product dimensions and details, product number and UPC, as well as branding information. Even better, it’s automated, it prints right on the manufacturing line and the labels are applied to each product before it leaves the building.”

At the end of the day for West Four, it all comes down to quality. “We want to make sure we continue to work with vendors and manufacturers that care about quality and develop products that we stand behind,” says Fafard. “With Epson, we know we’re doing that.”



Profile

Name: Epson America Warehouse
Location: Plainfield, Ind.
Website: <https://epson.com/usa>

Challenge

Increase labelling efficiency within a distribution environment while continuing to meet detailed compliance requirements. Upgrade from antiquated thermal label printing to a colour solution with labels that will not bleed or fade.

Solution

Future-proof labelling capabilities with ColorWorks C6000 series industrial colour label printers to augment operational efficiency, reduce the chance of fines due to unscannable labels and streamline labelling processes.

Out with the old, in with the colour

Epson distribution centre upgrades from thermal to colour labelling with ColorWorks on-demand industrial printers

Epson’s distribution facility in the Indianapolis suburb of Plainfield, Ind. houses its warehousing and distribution operations, a repair depot and sales of parts and accessories. The 750,000-square-foot facility with 200 dock doors sees a tremendous amount of movement, day in and day out. Over 25 million pieces and nearly two million orders are shipped out of the facility every year, each requiring a label to be printed for outbound shipping.

“Our goal is to provide Epson customers and retailers with the best service possible and deliver orders that perfectly meet the specific requirements, on-time,” Mauricio Villaveces, director, Distribution Operations at Epson America, Inc. “Making sure that customer requirements are met is paramount. We never want to say ‘no’ to a customer when they introduce a new requirement.”

For decades, the Epson facility had been using thermal transfer printers for labelling operations, which Villaveces noted had plenty of opportunities for improvement due to the lack of colour capability and frequent jams, resulting in downtime. Oftentimes,

packages needed to be visually marked for sorting or processing, and because the thermal printers we were using could not print colour, it required secondary steps to apply colour or manually mark the package. The operations team also found it difficult to change thermal ribbons because it required getting the ribbon completely smooth across the roller. Plus, they complained about the rising prices of thermal labels and ribbons.

“Epson trusts and relies on its own technology. Most recent testament includes modernising our headquarters in California with business inkjet MFPs and projection solutions,” said Rand Rozar, vice president, Service and Logistics, Epson America, Inc.

“Frequently, we hear customers speaking about incorporating colour label requirements. Now we’re prepared.”

Mauricio Villaveces, Director, Distribution Operations, Epson America, Inc.

“When we looked at upgrading our labelling operations in Plainfield, the ColorWorks C6000 series made sense as it was engineered for this exact application and environment. With ColorWorks, Epson is able to compete and lead in this type of logistics environment, printing labels with much higher resolution and image quality than the previous thermal labels.”

Tough technology for demanding requirements and harsh environments

Most distribution centres are not climate controlled, and labels created with legacy label printing solutions can be severely affected by moisture, heat and freezing temperatures, with the tendency to fade over time when a product is stored. Tough, heavy-duty technology is essential since environments like these are naturally rough on technology.

The industrial-strength ColorWorks C6000 series inkjet label printers are engineered for these types of demanding applications and environments.

“We work with a number of big-box retailers that have demanding labelling requirements,” said Villaveces. “So much is at stake every day when Epson ships to these customers.”

Labels that are not compliant or do not meet customer requirements can result in shipping delays, penalties and fines, and this can negatively affect customer relationships in terms of credibility and dependability, too.”

Villaveces explained that entire pallets or truckloads can be rejected for seemingly minor discrepancies. And nothing is trivial. Even the exact placement of an individual label is important – especially with mixed products in a pallet.

Per compliance requirements, each label printed must be readable and scannable for 24 months, meaning it must not smudge, bleed or fade. Case and pallet labels must incorporate the purchase order number, SKU number, vendor model number, master carton quantity, and these labels cannot be even slightly misaligned when printed. In some cases, even ‘mixed product’ and ‘do not break down’ labels are required. These requirements represent a minuscule fraction of the total labelling requirements outlined by retailers.

“With thermal transfer labels, on one too many occasions, a label on a pallet that has been stored will not scan because the barcode or QR code has faded, or because the image quality of the print was sub-par,” said Villaveces. “When this happens, we have to manually enter the information. In a fast-moving environment with a tremendous amount of activity, we cannot afford to take the time for this extra step. Plus, if retailers are not able to successfully scan a label on their end, fines will result.”

Hardware and software to solve woes

Though thermal transfer label printers are often commonplace in distribution centres, a one-size-fits-all solution is antiquated for such demanding environments.

The facility has a variety of labelling stations – from UCC-128 labelling to small pack billing, e-commerce, system devices, microdevices, and more – and each has unique labelling requirements. Each requirement varies by customer and labelling area and in some cases, can change on a weekly basis requiring some level of custom configuration.

For over 20 years, the facility has leveraged Software to design labels for its ERP applications. The facility also leverages software from partners, TEKLYNX and BarTender by Seagull Scientific. “Software has been integral in developing label configuration to meet any customer requirement. Starting the process to overhaul the previous labelling operations has been simple because of the synergies with hardware and software,” said Villaveces.

Converting each of the major labelling stations to ColorWorks area by area, Villaveces and his team are replacing all existing thermal printers with over 70 ColorWorks C6000 colour inkjet label printers.

“The ColorWorks C6000P models have a peel-and-present feature which eliminates the manual step of peeling the label from the liner. While it might seem trivial, it actually makes a significant impact on streamlining and speeding up labelling when you’re printing and applying millions of labels every month,” said Villaveces.



Opening new doors with colour

“Frequently, we hear customers speaking about incorporating colour label requirements,” said Villaveces. “Now, we’re prepared for colour requirements that retailers might ask of us.”

The transition to CW-C6000P printers and integrating colour capabilities, when complete, will help augment operational efficiency, reduce the chance of fines due to unscannable labels and simplify labelling processes in the distribution centre.

“We, like any distribution centre, focus on cost per piece, piece per hour and speed for service,” said Villaveces. “We have to pay close attention to certain aspects of operations, such as the precise placement of labels and requirements of the like, so it’s important that we don’t have to worry about labelling needing our intervention. The label creation and printing processes can take care of itself so we can focus on getting the product correctly shipped out and make sure it arrives to customers just as they require.”

“With ColorWorks, Epson is able to compete and lead in this type of logistics environment, printing labels with much higher resolution and image quality than the previous thermal labels.”

Rand Rozar, Vice President, Service and Logistics, Epson America, Inc.

5

Implementing colour labelling: best practices

Standardise colour codes or labels across the supply chain to ensure consistency and avoid confusion.

Train employees on colour labelling practices and the importance of accuracy in order fulfilment and quality control.

Use high-quality colour labelling materials that are durable and legible.

Implement robust tracking systems to monitor inventory levels and prevent stockouts.

Regularly review and update colour labelling practices to align with changing customer preferences and industry trends.



6

Conclusion

Colour labelling has a significant impact on the supply chain of furniture manufacture. It enhances inventory management, streamlines order fulfilment, improves quality control, ensures supply chain visibility, and supports effective marketing and branding efforts. By implementing colour labelling practices, furniture manufacturers can optimise their supply chain operations, increase customer satisfaction, and gain a competitive edge in the market. Epson’s ColorWorks range gives manufacturers and suppliers the opportunity to implement best practises.

¹ CAGR: Compound Annual Growth Rate / average growth rate per year. Source: Statista Consumer Market Outlook 2023
² Companies' sales for furniture. Source: Statista Consumer Market Outlook 2021, IKEA, Wayfair, Nitori Holdings, JYSK
³ Fiscal year ended August 31st. Source: Statista Consumer Market Outlook 2021, IKEA, Wayfair, Nitori Holdings, JYSK
⁴ Fiscal year ended February 20th. Source: Statista Consumer Market Outlook 2021, IKEA, Wayfair, Nitori Holdings, JYSK
⁵ Fiscal year ended August 31st. Source: Statista Consumer Market Outlook 2021, IKEA, Wayfair, Nitori Holdings, JYSK

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