



How to Ensure Your Corrugated Packaging is Fit for Purpose

in Today's Demanding Supply Chains
and Retail Landscapes



01

PROJECT BRIEF

Manage how your project brief is both received and responded to

YOUR BRIEF

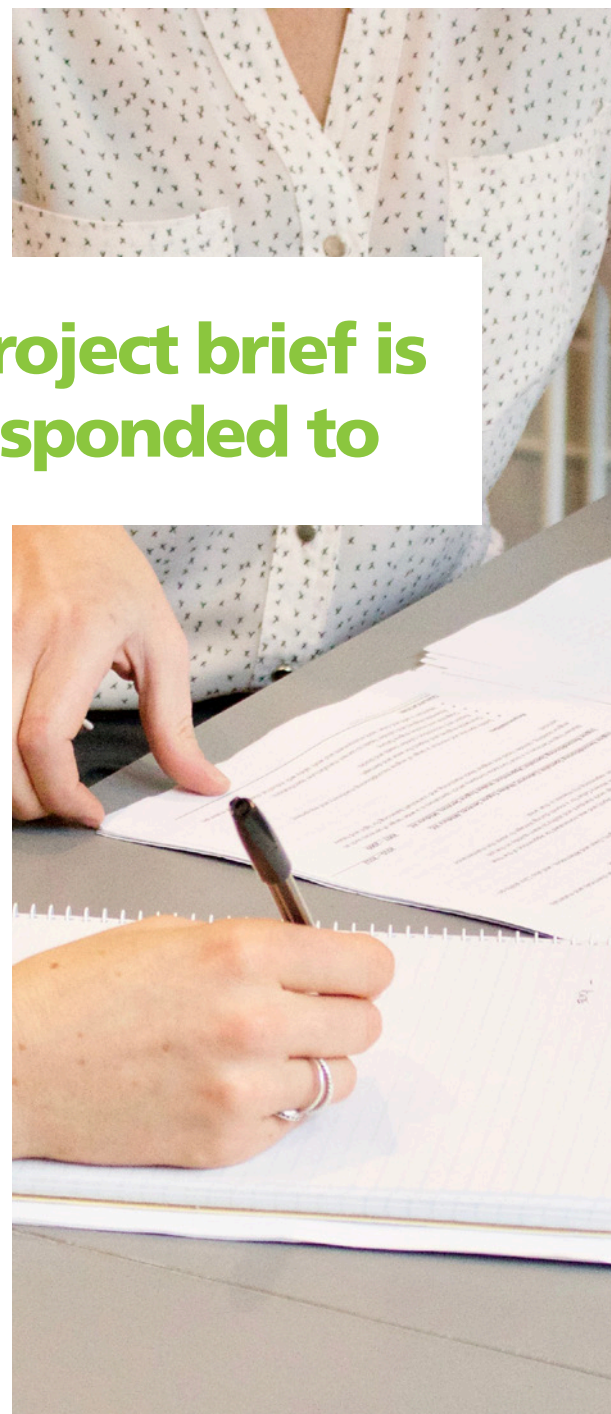
The manner in which your brief is received and processed is the fundamental foundation of how your project will proceed, so it's vital that all factions involved fully comprehend what is required from the start.

Outline the key elements:

- Are you looking at lowest unit cost or total supply chain cost?
- If printed, are you looking for basic transit instructions or a "WOW" factor to set your brand apart?
- Structurally, are you looking for a product to get your goods from A to B or an eCommerce design that can handle courier deliveries and returns whilst also delivering that now almost essential "unpacking" experience?

There is much to be clarified at this important initial stage; and all aspects need to be handled in a professional and systematic way. Ideally, your potential supplier will take a consultative approach and lead you through the process.

In some cases, it may be all that you require is a basic structural design, while indicative costings can also be prepared and reviewed. In other instances a full business review, which includes a review of existing packaging, packing lines, automation, pallet plans and supply chains, may be required. Either way, your supplier should want to establish a comprehensive brief and gain an understanding of your existing costs, including the box journey and how it is utilised.



DEFINING DETAILS

In an ideal supplier scenario, a full engineering evaluation would be made to determine whether fresh innovation and/or material changes could create cost reduction opportunities.

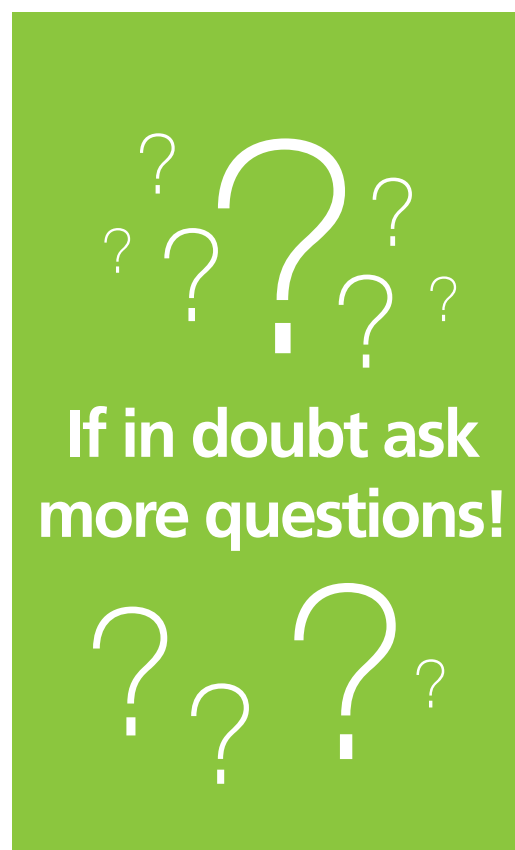
Automation and different box styles can help speed up your packing time, further reducing costs. Your supplier should explore all options to help reduce overheads from your business through your packing streams.

Alongside cost-saving, specific requirements need to be clarified. For example, FSC (Forest Stewardship Council) certification is a must if your company has environmental standards to be met. It's also worth adding the 'recycle' logo to your boxes to instantly display that the pack is from an environmentally responsible business.

Essentially, any call-off or stock held requirements should form part of your initial brief to your prospective supplier. Inform them of your expected supplier criteria and business needs; too much information is better than too little, as it is then that assumptions are made and where opportunities are missed.

COMMUNICATION IS KEY

Good communication with your chosen supplier is vital, and you should expect timely responses and regular updates. Often a project can be expedited over video calls, emails or by phone, but there are times when physical meetings are required. Complex projects can mean meetings are the only way to guarantee everyone understands a complex brief. Ensure at the outset that your provider is willing to do so in order to get your project up and running as smoothly and efficiently as possible.



02

CRITICAL PATH

Never underestimate the importance of determining a project's Critical Path/Timeline

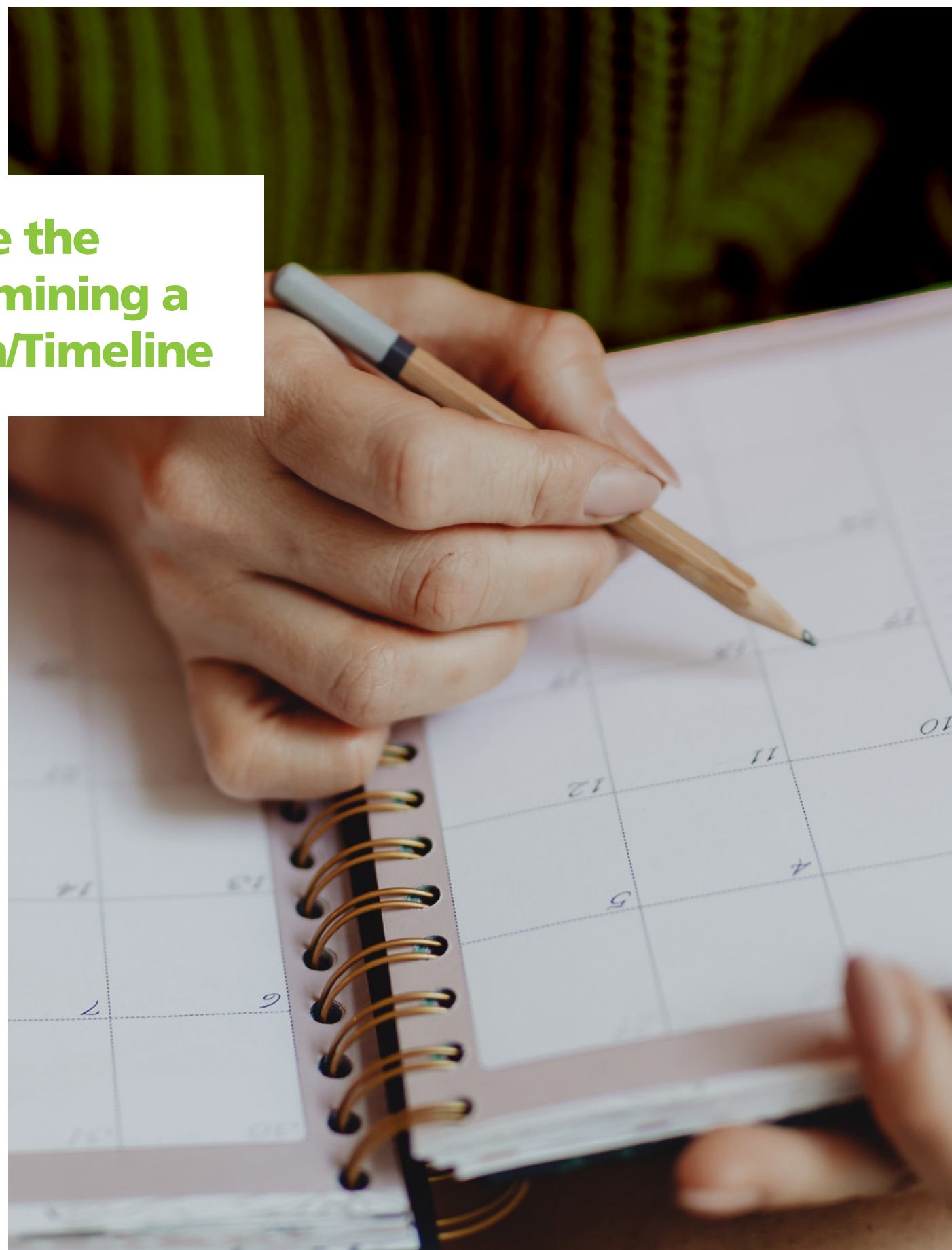
TAKING THE FIRST STEP

To ensure a smooth transition from start to finish, your supplier's first move should be to determine your project's Critical Path/Timeline.

HOW IT WORKS

Your Critical Path works backwards from your required completion or delivery date, with milestones and key activities established along the way to ensure a fluid operation. Establishing this will mean your project is consistently delivered on time.

If a product needs to be fast tracked you should be looking for a supplier that can accommodate this type of request.



CRITICAL PATH EXAMPLE 1

If a wider business review is to be conducted, then your critical path may look as follows:

- Gain project sign-off
- Gain electronic written approval for structure, graphics & colour
- Provide quotations
- Provide colour swatches
- Provide cutter guides for artwork overlay
- Establish print requirements
- Submit samples for review
- Propose new structural designs and pallet plans
- Establish routes to market
- Establish opportunities for automation/improved production efficiencies
- Review of packing lines
- Review of existing packaging
- Initial customer brief

CRITICAL PATH EXAMPLE 2

If a new line has been briefed, then the most important date is likely to be your required delivery date, therefore the Critical Path may look as follows:

- Required Delivery expected
- Manufacturing process
- Receipt of customer Purchase Order
- Electronic written approval for structure, graphics & colour
- Cutter Guides for artwork overlay
- Quotation supplied
- Sample Submitted
- Logistics & Pallet Plan Utilisation
- Structural design submitted
- Initial customer brief

03

STRUCTURAL DESIGN

Manage how the structural design of your packaging will be handled

BETTER BY DESIGN

Structural design is a critical area. With the right supplier, this is the area where great improvements can often be made, and it's also where your packaging becomes 'real'.

Your supplier's design team will undoubtedly use a CAD/CAM system, but how well versed in it are they and do they provide alternative solutions as a matter of course?

The experience of the structural design team is fundamentally important to your project, so seek a supplier with ample structural design experience and a team used to collaborating as opposed to an individual without a sounding-board. This will ensure a team primed to explore and innovate on your behalf.

If it's innovation and fresh ideas you are looking for, find a supplier whose design team are known for giving a choice of solutions, thereby presenting you with more options to consider.

Once you have your chosen team in place, there are crucial points to consider:

- Are you looking for lowest unit cost or total packaging cost?
- Are you looking to speed up packing lines?
- Do you need to introduce automation?
- Is this transit packaging, shelf-ready packaging or eCommerce packaging?
- What type of environment does it need to perform in? Frozen, chilled, ambient?
- Does it get sent palletised or as single items?
- How does it need to be palletised to gain maximum efficiency within supply chains?

Also, very often, unwanted materials such as single-use plastics can be designed out and replaced by materials that are already recycled and are 100% recyclable. A solid structural design team will identify and address this for you.



BUDGETS AND SOLUTIONS

Always share your budget expectations with your supplier at the outset to avoid any misunderstanding or time wastage. The design team may be extremely innovative but if they can't create the most appropriate solution inline with your costings, they're of no use!

During the design process, the team should physically cut-out samples of each element to check for fit and test viability. The design can then be tweaked and refined until fit for

purpose. Once the design team are happy that all angles have been checked and are confident they've met your brief, a final sample should be produced – free of charge – for you to review.

Below is an example of the type of cutter guide that your supplier's structural design team should produce in the early stages.

	Customer:			Print Machine:	PRT/DC/TPR/VMP		Internal Dimensions:	L: 0 W: 0 D: 0 mm	
	Reference:			Case Style:	<Bespoke>		Board size:	839 x 1435 mm	
	Spec No.:	MP101084	Version:	1	Board Grade:	200K/200T I	Blank Size:	814 x 1410 mm	
PRINT VIEW OUTSIDE PRINT		Colour 1:	BLACK	Colour 2:		Colour 3:		Colour 4:	
Date: 22/03/2022 Created by: PM									
<small>DISCLAIMER: This proof is for visual reference only. It does not attempt nor claim to accurately represent the final printed ink colour(s) on the approved substrate. Be aware that computer monitors and inkjet printers replicate colour differently to the results obtained using the Flexographic print industry (especially concerning Spot colours). All PANTONE references and Customer/Special ink formulations should be confirmed and approved with the printer before final approval. It is the Client's responsibility to ensure that all content, including layout, text and spelling are correct prior to giving final approval.</small>								CUSTOMER APPROVAL Signed: _____ Date: _____	

04

GRAPHIC DESIGN

Ensure your graphic design meets with the finished print expectation

STRUCTURAL & GRAPHIC DESIGN

Your supplier should provide an electronic file of a scaled cutter guide demonstrating the print face of your pack. This file should be accompanied by the supplier's print guidelines – vital to ensuring you receive the appropriate and highest level print quality.

It is important when creating your artwork that all glue areas should be left varnish and print-free. Font type and size can also enhance print quality, so where possible adhere to the supplier specification guidelines for maximum quality.

Colour management is crucial to your brand integrity. Your artwork agency is likely to be supplying graphics, colour specification and other brand developed aspects, while your supplier should supply colour swatches, printed on the correct substrate, matching your colour specification and expectations.

Here is an example of an artwork with cutter guide.



Your supplier should also be equipped to maintain a consistency of individual colour, within industry tolerances, throughout the operation process. Ask your supplier to document what print tolerances they are working to and how they control colour management inline (ideally they would be printing to Delta +/- 2). If the tolerances are too broad, your brand integrity can suffer.

DEVIL IN DESIGN

The aesthetics of your box, both inside and out should work to maximise brand awareness through your customers' experience. To this end, your supplier should offer several different print options, each ready to enrich the packaging experience of your end-user.

To assist in this, 3D visuals can be a useful tool to quickly demonstrate the aesthetics of your pack. Being able to visualise the box with your graphics applied can help speed up the entire process, so check whether your supplier can provide 3D PDF files of your printed box options.

Natrually, it is imperative to check your print detail to ensure it is exactly as expected and correct to specification before giving approval to your supplier. Once received this approved artwork should be referred to during the production run.

Optimising pallet space, warehousing and transport logistics

STORAGE AND SHIPPING

An area that is often not given proper consideration is the optimisation of pallet space within the warehousing environment and during transportation.

Fitting as much product as possible on a pallet and being able to double-stack during transport is a major advantage. Equally, the size of the pallets received should be aligned to your racking and warehousing set-up.

A credible supplier will always want to understand your inbound palletisation requirements, because small improvements can make a big difference.



Alongside warehousing, the journey of your packed box should also be clearly understood. Ask your supplier for the recommended 'pallet plan' for each item being supplied, so that your outbound goods are packed and palletised to minimise the amount of 'air' you ship. It'll mitigate unnecessary costs and help ensure the protection of your product during transportation.

Separate thought is needed for Ecommerce boxes, as they must be produced inline with your carrier's requirements. Considering the lowest postal or shipping cost options is crucial, and perhaps, also the need to fit through a letterbox. The aesthetics, size and weight of your Ecommerce boxes will influence your customers' user-experience; if it isn't easily delivered, the cost of transit is excessive, or the box size is disproportionate to the product, perception can be tainted and brand loyalty lost.

06

PACK TESTING

Prove your product viability with rigorous transit testing

TESTING TIMES

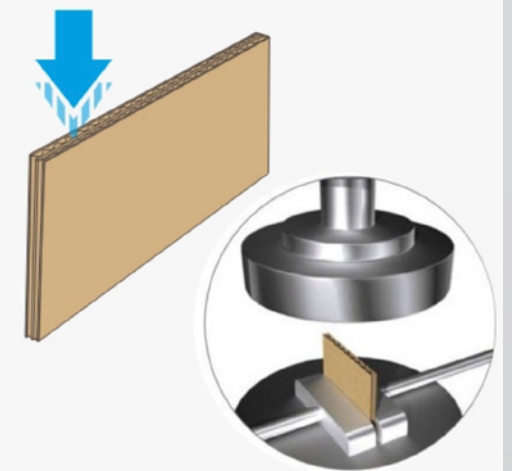
Up to this point your supplier's calculations would be largely theoretical, so you should be prepared to complete a thorough test of your packaging to ensure that it's fit for purpose and safely protects your goods throughout their journey.

Essentials to check include:

- Size and fit
- Material is fit for purpose and not over-/under-specified
- Speed of assembly and packing
- Compatibility with case erecting machinery, if applicable
- Drop testing
- Palletisation
- Durability in transit
- Ability to double-stack pallets in transit



Edge Crush Test (ECT)



A good supplier will be equipped with CAD/CAM sample equipment, providing you with the required amount of samples, constructed in the correct material, allowing you to test for suitability.

Your supplier should also be equipped with certified testing equipment capable of measuring material quality, both pre- and post-production, to ensure exacting standards are met throughout the entire manufacturing processes.

07

PRODUCTION PLAN

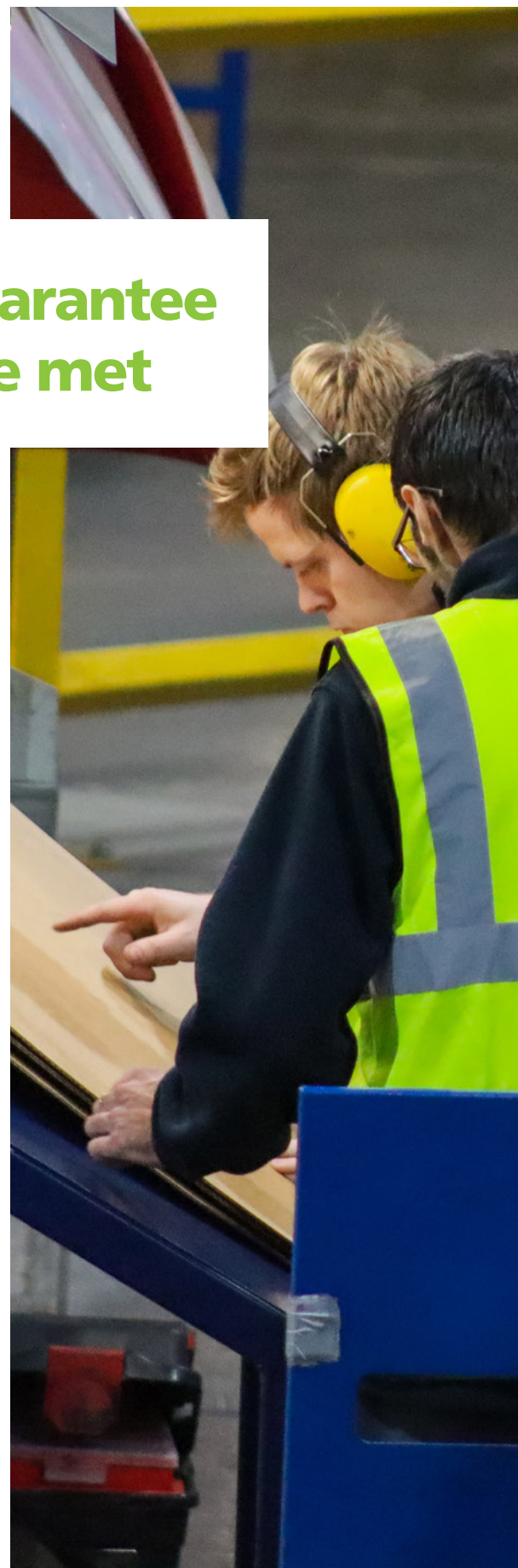
Hit deadlines and guarantee set delivery dates are met

AFTER SIGN-OFF

Once you've given approvals for structure (sample approval), graphic design (print card layout) and colour (ink swatch), your order is ready for processing in-line with the agreed critical path.

At this point, materials are purchased ready to begin production. Generally, suppliers would process in-line with standard shifts, but it's worth checking how they would react if the agreed dates were to slip. For example, how would they ensure your delivery date is still met, and will this be achieved without additional cost to you? This is one of the key areas where costs can increase, so always explore this in advance.

Also, do they have a contingency plan in the event of mechanical breakdown? For example, is there more than one machine for each process? If so, does it enable work to be moved across to an alternative machine in the event of a breakdown and still be able to achieve the original delivery date? Vital questions.



PROTECTING PRODUCTION

First time production runs should be conducted under careful evaluation at every step to ensure all expectations are met. So ask, does your supplier hold daily review meetings to ensure your project is resolutely on track? And is it attended by all of the production team, from the General Manager to the Warehousing/Distribution Manager? Occasionally, things go wrong, but a supplier who is pro-active and informs you of any issues as soon as they arise will minimise potential problems.

"It's worth checking these things before you embark on a project as it can mean the difference between success and failure in terms of hitting your targets consistently, including maintaining your original agreed project costs."

CONTINUOUS IMPROVEMENT

If something does go wrong, do you have a supplier who can show a proven record of continuous improvement? Ideally your supplier would have someone employed in a full-time role looking at this. NCR's (non-conformance reports) should form a fundamental part of this process and should be made available to you for review if a problem has occurred.



Crucial procedures for printing, converting and palletisation

QUALITY QUESTIONS

With our recommended research done, the supplier you eventually select will be ideally positioned to meet your project needs. But we're not done yet, so here are a few more points-of-interest concerning Quality Control that are well worth considering.

- What are the supplier's Quality Control processes?
- Who signs-off the job at the start of the production process?
- How many quality checks are conducted throughout the run?
- Are they recorded and if so, how?

If the quality doesn't meet the required standard, vital time will be lost in correcting the issue, so don't be afraid to question your supplier. Ask which quality standard they're working to; a good gauge being British Standards ISO9001. It's all about providing you and your customers with peace of mind.



COLOUR CONTROL

Obviously, Quality Control of Colour Management is imperative, so your supplier should be using a spectrophotometer to measure and control colour throughout the production process. Multiple colour quality checks should be recorded electronically and be available upon request should there be a query. Ideally you should be working with a supplier who can operate to ± 2 Delta, which delivers exemplary colour control.

FLEXIBILITY

Finally, just how flexible is the supplier, given your needs and objectives, and how do they demonstrate that flexibility? Peace of mind during the production process is what you want to be assured of, so ask all these questions and more. Your supplier should be happy to answer your questions and explain how things are done to your satisfaction – it never hurts to ask, but not asking could prove costly.

Ensure dependable distribution to your warehouse or distribution centre

DELIVERY STANDARDS

With everything else in the process optimised, what matters now is that your goods arrive in the same condition as when they left the factory. To this end, it's extremely important that your supplier has a proven and consistent record of dependable distribution and high palletisation standards.

Suppliers with their own delivery fleet often retain tighter control and offer greater flexibility, which in turn makes them more reliable.



PALLET DISTRIBUTION

Distributing goods via a pallet network system allows for the easy and efficient despatch of individual pallets, often destined for distant destinations. Ideally, your supplier will be capable of managing these deliveries, liaising with everyone in the supply chain and ensuring booking-in times are coordinated.

It's in your best interests to ensure your chosen supplier can show a proven record of delivering on time, in full, consistently. As a guide, your supplier should aim for a minimum 95% OTIF performance level, which is deemed to be world class.

"Can your chosen supplier prove consistent OTIF of

95%

as a minimum!"

10

STOCK MANAGEMENT

Address the importance of maintaining careful stock management

TAKING STOCK

If using your supplier for a Just-In-Time delivery or a call-off arrangement, it's essential that finished product stock is produced in-line with your forecast plan. Essentially, product should be available in good time for call-off as and when required. Alternatively, you may prefer to agree on scheduling regular deliveries, thereby removing the need for additional correspondence.

Efficient stock management should be second-nature to a switched on supplier and keeping your stock levels maintained in-line with your forecasts is vital. Your supplier should be able to provide regular stock reports to aid with the keeping of efficient stock levels without over-committing.



IN CONCLUSION

When you know what to ask of a supplier, you can find one who fully understands your business needs, the process required, and has the systems and experience to control and manage these throughout the entire process.

Remember: a good supplier works with you, providing precisely what you want, when you want it, with minimal fuss and maximum return.





Intelligent Corrugated Packaging

www.manorpackaging.co.uk