



Key supplier partnerships

Serving to add sought after value for customers



Key supplier partnerships

PP Control & Automation has been inspired by the many benefits of building partnerships with suppliers as part of a wider strategy to support the trend for outsourced design, engineering and more specialist competencies required by OEMs involved in complex machine building.

There is a desire to draw attention to the fact that cooperation within a framework of customer specific needs and optimisation of those needs, alongside the ability to adapt and drive innovation is sought after now more than ever.

Read on for an in-depth look into the benefits of these partnerships, case studies where added value is abundant, and the criteria that engaged suppliers match to allow PP C&A to respond to needs.

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Supplier strategy

PP C&A's technical partnerships with innovative technology suppliers, testing & approval bodies and industry associations facilitates the continuous development of the company, capturing emerging opportunities at speed thanks to an 'on request' pool of expert knowledge and know-how to dip into.

It can be the best chance at gaining a competitive advantage and should not go unnoticed or unrecognised as a major benefit to the customer.

The importance of formulating relationships with suppliers is based on the knowledge of the conditions for the development of relations with customers. They go hand in hand!

PP C&A is adamant that the benefits of its own strategic and technical partnerships with suppliers is given the attention it deserves...

Response to needs & main criteria

Manufacturers operating in today's economic reality should have the ability to respond quickly to changes occurring within the markets they operate.

Such phenomena as growing requirements of suppliers, dynamic globalisation of markets, growing competition, and activity of end-users, has led to the situation by which PP C&A needs to be on the cusp of new ideas that constitutes its own development and to successfully compete in changing environments.

That's why the supply partnerships built at PP C&A are in line with its own objectives, those of its partners, and with the business pains of its customers. These partnerships are a fundamental asset in more regards than one, so selecting and building the right ones is critical.

The main criteria for selection of partners can be broadly categorised as:



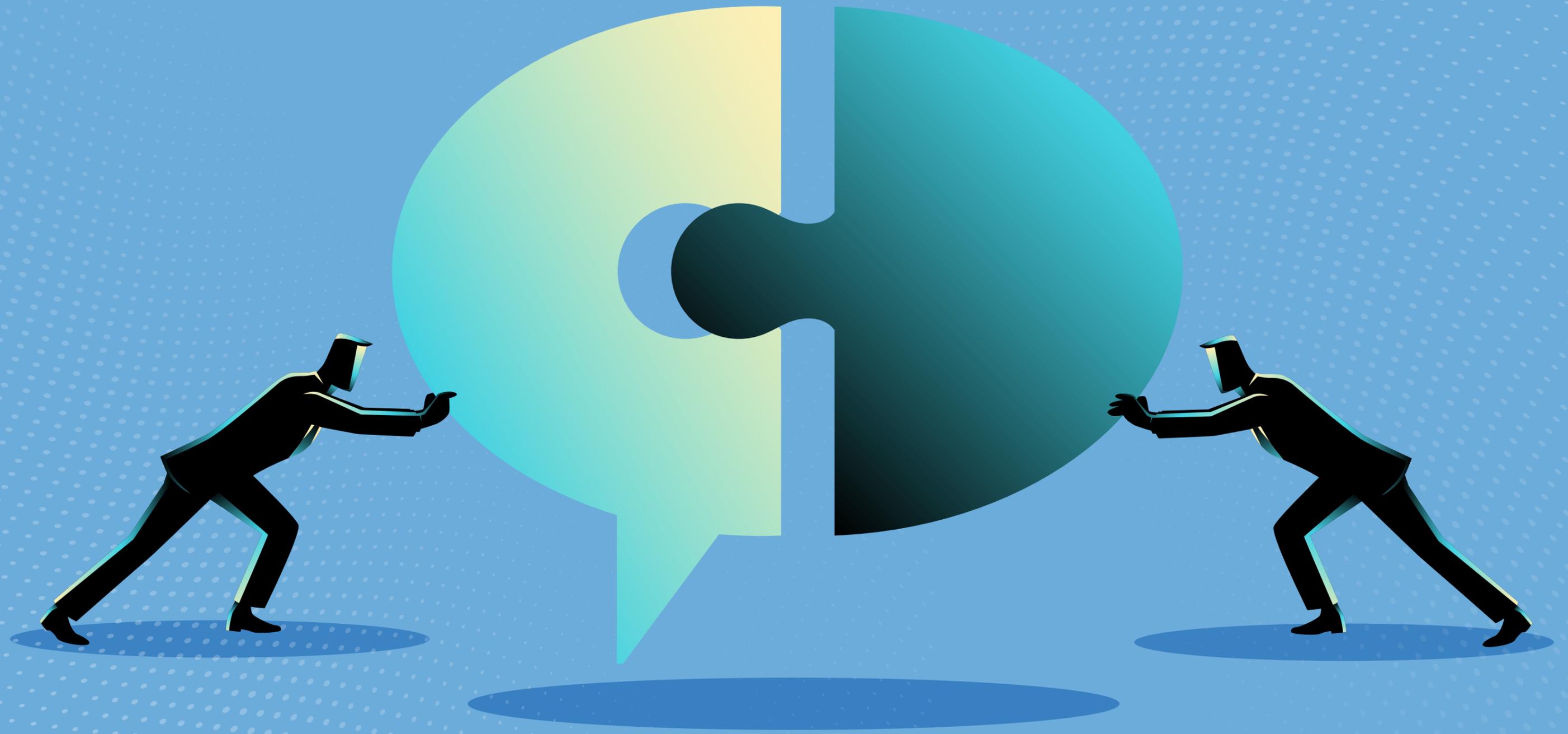
According to the EFQM Excellence Model:

“partnership is for both parties a relationship that helps to develop and deliver added value.”

PP C&A couldn't agree more!

Case studies

The following pages outline key supplier partnerships delivering against the optimisation of specific customer needs, alongside the ability to adapt and drive innovation.





Case study *#1* Grove Design

The point of use specialist Inventor-e recently extended its partnership with PP C&A to make the most of £multi-million global opportunities to supply cloud-based technological innovation to customers around the world.

The partnership makes the most of PP C&A's relationships with key technical partners, including fellow MAN Group member, Grove Design.

The Scenario

Grove Design was introduced by PP C&A after understanding Inventor-e's ongoing requirement for reliable quality production in increasing numbers that facilitated specific design support. This support would be designed to improve existing products and generate new ones.

Inventor-e's need to fully define products suitable for a demanding workplace, whilst offering cost-effective fabrication was a clear challenge that needed Grove Design's particular discipline expertise. Inventor-e has a strong track-record in generating ideas leading to intellectual property within their field but could see the power and potential in establishing partners to complement this in production and ongoing design.

More specifically, Inventor-e presented the requirement for a new generation of Industrial Vending Solutions and associated Asset Management and Tracking Solutions. Subsequently, design focussed meetings, involving all parties were held to generate concepts and start fleshing out ideas.



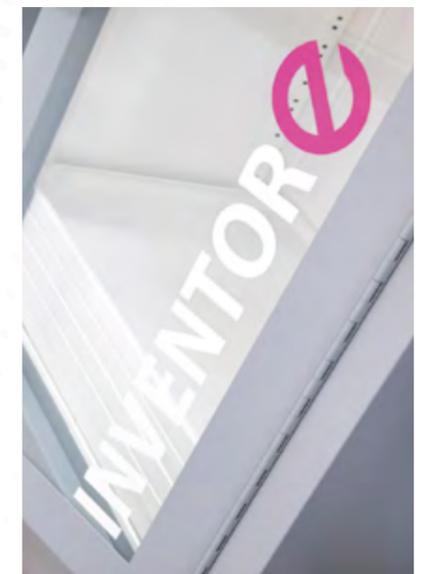
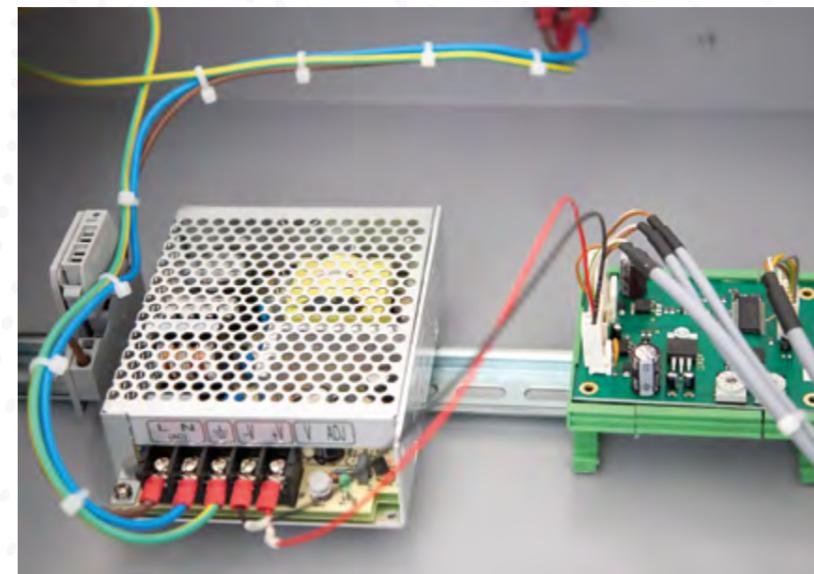
The Solution

Working in close collaboration with PP C&A, Grove supported the design of a family of modular industrial vending systems that offered differing technology aimed at different market sectors and applications.

The systems use a standardised carcass that can be easily configured for specific customer requirements. Grove designed new approaches to cable management, door hinging and locking mechanisms, inter-cabinet cabling, and control panel access.

The cabinets are part of a much larger system and Grove has created new products that complement their functioning. New, more environmentally friendly asset tags, communicating through new gateways also fell within Grove's remit. Intelligent bin scales, with a new flexible way to attach the scales to bins has further complemented the growing system.

Speed to market and agility is key to future success and both companies are confident that they have a partnership in place that will deliver.



The Benefits

By collaborating closely, PP C&A and Grove have refined the design to best suit assembly, such that anticipated fabrication and assembly times have been significantly reduced.

This has allowed products to fit within Inventor-e's ambitions for cost reduction without sacrificing quality. Inventor-e's objectives include significant scaling up of production, meaning the fundamental design and assembly activities needed to be right from the start.

All parties can benefit from this added value and both PP C&A and Grove Design continue on the journey to reach Inventor-e's targeted growth figures.

Austin Owens
Managing Director, Grove Design

"Working with PP C&A makes my life easier. I know that if a potential client has met with them, then they'll already be impressed."

"PP C&A has the equipment, systems, and the experience to position them above the pack and that's obvious when you visit the facility. It is a pleasure to be associated with them and have the opportunity to collaborate on exciting projects with unique design briefs."





Case study #2 Product Approvals

PP C&A has recently signed a deal with Product Approvals to boost its product certification offer to global clients after seeing a major increase in demand from machinery builders sending products to North America.





The Scenario

PP C&A was looking to capitalise on new opportunities for outsourced machine builds destined for North America, where location specific UL 508a certification and NFPA79 compliance requirements cover need to be met for industrial control panels and electrical cable harnesses.

Tony Hague
CEO, PP Control & Automation

"This partnership is all about increasing our engineering bandwidth and access to technical expertise that will support the requirements of our growing order book"

The Solution

The new formal agreement which strengthens what is already a seven-year relationship, gives PP C&A the backing of seven product approval experts and rapid access to dedicated laboratory and testing equipment covering electromagnetic capabilities, safety, and environmental compliance.



508A

Machines are becoming increasingly customised and will need to comply to ever-changing global legislative demands, so the relationship is critical in ensuring the capability to match customer requirements in the area of country and industry-specific approvals and legislation.

The Benefits

Product Approvals' very specialist knowledge complements PP C&A's own internal 'design for manufacture' experience and, together, will provide the ability to offer customers a much more in-depth engineering due diligence service.

The partnership is an important weapon to have in PP C&A's arsenal and will help de-risk new product and process introductions.

Mark Lindsay
Director, Product Approvals

"We now have dedicated engineers assigned to the strategic outsourcing manufacturing expert, so that we can deliver the fastest possible support on engineering issues, testing and full certification services."

"It's much more than just that though. We'll be working with the production team in Cheslyn Hay to scope our future projects and where we can add value to the PP C&A offer. This could be reducing lead times, eliminating risk and even opening up new global markets by advising on the right certification."





Case study #3 InControl Systems

This case study details the relationship with InControl Systems, an experienced and versatile team of engineers and programmers, handling everything from electrical design, PLC and HMI software programming, commissioning, and the project management elements of control and automation systems for factories and machinery OEMs.

With PP Control & Automation's experience in electrical cabinet build and control panel manufacture, there is great synergy between the two businesses. One instance of this relationship working to add sought after value for the customer, was in the implementation of a new production line for an electroplating service.



The Scenario

PP C&A were approached and invited to quote on a new electroplating production line with complete automation design and programming requirements.

The prospect required an advanced systems integrator to design and manufacture the control panel, PLC and SCADA application software, which would satisfy the desire to efficiently call up different plating specifications by product code. Minimising changeover time and having the ability to automate line speed and weir heights unique to each job was also key to the brief.

With the emphasis on design and programming of a complex process of automation, it was clear that this was a project that PP C&A and InControl could collaborate on. InControl were quickly introduced to the prospect and with an understanding of the requirements for automation on the production line, it took over the complete automation design and programming aspects of the project with a view to successfully commission the new plating line on site.



The Solution

InControl wrote the functional design specification with the customer, holding several technical meetings with PP C&A and the client to fully understand the process of the line.

This also included the important aspect of the production operator's interaction with that machine via an operator interface (HMI) display on the control panel, which is optimised to handle different sequences and plating recipes in an efficient manner.

The plating line consisted of a reel-to-reel process, feeding precision stamped parts through eight electro-plating baths where the chemical levels, temperatures and weir heights are controlled and monitored. The control systems also had to communicate with the 24 rectifiers via Modbus TCP which controlled the plating process in each bath.

With the operator interface being accessed by the FactoryTalk View SE, the operator had automated start-up sequence, running mode and shut-down sequence at their disposal.

The plating process has numerous PID controllers for batch temperature and other treatment parameters and tension control of the recoiling of the stamped parts, ready for supply to the customer.

InControl designed the control panel with industry standard components and also implemented a remote access solution to allow engineers to maintain software updates and change requests efficiently without having to travel to site – this was of particular importance as the project ran during covid restrictions.



The Benefits

The success of the project is testament to the fluid working relationship between PP C&A and InControl. The obvious fit between the two companies opens-up added value opportunities for customers, be it reacting to new product design requirements, or taking advantage of a cross pollination of ideas.

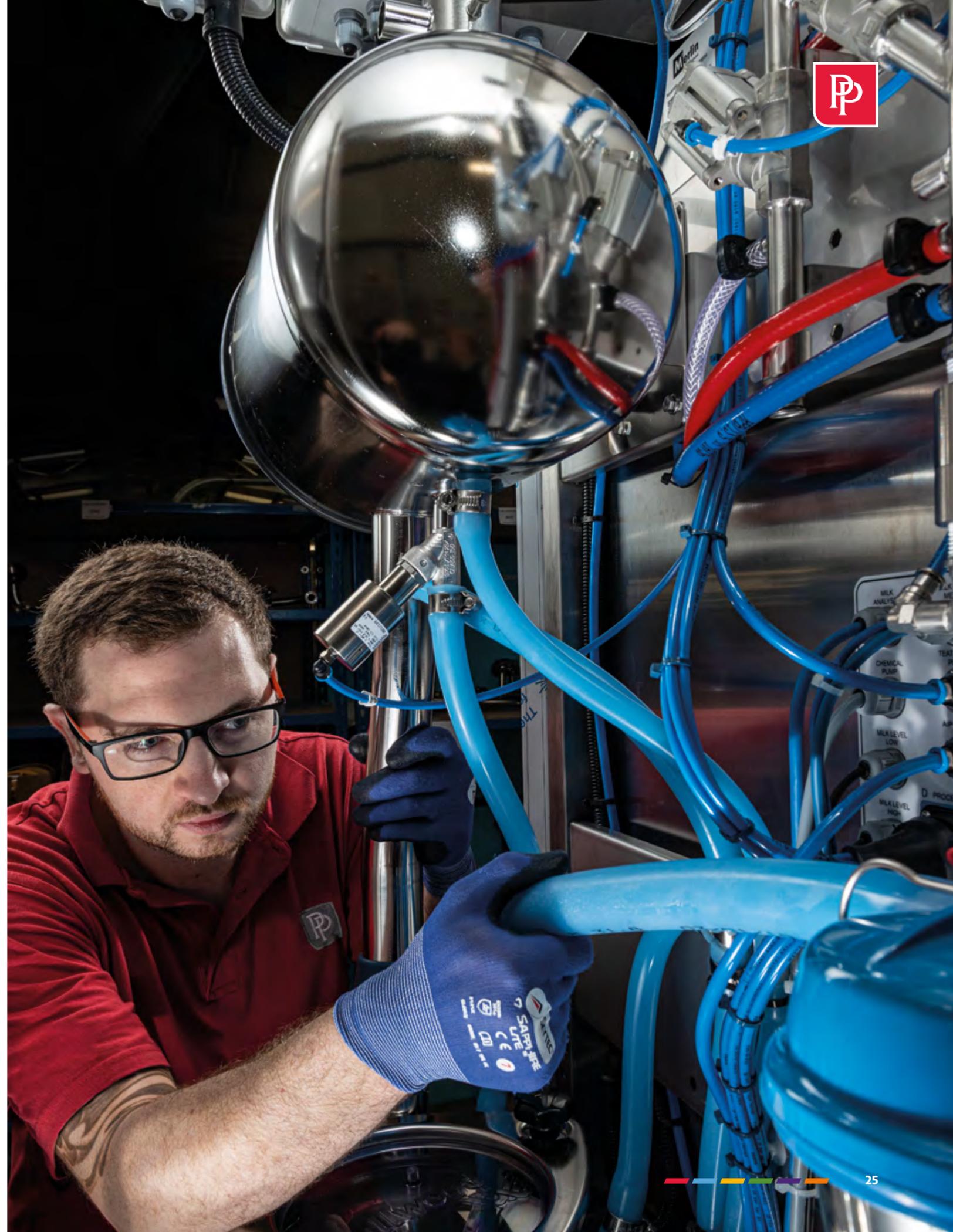
Having the modular software and electrical design capabilities of InControl working alongside the core competencies of PP C&A in control panel and machine build means that standardisation can be implemented, futureproofing the design and volume production of a given panel or machine.

In addition to traditional PLC, HMI and SCADA design work, InControl is a pool of Industry 4.0 knowledge and expertise that PP C&A can tap into on behalf of clients looking to enable their machines for operation in a future digital roadmap, and to be safely integrated and connected.

John Hemper
Technical Director, InControl Systems

"PP C&A are clearly a company that works to their strengths and focusses on their core business, outsourcing to specialists where it makes the best sense for the customer."

"We're always delighted to be asked to work on projects in collaboration. Partnering with PP C&A is built on trust and competence, and this is very much our own ethos, one where we strive to deliver the very best solution, with the greatest of flexibility as an enabler to a long-term partnership that not only benefits the two companies but the OEMs and machine builders seeking our collaborative expertise."





Case study #4 TSl Packing

This case study with TSl Packing, focuses on how the outsourcing model extends beyond manufacture and appeases specific requirements around the packaging & shipping of machinery and equipment to the end customer.

When manufacturing complex machinery, often with delicate electronics, the method by which they are shipped to the customer is an important facet of the overall outsourcing service and one that is often taken for granted. To do it safely and securely, it relies on a close bond with a specialist packing service provider.

PP C&A has leveraged a 15-year partnership with TSl Packing to do exactly that. The relationship developed quickly from requirements for smaller, short-run boxes to heavy duty boxes for machinery and taking advantage of added-value services such as freight forwarding, used to ship large machinery overseas.

The current issues around global logistics are very well publicised, new legislation initiated by Brexit, a shortage of resource in the sector, rising fuel and duty costs, a shortage of containers – and so much more – PP C&A has endured the “perfect storm” which has resulted in spiralling freight costs and extended lead times. When you then factor in the changing needs associated with packaging specifications and legal requirements associated with export, the need to have close partners has never been greater.

The Scenario

Over 15 years ago, PP C&A invited consultants from TSI Packing to review small builds and to instruct on best practice packing and shipping methods. The onsite service allowed PP C&A to stress the importance of damage protection and the need for bespoke packing designs that would also need to meet the strict guidelines associated with export legislation – these could also have country-specific requirements.

There was also the need for specialist transport methods and an understanding of how machinery and equipment would need to be prepared for shipping, ensuring any health and safety, risk assessments, and lift plans were covered.

Any packing partner would also need to be involved during the prototyping phase of certain projects and would be consulted on how best to prepare packing early in the process of any build. PP C&A was seeking a partner with an acute attention to detail and one which shared its environmental concerns for reusable and recyclable materials, all part of PP C&A's commitments endorsed by its ISO14001 accreditation and similar needs and expectations of the customer.

PP C&A's partner had to share its environmental concerns, using reusable and recyclable materials



The Solution

In-depth analysis of packing and shipping needs during the consultation and onsite survey, resulted in several recommendations for safer, more secure delivery.

TSI started with a short-run of small reusable boxes for delicate equipment and produced a fit-for-purpose design, all hand cut with handmade fitting. Specific stencilling was introduced to ensure the customer receiving the goods were instructed on safe handling and opening, as well as directions on how to return the boxes.

The approach was a foundation for more unique and demanding packing requirements and today TSI Packing handles much larger and more diverse machine builds and equipment, each one with its own bespoke solution.

As PP C&A's needs evolved, so did the service offered by TSI Packing. No matter the size of goods being shipped to customers, the need to do it safely and securely doesn't change but there are no doubt more unique demands when machinery and equipment is larger and more difficult to handle. This specific need for bespoke packing for large equipment surfaced and TSI designed a solution which allowed the international shipping of machinery up to 3.5m long and 2m tall.

Freight forwarding was utilised and allows for shipping by sea with barely any limits on weight and size. TSI fully manage the service, informing the PP C&A logistics team of freight spaces available and arranging the collection and delivery in a timely manner.

TSI also provides a storage facility for certain machine builds so that delivery can be activated quickly but importantly, helps save space at PP C&A's facility – space that can be utilised for machine building and more important activities.

When visiting the PP C&A facility, you may notice certain machine builds are being worked on atop bespoke pallets. This was an approach recommended by TSI to ensure that when the build is ready to be shipped, it can be moved quickly and securely.

The Benefits

The ultimate benefit is that PP C&A can be assured that customers receive goods safely, securely, in a timely manner and with clear instruction on opening to avoid any damage when unpacked.

Having a partner handle every aspect of packing and shipping takes pressure off and the close bond and years of excellent service and solutions offered give PP C&A every confidence that no matter the machine or equipment, it will undergo the same rigorous routine of consultation on requirements, the development of bespoke solutions based on those requirements, and the final logistics.

PP C&A now utilise every service offered by TSI, taking advantage of freight forwarding and the storage facility, whilst receiving bespoke reusable corrugated boxes, timber case, and foam fittings every week.

The customer is also involved in the process and TSI takes time to understand their operations and regulations when receiving goods. If the customer requests that no forklifts are used, TSI design a solution to solve the problem and ensures no matter what the customer demands, goods can be removed and unpacked safely.

Furthermore, one thing that PP C&A needs to avoid is having finished builds taking up space in the facility that could be utilised for more productive means, so an agreement with TSI allows PP C&A to activate a 24-hour service. Customers should share in the confidence PP C&A places on yet another of its valuable and key supplier partners – a partnership that ends the outsourcing cycle with a quality and professional approach to customer service.





Case study #5 Warwick Manufacturing Group (WMG)

Tapping into expert academic support is helping PP Control & Automation access up to £3m in new business in the niche vehicle sector.

PP Control & Automation on course for £3m of new business with 'Ready 4 Electrification' support

Press Release

PP C&A, which already works with many of the world's largest machine builders, is one of the first participants of the Ready 4 Electrification Programme run by WMG, at the University of Warwick, and is already reaping the benefits of an initiative designed to get the supply chain ready for new opportunities.

The company has completed a feasibility project that assesses how ready it is to enter the automotive electrification arena, identifying barriers to overcome and, importantly, opportunities where it can transfer its technology and engineering expertise into the marketplace.

Information gained here has already been used to successfully approach and secure work for two customers involved in niche vehicle manufacture, with PP C&A supplying electrical box builds and cable assemblies, as well as using its design for manufacturing experience to support standardisation in order to reduce variety and complexity.



Case study #5
Warwick Manufacturing Group (WMG)

"There is such a groundswell of movement towards reducing emissions in the automotive sector that we knew it was a market we had to try to get involved in and electrification appears to be doing most of the driving."



Tony Hague
CEO, PP C&A

"As an SME, we don't have the immediate available resource to research into such new and complex vertical market sectors. That's where WMG comes into the equation."

Tony Hague continued: "They have the experts in the field, who have the technical/commercial knowledge and understanding, not to mention a host of new contacts. We have a long-standing relationship with WMG so had no hesitation in becoming one of the first firms in the country to take part in Ready 4 Electrification."

"Feasibility has been completed, with the next step being to finalise a strategic project we can work together on that will help us gain commercial advantage in the sector."

"We're already delighted with the results. Two new contracts with niche vehicle manufacturers have been secured and there's another in the pipeline...it has been a great start."

WMG's Ready 4 Electrification programme is supported by the WMG Centre High Value Manufacturing Catapult and provides assistance to support companies of all sizes to make the most of opportunities in electrification.

The initial support is awareness sessions followed by part-funded feasibility studies to help firms develop their EV roadmap and to provide masterclasses in key disciplines, including batteries, motors, power electronics and supply chain capability.

From there participants can benefit from a strategic project that will deliver action plans around collaborative R&D, Knowledge Transfer Partnerships and Internships, with manufacturers also able to access technical support with production processes and rapid prototyping.

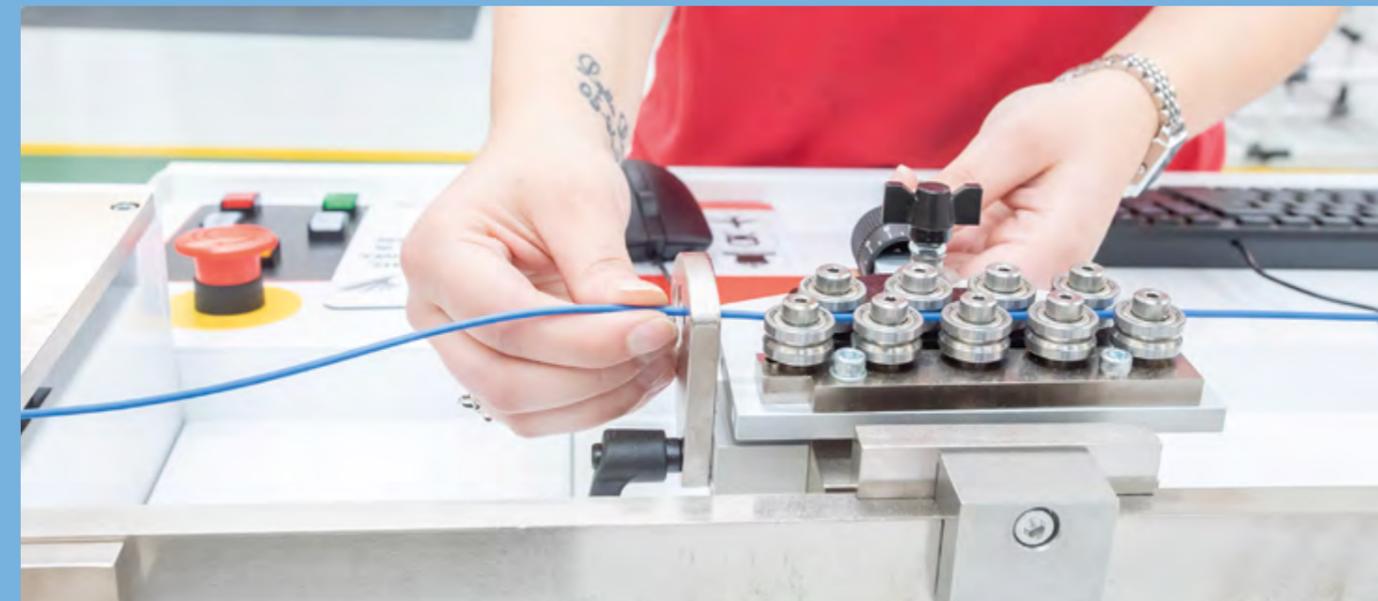
Simon Garwood, Innovation Manager at WMG, added his support:

"PP Control & Automation is a fantastic example of how the intensive research and coaching provided by the Ready 4 Electrification programme can upskill teams in companies and deliver real commercial advantages in a short space of time."

"Our experts understand the pressures faced by manufacturers and how important it is to tailor the support to overcome specific barriers and unleash the potential in our supply chain."

"We can deliver data, research and access to networks of specialists, not to mention the world class advanced test and manufacturing facilities available at WMG."

He concluded: "The UK has a fantastic opportunity to lead the world in vehicle electrification, but we can only achieve this vision if industry taps into the vast academic expertise and research at their fingertips."





Summary

This guide has highlighted key technical supplier relationships covering a broad set of categories, designed to add sought after value to customers.

From industrial design support and access to academia, and automation and legislation partnerships, to packing and shipping finished goods, every stage of the outsourcing approach is considered and maximised for manufacturers operating in today's economic reality.

Your focus is on growing sales revenue and market share. PP C&A share this focus with you. By working together in a collaborative manner, strategies that deliver measurable success will be developed for you.

A comprehensive outsourcing solution is a strategic enabler to that success and is best considered as a long-term partnership. This partnership between you and PP C&A is built on alleviating constraints to growth by first identifying business pains.

PP C&A is a leader in strategic outsourcing to some of the world's largest OEMs. And alongside a stringent process to source the very best technical suppliers, it is perfectly positioned to support your production requirements and take ownership of the supply chain.

When you're looking to grow but barriers are ever-present, PP C&A get to the root of the problem and unlock your true potential.

When you're looking to grow but barriers are ever-present, PP C&A get to the root of the problem and unlock your true potential.

Since 1967, PP Control & Automation has grown to be one of the world's leading providers of strategic outsourcing solutions.

PP C&A looks to adopt a consultative approach when engaging with customers, looking first to fully understand and appreciate potential areas of constraint and 'business pain', before designing a manufacturing solution that delivers specific remedies based on your individual needs. The solution PP C&A offers is able to deliver significant and measurable results.



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OUTSOURCING**



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**CONTRACT
MANUFACTURING**



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Complete manufacturing solutions

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