



High performance
adhesives and coatings

Company profile



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Our story

It was in 1902 that ITAC's founder, John Markus, discovered that tyre scrapings dissolved in solvent made an excellent rubber adhesive, which when painted onto the outside carcass of a tyre provided an ideal priming coat on which tyre thread could be bonded. He had the full backing of his wife, Miriam, who endured the physical strain of manually transporting the tyres for processing before valiantly returning them to the client once treated! It was this kind of grit and determination that set the tone for ITAC to become one of the UK's leading producers of high-performance adhesives and coatings despite two world wars, six recessions, and a devastating fire which brought the factory to the ground in 1988.



In 2020, ITAC was acquired by our parent company HD Sharman, and is still the manufacturing arm of the UK's market leading commercial roof protective coatings system. However, ITAC's primary specialism is in the formulation and production of paintable coatings and sealants, spreadable adhesives, specialist fabric coatings, and film coatings within a wide range of sectors. Continuous developments in advanced materials, manufacturing methods, and customer preferences place great emphasis on research & development and continuous improvement. With this in mind, ITAC continue to develop our value proposition, and ability to align the chemistry with the application for both broad and niche requirements.





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Formulation

What we do

Capabilities

Adhesive and coating formulations that support market leading brand and product development.

Supporting our customers with their own business goals, whether this be at the concept, formulation development, trialling or scaling up phases, is what ITAC do best! Through collaborative formulation partnerships with our customers, we design customised adhesive and coating formulations to meet specific requirements based on:

- application substrate properties
- performance requirements of the end use application
- environment the adhesive or coating is expected to perform in
- the production environment
- the chosen application method

We can also help to improve and refine existing formulations to provide optimal performance.

ITAC have expertise across a range of polymer systems including polyurethane, silicone, acrylic, poly-aspartic, neoprene, SBR, nitrile and natural rubber. Our solvents expertise includes water, acetone, ethyl acetate, MEK and toluene.

The above combined enable us to interpret our customers' needs and advise on the polymer technology that will satisfy or exceed their product requirements, whilst also complimenting their own manufacturing methods.

Our expert team of chemists, chemical engineers and materials scientists are on hand to support problem solving and decision making, and we have a fully equipped lab for R & D, and for testing and trialling of new or improved formulations.

ITAC's agile approach to doing business enables smaller nuances to be addressed, as well as wider market demands, to create application specific formulations.





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Manufacturing

What we do

Capabilities

A responsive, agile, efficient & effective service that enables our customers to focus on what they do best.

With proven competence in polymer compounding across a wide range of applications, ITAC provide a confidential toll manufacturing service for our customers. We are flexible in our approach so partners can provide us with their formulation and raw materials, or we can supply these as part of the package.

Our aim is to reduce the hassle for our customers by absorbing the risks, costs and infrastructure associated with the dissolution process required for specialist coating materials. We run a Kanban operation for customers with regular requirements and hold daily operations meetings with manufacturing, logistics and sales leaders. This supports our goal in getting things right first time, every time!

We monitor and control critical to function process parameters that are vital for performance in countless applications and processes. Frequent calibration of process equipment enables repeatable batches and uniform performance.

Our comprehensive range of mixing equipment provides dry as well as wet compounding facilities, and include bulk mixing vessels with capacities ranging from 25 litres to 3,000 litres. These can handle a wide range of viscosities, from water thin liquids to extremely thick pastes (100 cPs to 2m cPs).

ITAC have proven technical competence in the legislative requirements for the safe manufacturing, storing and shipping of hazardous materials including DSEAR and ATEX. Our ISO 9001:2015 and ISO 14001:2015 certifications ensure the right protocols are followed at all stages of our operations whilst minimising our impact on the environment.

The team at ITAC are committed to making a positive contribution to becoming a more sustainable business and sector. We are actively engaged in research and development of new methods, materials, and technologies to keep abreast of the environmental challenge, and the rapid pace of change in the manufacturing industry.





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Applications

Sectors and Applications

Technical adhesive and coating products as diverse as our customers' needs.

We know it can be difficult to find an adhesive solution that meets your unique design, manufacturing, and quality requirements. That's why ITAC have a dedicated team of chemists who develop custom-formulated solutions for a wide range of sectors and applications. These include but are not limited to:

Graphics

For over 20 years, ITAC has worked with companies on a regional, national, and international level to develop a continually evolving range of coating adhesives specially formulated for mounting, laminating, and encapsulation for the graphics industry. From vehicle wrapping to window films or fine art lamination, our adhesives and coatings have enabled uncompromised designs, better aesthetics, and lower costs in terms of application, installation, and maintenance of printed media.

Whether it be our acrylic pressure sensitive, heat activated and dry mounting adhesives, or our durable and versatile polyurethane based coatings, our products are designed and manufactured specific to your display requirements. Outstanding delivery and performance can be expected with every application.

Technical textiles

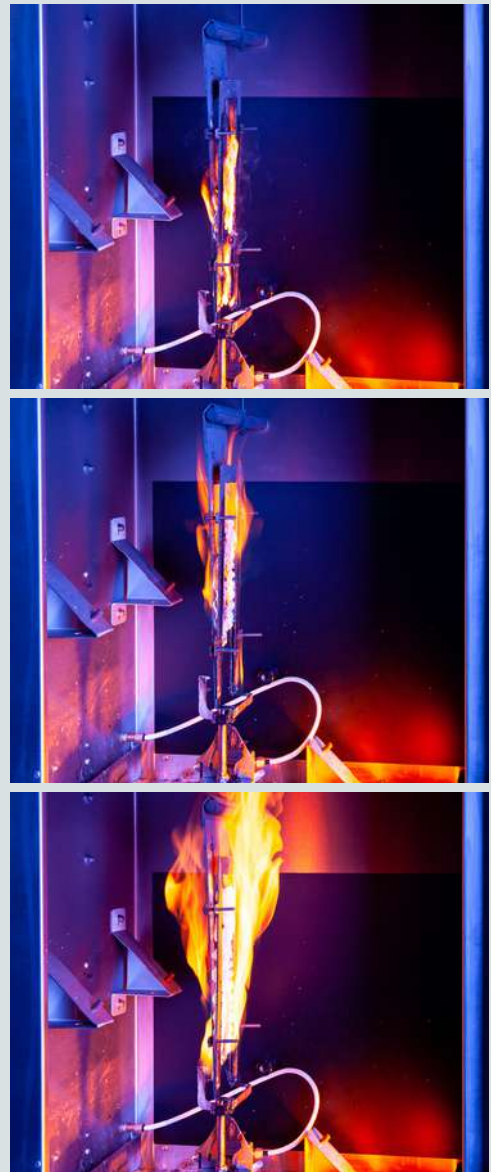
ITAC design and manufacture a variety of polyurethane and silicone coatings specifically formulated for high performance fabrics used for a diverse range of end uses. These include outdoor clothing, life saving equipment, personal protective equipment and passive fire protection.

We work closely with fabric coaters and their customers to develop new products or enhance existing ones. We develop a deep understanding of the end use, the way the product is made, and the fabric coating process itself, before proposing an appropriate formulation to meet performance requirements.

Building and construction

ITAC manufactures and supplies a variety of polyurethane, silicone and acrylic adhesives and coatings that are specially formulated for the construction and building safety sector.

From intumescent coatings for passive fire protection, to neoprene based coatings for insulation, our products form an integral part of the finished building. They enhance substrate properties, performance, longevity, and appearance for rigid, flexible, and fleece-backed substrates. Whether it is an acrylic, a polyurethane, or a silicone based adhesive or coating, we ensure the right chemistry is used with the right application for optimal performance.





Industrial

ITAC's specialist rubber-based adhesives and coatings provide an ideal solution for industrial gasket materials that need to maintain their integrity in corrosive, extreme temperature, aggressive chemical and high pressure environments. These can safeguard against the financial costs associated with downtime, and the environmental and health risks associated with leaks due to failed gasket and sealing technologies.

ITAC can also modify adhesive coating formulations to achieve specific colour properties. This enables our clients to manufacture a variety of end use rubber gasket materials which can be categorised and readily identified by users for correct application.

Sport and recreation

ITAC have designed and manufactured best in class technical adhesives and coatings for the sports and leisure sector for more than 20 years.

Our silicone and polyurethane based coatings have been successfully applied to a diverse range of outdoor fabrics used for tents, ground sheets, marquees, inflatables and even hot air balloons!

ITAC provide the high performance where and when it matters by imparting beneficial properties to the given substrate. These include abrasion resistance against wear and tear, UV resistance to protect against fading and water resistance so products remain fit for purpose and design. Our coatings can also build air tightness into products to control the passage of air, (or other gaseous media), through fabric which is often a critical requirement for many end uses.

Food and beverage

ITAC specialise in the formulation and manufacture of durable food conveyor belt coatings. These are designed to provide conductive properties together with resistance to extremes of temperature, contamination, and mechanical abrasion.

ITAC's polyurethane coatings provide high resistance to water, grease, oils, cleaning materials and other liquids. Reduced absorption rates make conveyor belts durable, resilient, and efficient. Therefore, spillages do not affect the conveyor belt substrate, allowing simple yet efficient cleaning up processes to be used, avoiding unnecessary downtime and minimising costs.

We work closely with food and beverage conveyor belt manufacturers to ensure our coating materials comply with FDA, EU, and all relevant food contact regulations.

Case study

Laminating films

Acrylic Heat Reactivable Pressure Sensitive Adhesive

Over 20 years have passed since ITAC received our first heat reactivatable adhesive enquiry to help produce a coating with pressure sensitive properties. Since then, we have worked with companies on a regional, national, and international level to develop a continually evolving range of coating adhesives specially formulated for mounting, laminating, and encapsulation for the graphics industry. These have all been designed to enhance the appearance, performance, and protection of printed media.

Challenge

The synthetic polymers used in the processes of mounting and laminating graphics are thermoplastic in nature which means they soften or reactivate when exposed to heat. The heat at which the adhesive reactivates is controlled through the formulation process but there can be disastrous consequences for the product if the formulation is wrong. For example, if a reactivation temperature is too high, the laminating process could result in damage to the inks and resins in the print and the polymeric films being used.

The adhesives can also be formulated to have varying levels of tack strength to provide the required pressure sensitive effects. Again, the chemistry needs to be carefully aligned with the product and application to ensure the correct level of repositioning and removability is enabled once the initial bond has occurred.

Solution

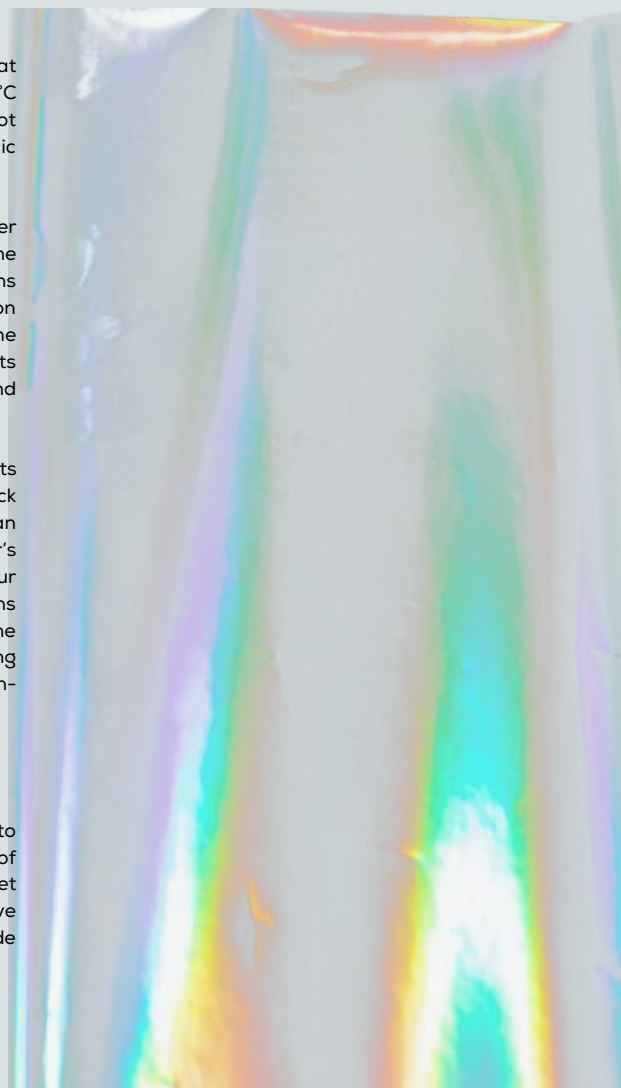
ITAC can formulate and manufacture adhesive coating formulations that have varying reactivation temperatures. We often aim for between 80°C and 90°C. This is the temperature many end clients use during the hot press laminating process for bonding the protective film on to the graphic media substrate.

As mentioned above, damage to the printed media may occur if higher temperatures are used. However, Itac also pay special attention to the danger of lower reactivation temperatures. Often, coated laminated films are transported through hot climate locations. If the reactivation temperature is too low, the hot conditions in transit could result in the adhesive softening or reactivating prior to the coated film arriving at its destination. This could result in the materials sticking together and rendering them unfit for purpose.

By using ITAC's formulation expertise, our clients can avoid the high costs associated with using the wrong reactivation temperatures and tack strengths being applied in the coating process. Furthermore, Itac can address the little nuances when our clients need to satisfy their customer's requirements for more unique applications. Whilst many of our competitors focus on standardising their product offerings and operations to meet broad market demands, ITAC are willing to spend time collaborating with alternative suppliers, trialling, testing, and providing working samples until the desired outcome is reached. For ITAC non-standard is standard!

Outcomes

ITAC's agile, responsive, and flexible approach has helped our clients to differentiate their product offer through the manufacture and supply of adhesive coatings with additional functionality to what the market considers to be the norm. A mutually beneficial and collaborative partnership remains today between ITAC and the company that made that initial enquiry more than 20 years ago.





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itac
the chemistry

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Properties

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Properties and Performance

Enabling our customers to differentiate their product offering with additional functionality.

ITAC provides real value to the production of new products and the improvement of existing ones. We design and manufacture our specialist adhesives and coatings to satisfy a wide range of performance requirements. These include properties that promote:

Durability

Adhesives and coatings that protect and preserve for long-term performance, reliability and quality.

Ease of use

Adhesives and coatings designed with speed and simplicity in mind for both the manufacturer and the end user.

Bonding performance

Formulations that provide the correct bond, tack, grab peel and shear strengths for optimum performance in application and end use.

Permeability

Adhesives and coatings that promote the right levels of water resistance and air tightness for specific requirements.

Health and safety

Thermal insulation and flame retardant coatings that safeguard life and preserve property.

Specialist effects and properties

Customising adhesive and coating solutions to satisfy niche requirements and expectations.

We are constantly innovating to develop new adhesives and coatings that meet the ever-changing needs of our customers.



Great Chemistry

For ITAC, great chemistry isn't just about our coating application formulation expertise. It's also about the relationships we have with our customers as we support them to achieve their internal and external business objectives.

Whether it be at the initial concept and design stage, or when taking a product to market, ITAC are committed to helping our customers to develop high performance products. This is achieved through a partnership whereby ITAC gain a clear understanding of our customers' requirements at each stage of the process. This, together with a developing sense of trust in our expertise, ensures desired outcomes are reached.



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Our values

itac
Great chemistry

What Matters to us

Itac's core values portray how we work and are reflected in the way we conduct ourselves as an organisation, as a team, and as individuals.

These are key ingredients in the great chemistry we provide, and guide our performance and commitment in achieving the highest standards for our customers.



Sustainability and community

ITAC are committed to making a positive contribution to becoming a more sustainable business and sector. As members of the British Coatings Federation, we have pledged our support for achieving Net Zero by 2050 and will be committed to reaching ambitious targets throughout the road map.

We are driving Research and Development initiatives to explore ways of expanding our range offering away from solvent based adhesives and coatings where feasible. Alternative solutions will be synergistic to our existing operations and products, including water-based and bio-based adhesives and coatings. We will also focus our efforts on developing products based on 100% solids chemistry such as silicone, poly-urea, and epoxy-based systems.

Our aim is to ensure ITAC is a responsible steward of the environment, the health and safety of our stakeholders and the communities that we touch through our operations, products and services. A recent initiative involved ITAC and our manufacturing partner taking measures to prevent up to 30,000 plastic interleaves from going to landfill. To offer some perspective, this was enough plastic material to cover the area of four football pitches! Another initiative has seen changes to the supply arrangements of primer material to a key customer. The change to multiple-use rather than single-use drums combined with a simplified supply chain resulted in a significant reduction in their monthly CO2 emissions.

At ITAC, we firmly believe even the smallest gestures can have a huge impact on our local community and we strive to make a positive contribution. Our team regularly fundraise for good causes and in 2021 to 2022 we raised just over £3,400 for local domestic violence and young person's homelessness charities. We make regular donations to support local school PTA activities, sponsor community events, and wherever possible support other local businesses by using their products and services.

Doing our bit and building positive relationships within our community matters!

Feedback

What our customers say

A proven track record in delivering what really matters, and more, to the highest standards.

"ITAC bring continuity of supply. This is key. We have a £multi-million contract with our client. We value ITAC'S ability to change and grow with us and adapt to how we operate".

"There are so few suppliers that could do the bespoke work ITAC does for us on this small scale and have that range of equipment".

"A great team. From the shop floor to admin and management, they are all people I can talk to. The whole attitude is great".


"We see ITAC as our technical arm. It's critical that they understand the technical requirements of an adhesive and that we understand its limitations ".

"With our larger suppliers it's all lost in translation. With ITAC we can discuss things there and then and get things moving without going through layers of management".



How can we help? Talk to us




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