



**CONDALE
Plastics Ltd**
PLASTIC EXTRUSION
MANUFACTURERS

Extrusion Projects Implementation Guide



Inside this guide

- ③ Who we are
- ④ What we do
- ⑥ Applications
- ⑧ Why Condale Plastics
- ⑩ Sustainability
- ⑫ Client project journey
- ⑭ Services
- ⑯ Materials
- ⑱ Here to help



Who we are

Condale Plastics is a specialist manufacturer of bespoke plastic extrusions located in West Sussex in the UK. Renowned for our innovative approach to thermoplastic extrusion design and manufacture, we work with our customers to refine ideas, overcome challenges and enhance our customers' products.

Our roots in extrusion

Established in Croydon in 1969, Condale Plastics grew steadily, leading to the acquisition of a second factory in East Grinstead, where we consolidated our plastic extrusion operations in 1995.

Our 6,000 square metre manufacturing facility now includes a state-of-the-art tool room and 33 extrusion lines including a separate clean medical unit for the production of medical grade extrusions.

Plastic extrusion expertise

We have achieved an enviable reputation for high quality service, innovation and technical expertise, pushing the boundaries of plastic extrusion technology by using a diverse range of materials to create versatile and complex plastic extrusions for all applications. To find out if Condale Plastics has the solution to your challenge, contact our team today.

What we do

Condale Plastics offers a complete plastic extrusion service to its customers. It is a process we have specialised in for more than 50 years, manufacturing high quality custom plastic extrusions to meet our customers' specific requirements.

When we take on a new project, we commit to guiding our customers through each stage, from the initial plastic extrusion design through to tool production and manufacturing. Our plastic extrusion services extend right through to the delivery of the end product. Our highly skilled and experienced staff, coupled with our modern tool manufacturing and extrusion facilities, ensure that product designs are optimised for extrusion and that new concepts and products are delivered in the shortest of timeframes.

Our plastic extrusion services include but are not limited to:

- Custom-made samples
- Material, colour and plastic property support
- Design support
- On-site manufacturing in our UK-based factory
- Customer support from initial enquiry through to delivery of the order

Our plastic extrusion services include samples of your extrusion prior to the production run and our expert team is on hand to help ensure a high quality, lasting finish.





Applications

Wondering what the best plastic extrusion is for your application? Many of our extruded plastic products are used every day. We supply both standard and bespoke plastic extrusions to a variety of industries.

These include plastic applications for building, construction and engineering industry. In the latter, plastics have a number of uses, including for the protection of operatives or as a component in roller track mechanisms.

We have also seen increased demand for extruded plastic in the lighting sector. At Condale Plastics, we have specialists with years of experience in this area, where plastic extrusions are used for lighting diffusers, refractors and lenses. We've also seen demand for medical-grade plastic tubing and profiles. Medical-grade plastic applications are produced in our own independent and anti-microbial manufacturing facility. Plastic extrusions play an integral role in the medical industry as they are often used in devices delivering and collecting fluids to and from the body.

Since our versatile, bespoke extrusions can be made in many different shapes and sizes, they can be used in places you may never have expected. The horticultural industry uses plastic profiles for tool and chainsaw covers, tree ties, decking and more. The retail sector makes practical use of extruded plastic for display shelves, poster hangers, menu holders and frame sections. We can create plastic extrusions for any industry or office. The possibilities are endless. Want to learn more about the best extrusion for your application? Browse our range of applications below.

Building & Construction

Including heating, ventilation and refrigeration trims, roofing profiles, window profiles, stair protectors and rails and fall protection walkway systems.



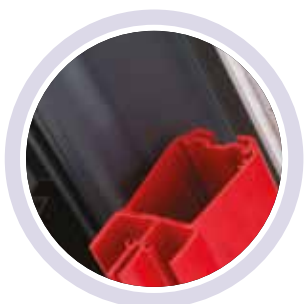
Exploration

Including core sample tubes, water filtration, inclinometer casing tubes and underwater sonar buoys.



Engineering

Including insulating pads, conveyor tubes, cable ducts and covers.



Horticulture

Including hydroponic growing trays, lighting profiles, irrigation tubing, trimmer guards and gutter systems.



Electronics

Including busbar insulators, antistatic bars, EV charger components and radio/5G antenna covers.



Lighting

Including lighting diffusers, lenses, emergency photoluminescence systems and aerospace lighting.



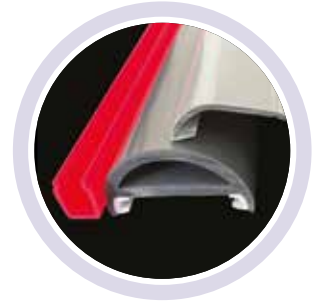
Materials Handling

Including warehouse crash barrier protection, retail protection systems and hospital wall protection.



Retail & Display

Including ticket profiles and holders, lighting diffusers and trunking and profiles for retail display fixtures.



Medical

Including catheter tubing, feeding tubes, multi-lumen tubes and fluid management tubing.



Sport & Leisure

Including decking profiles, caravan and motorhome components, boat trims and window blind profiles, mouth guards and training aids (flags/posts).



Office Furniture & Partitions

Including office partition trims, floor cable tidies and cable trays, stretched fabric tensioners and door tracks.



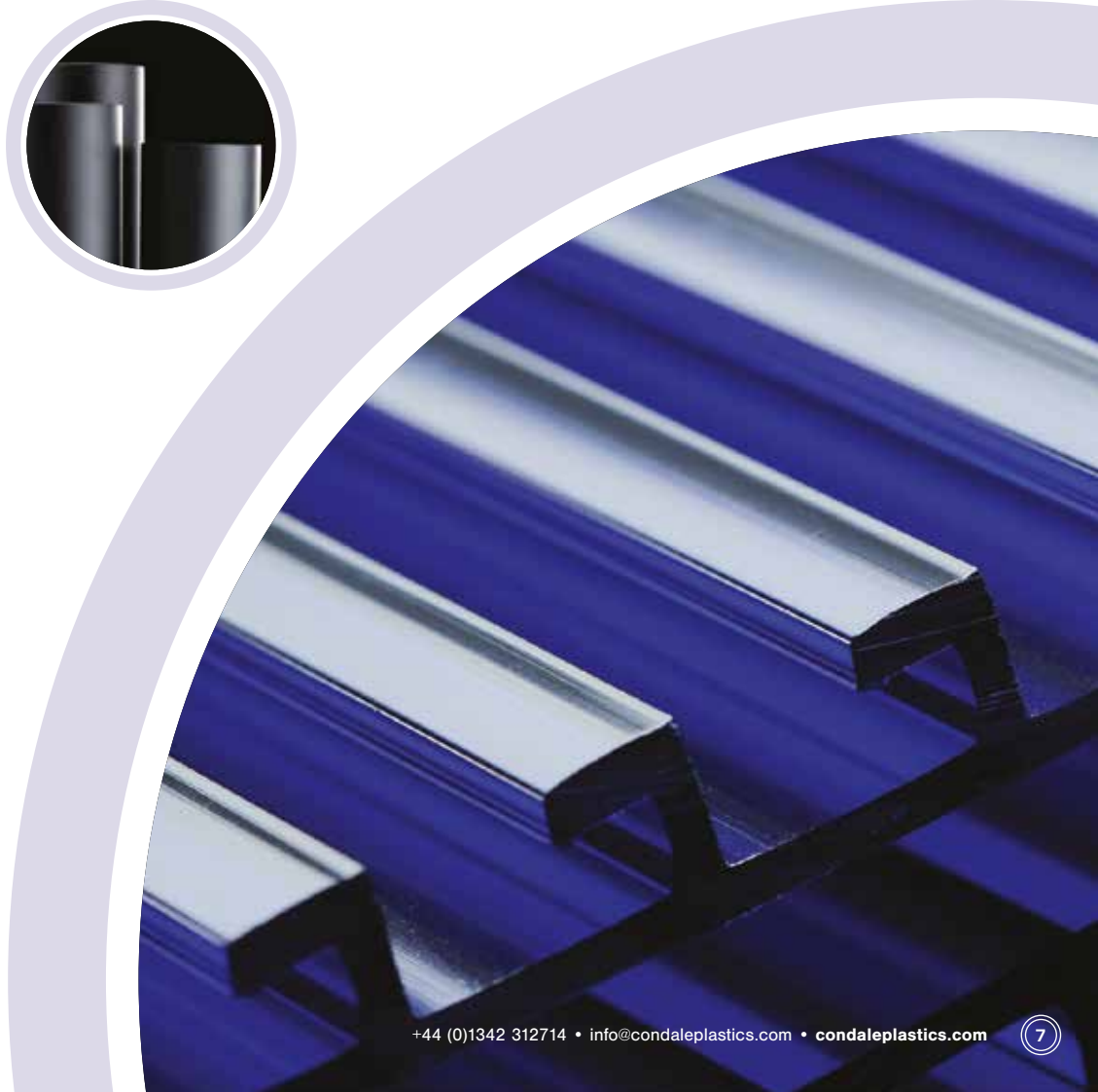
Transport

Including commercial vehicle trims, vehicle lighting diffusers and lorry body trims.



Packaging Cores

Including packaging tubes, film cores and tape cores.



Why Condale Plastics

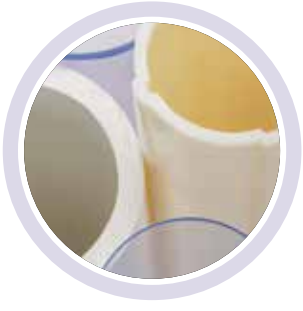
At Condale Plastics, we consider precision, innovation and sustainability essential. Our ethos is built around forging a deep understanding of our clients' needs and every project we undertake is a collaborative journey to achieving exceptional outcomes with them. Our commitment to exceeding expectations embodies this philosophy through a blend of technical expertise, forward-thinking sustainability practices and a client-focused approach that prioritises clear communication and tailored solutions.

Our success lies in our ability to adapt and respond to the diverse and evolving needs of the markets we serve, using:

- The complexity of the profiles we produce
- The diversity of materials we master
- Our in-house capabilities in tool manufacturing and maintenance
- Our unwavering commitment to sustainability
- Our ability to deliver with exceptionally short lead times.

These pillars not only define our approach but also ensure that we remain at the forefront of the plastic extrusion industry. They enable us to provide technically superior, environmentally responsible solutions that are perfectly aligned with our clients' strategic objectives.





Complex Profiles

Our team's extensive experience and advanced production capabilities allow us to create highly intricate and precise profiles, tackling challenges that others might not be able to manage.



In-House Maintenance

Our preventative and meticulous maintenance programme is designed to avoid unnecessary downtime and enhance production efficiency, ensuring the rapid delivery of high-quality products.



Diverse Materials

We pride ourselves on our ability to source and utilise a wide array of materials, ensuring that each product meets and surpasses our clients' specific requirements.



Sustainability

Our commitment to the environment is evident in our adherence to ISO14001 standards, alongside numerous green practices that reduce our ecological footprint without compromising on quality or efficiency.



In-House Tool Room

With our comprehensive on-site tool manufacturing facilities, we are equipped to launch projects with remarkable speed and accuracy, giving our clients a significant advantage in time to market.



Short Lead Times

Thanks to our unwavering commitment to innovation and operational efficiency, we offer some of the shortest lead times in the industry, from project initiation through to production and delivery.

Sustainability

Condale Plastics is committed to minimising its impact on the environment. We're committed to the environmental standard ISO14001, and as a matter of course, we take the following actions to help reduce waste:



Wherever possible, all plastic waste is re-chipped and reused in-house or sold for reprocessing.



We carefully consider the power requirements of new machinery before buying.



All polythene material bags are recovered, baled and sold for recycling.



The hot air produced by equipment such as chillers is recycled into our factory during the cold season to save on energy used for heating.



All cardboard waste is cut down for use as pallet liners between products.



Waste metal produced from our tool room is sold for recycling.



Excess water is kept to a minimum through filtration and recycling.



We make use of recycled and sustainable materials in our products wherever possible.

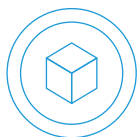




Services

Condale Plastics offers a complete range of services related to the plastic extrusion manufacturing process.

These services include:



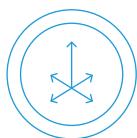
Plastic Extrusion Design

Optimising the function of your design through our extrusion design capabilities and experience.



Project Management

Our technical sales engineers will guide you through the whole process.



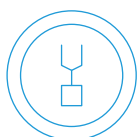
Plastic Extrusion Tooling

Designed, engineered and tested on-site by our experts, for exact results.



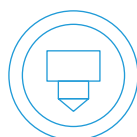
Finishing & Secondary Operations

We have a range of in-line printing, notching, punching, rolling and drilling equipment.



Plastic Extrusion Manufacturing

Our versatile extrusion lines can produce complex profiles up to 500mm in width.

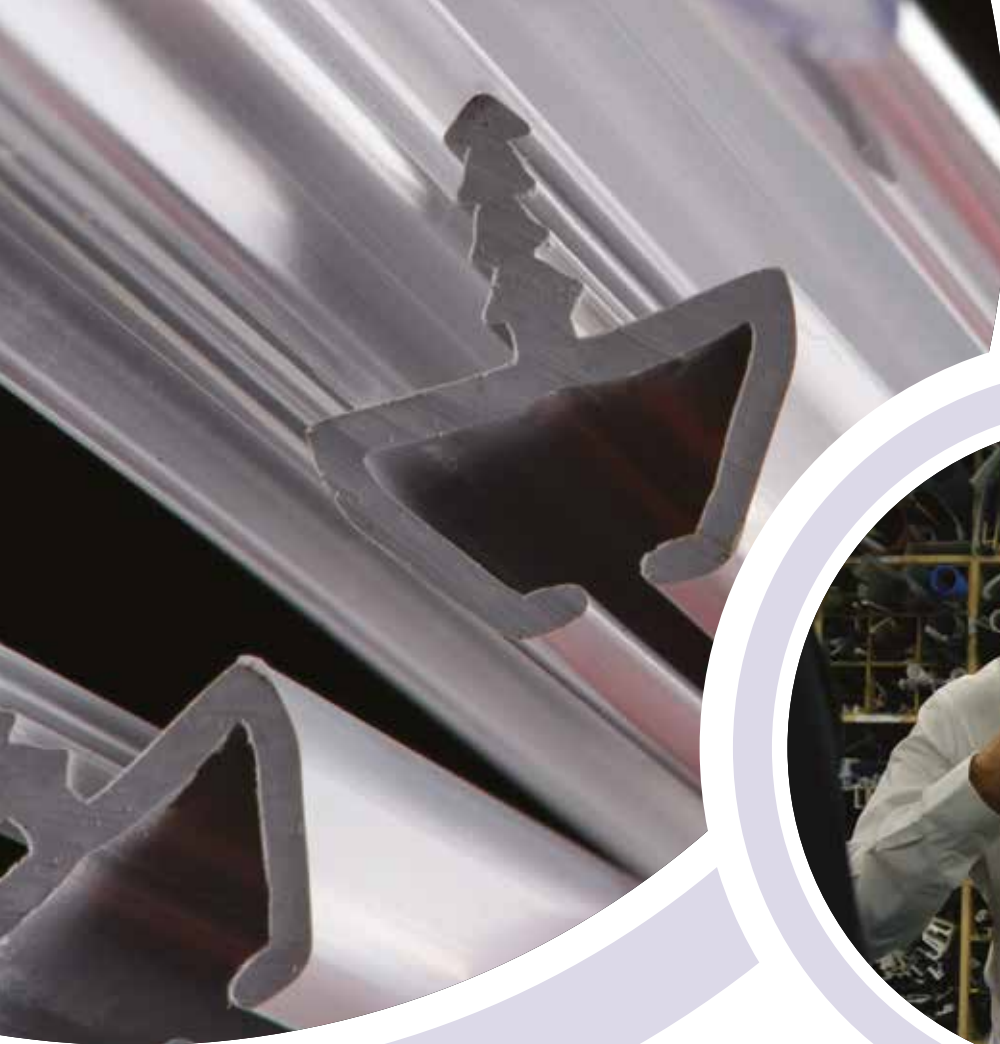


3D Printed Rapid Prototyping

Save time and money by testing and developing your design before manufacturing.







Client project journey

At Condale Plastics, we understand that every project is a unique endeavour with its own set of challenges and requirements. Our dedicated approach to your project ensures that from the first point of contact to the delivery of your bespoke plastic extrusions, your experience is seamless, transparent, and tailored to meet your specific needs.

We believe in collaboration. We begin by diving deep into your project's requirements, ensuring that every detail is captured and every challenge is understood. Our expert team, equipped with decades of experience in plastic extrusion, works closely with you to bring your vision to life. We turn your concepts into reality through meticulous design, precise tooling, and expert manufacturing, ensuring quality at every step.

Your journey with us is more than just a transaction; it's a partnership. We are committed to providing solutions that meet your specifications and exceed your expectations. We don't just create plastic extrusions—we build long-lasting and innovative solutions that drive your success.

①

Clarify Requirements

We work with you to understand exactly what you want to achieve and the specific design requirements.



②

Establish Design

Our in-house designers will review your technical drawings, define which materials are suited to your requirements and design the unique extrusion tool for your product.



③

Manufacture Tool

In our tool room and manufacturing plant, we will create a unique manufacturing tool for your profile.



④

Produce & Approve Sample

We create an initial design sample to verify it meets your exact design requirements.



⑤

Full-Scale Production

When the design is proven, we begin full-scale production of the length and quantity required.



⑥

Distribution

We safely package your products and our national and international distribution partners ship them to you.



Materials

As a specialist thermoplastic extrusion manufacturer, our team are able to produce bespoke extrusions from our West Sussex factory in a range of different plastic extrusion materials.

These extrusion materials include conventional plastics like Rigid PVC (uPVC), Flexible PVC, ABS, Polypropylene, Polyethylene, EVA and HIPS. We also deal with more specialised plastic engineering materials, such as ASA, PC/ ABS, Polycarbonate, PETG, Noryl, Impact Acrylic, Acetal, Nylon, Styrolux and Styrosun. We work with flexible plastic and rigid materials to offer extrusions for every need.

What should I consider when selecting plastic extrusion materials?

The choice of thermoplastic material needs to be carefully weighed up depending on the application. A number of factors need to be considered, such as interior or exterior use, impact strength, low/high-temperature resistance and degree of clarity on clear materials. It's also important to consider the hardness/softness of the material, electrical properties, fire retardant properties and halogen-free properties. Some plastic extrusion materials need to be chemical or temperature-resistant, while others may need to have adhesive properties. Our experts will be able to advise on the best custom-made solution for your needs.

All our plastic extrusion materials are from the best quality sources and we are always trialling new ones. Many of our products are made from recycled materials and are designed to have a long life cycle. Our expert team will oversee the entire extrusion process, from initial design and enquiry through to manufacturing and delivery. Most of our extrusions are available in a choice of colour, so discuss your bespoke order with our plastic specialists today.





ABS

Natural and clear grades. Good high and low-temperature performance. Good adhesive properties. Mainly internal use. Most grades are food-approved. Good rigidity and chemical resistance. High impact. Fire-resistant grades are available.

ASA

Similar to ABS but for outdoor use. UV resistant and good high and low-temperature performance.

Polycarbonate

Good high-temperature performance. Extremely tough. A wide range of grades is available, including UV-stabilised and superior flame-retardant grades. Clear and frosted grades are available. Limited chemical resistance.

EVA

Good recovery. Range of hardness. Good clarity.

Flexible PVC

Various softness up to semi-rigid. Wide range of colours and grades plus clear. Used mainly indoors, with some external use. Filled or unfilled grades are available.

Rigid PVC

Extremely versatile. Wide range of colours and grades (including clear grades). Indoor and outdoor use. Food grades are available. PETG Food-approved. High clarity. High impact. UV stable grades are available.

Acrylic

High clarity. Moderate impact resistance. Good light transmission. Good chemical resistance.

Polyethylene

Good resistance to chemical environments. Used indoors and outdoors. Good low-temperature performance. Low toxicity levels, tough. Low smoke, zero halogen grades available.

Polypropylene

Good resistance to chemical environments. Extremely tough, but the co-polymer hinges well. Good high-temperature performance. Mainly indoor but some external use. Low toxicity levels, LSOH grades available. Homo-polymer is clearer and stiffer.

PPO/PS Blends

Opaque, rigid, hard and strong with low creep. Robustness offers dimensional stability, electrical insulation, and heat resistance. A reliable choice for demanding applications like hot water, instrument housings and internal electrical components.

Polystyrene

Mostly used indoors. Some external use. Good adhesive properties. Range of colours also clear grades available. Fire-resistant grades are available. Outdoor grades.

Additional Materials Available

We can also source a wide range of additional engineering-grade materials suitable for a diverse range of unique applications.



Here to help

We can help you achieve your desired extrusion, no matter what stage of your design process. Our technical sales engineers boast extensive experience and in-depth knowledge to identify which extrusion solution best suits your unique application.

If you already have a technical design, we will steer you through the development process, recommending the most suitable materials for your application and providing a comprehensive quote. Our specialists are here to help:

info@condaleplastics.com

+44 (0)1342 312714





Condale Plastics Ltd
Independent Business Park
Imberhorne Lane
East Grinstead
West Sussex
RH19 1TU
United Kingdom

+44 (0)1342 312714
info@condaleplastics.com

condaleplastics.com