PLASTICS EXTRUSIONS FOR THE 21ST CENTURY

Condale Plastics, established since 1969, has achieved an enviable reputation for high quality, service and versatility in the design and production of extrusions. Our skills and tenacity in the generation of new designs complemented by our manufacturing experience of almost 40 years enables us to produce the most complex profiles in the shortest of lead-times.

With a manufacturing base of 50,000 square feet and over 30 extrusion lines located in East Grinstead, we are the largest general purpose extrusion company in the South of England. Our modern extrusion plant and in-house design and toolmaking facilities provide the flexibility to satisfy the most demanding customers.

Our purpose built tool-room incorporates state of the art design systems and tool manufacturing equipment. The CAD facility accepts designs in a range of formats. If required, our well-trained and experienced technical support and design staff will assist you with everything from the selection of materials to the optimisation of your design for manufacture.

Once a design is approved, drawings are transferred seamlessly across our secure network to the latest wire-erosion equipment and computer controlled machining centres. This facility supports our extrusion plant but more importantly enables us to develop and produce tooling to suit our customer’s needs in the shortest possible time. Over the years this has proved invaluable.
Condale Plastics produce rigid and flexible profiles, tubes and co-extrusions (where a combination of flexible and rigid PVC is extruded together or two different colours are produced together). We produce profiles up to 300mm wide and tubes to 160mm outside diameter.

Plastic extrusions are available in a wide range of materials including: uPVC (Rigid), PVC (Flexible), Cellular PVC, ABS, TPE, Polycarbonate/ABS Alloy, Polythene, Polypropylene, Polystyrene, High Clarity PETG, Acrylic, Polycarbonate and Nylon. Other thermoplastic materials are available if required. Please consult with our technical support staff on your specific requirements.

We hold a large range of rigid PVC colours in stock and in addition can offer a full colour matching service for across the range of materials.

Accurate in-line cutting facilities are available. For added accuracy we can offer an out of line cutting service.

We can carry out post or in-line fabrication tasks such as: drilling, punching and slotting.

We also have our own library of tools; this includes a comprehensive range of tube diameters and an extensive range of profile tools to produce rectangular and square tubes, channel sections, ‘H’ sections, ‘T’ and other sections.

We supply a variety of industries including the following: Shop Fitting, Office Partitioning, Lighting, Medical Products, Building, D.I.Y, Furniture, Domestic Appliance, Marine, Sports, Toys, Point of Sale, Packaging and Automotive. Our products are regularly seen in everyday use.

Whatever your requirements Condale’s resources are readily available and our Technical Sales staff would welcome the opportunity to discuss them with you. Please do not hesitate to contact us.
<table>
<thead>
<tr>
<th>MATERIAL TYPE</th>
<th>SPECIFIC GRAVITY</th>
<th>SOFTENING TEMP °C</th>
<th>PROPERTIES</th>
<th>TYPICAL USES</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPVC (Rigid PVC)</td>
<td>1.4 - 1.6</td>
<td>65 - 75</td>
<td>Extremely versatile&lt;br&gt;Wide range of colours and grades (including clear grades)&lt;br&gt;Indoor and outdoor use&lt;br&gt;Food grades available&lt;br&gt;Low cost</td>
<td>Windows, tubes, trunking, shrouds, glazing, cladding, trims, packaging, inserts, ticketing strips, toys, point of sale, tile edge trims, crack inducers</td>
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<tr>
<td>Cellular PVC</td>
<td>0.6 - 0.9</td>
<td>65 - 75</td>
<td>Extremely light in weight&lt;br&gt;Can be produced with or without skin&lt;br&gt;Indoor or outdoor use&lt;br&gt;Low cost&lt;br&gt;Can be nailed</td>
<td>Building and window products (i.e., cladding, skirting, architraves etc), finishing trims, wood replacement applications</td>
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<tr>
<td>PVC (flexible PVC)</td>
<td>1.2 - 1.6</td>
<td>-</td>
<td>Various softness up to semi-rigid&lt;br&gt;Wide range of colours and grades plus clear&lt;br&gt;Used mainly indoors, some external use&lt;br&gt;Filled or unfilled grades available&lt;br&gt;Low cost</td>
<td>Hosing, gaskets, seals, fenders, pumpers, handrails, sleeves, straps, trims, T-barbed edging strips, water stops, medical tubing</td>
</tr>
<tr>
<td>ABS (Outdoor grade)</td>
<td>1.0 - 1.2</td>
<td>85 - 105</td>
<td>Clear grades&lt;br&gt;Good high and low temperature performance&lt;br&gt;Good adhesive properties&lt;br&gt;Mainly internal use&lt;br&gt;Most grades are food approved&lt;br&gt;Good rigidity and chemical resistance&lt;br&gt;High impact, medium cost&lt;br&gt;Fire resistant grades available&lt;br&gt;Outdoor grades</td>
<td>Water transfer tubing&lt;br&gt;Cold rooms&lt;br&gt;Freezer cabinets&lt;br&gt;Toys</td>
</tr>
<tr>
<td>ASA (Outdoor grade)</td>
<td></td>
<td></td>
<td>Mostly used indoors&lt;br&gt;Some external use&lt;br&gt;Good adhesive properties&lt;br&gt;Range of colours also clear grades available&lt;br&gt;Medium cost&lt;br&gt;Fire resistant grades available&lt;br&gt;Outdoor grades</td>
<td>Toys&lt;br&gt;Light diffusers&lt;br&gt;Point of sale&lt;br&gt;Film cores</td>
</tr>
<tr>
<td>H.I.P. (Polystyrene)</td>
<td>1.0</td>
<td>70 - 75</td>
<td>Good resistance to chemical environments&lt;br&gt;Used indoors and outdoors&lt;br&gt;Good low temperature performance&lt;br&gt;Low toxicity levels, low cost, tough&lt;br&gt;Low smoke, zero halogen grades available</td>
<td>Toys, water and gas pipe, tubes, packaging, protective trims</td>
</tr>
<tr>
<td>Styrosun (Outdoor grade)</td>
<td></td>
<td></td>
<td>Good resistance to chemical environments&lt;br&gt;Extremely tough but the co-polymer hinges well&lt;br&gt;Good high temperature performance&lt;br&gt;Mainly indoor but some external use&lt;br&gt;Low toxicity levels, LSOH grades available&lt;br&gt;Bio-degradable, low cost&lt;br&gt;Homo-polymer is clearer and stiffer</td>
<td>Non load bearing hinges, toys, tubing, protective plant and tree sleeves, oil pump tubes</td>
</tr>
<tr>
<td>POLYETHYLENE High and low density</td>
<td>0.97 (HD) 0.91 (LD)</td>
<td>65</td>
<td>Good resistance to chemical environments&lt;br&gt;Used indoors and outdoors&lt;br&gt;Good low temperature performance&lt;br&gt;Low toxicity levels, low cost, tough&lt;br&gt;Low smoke, zero halogen grades available</td>
<td>Toys, water and gas pipe, tubes, packaging, protective trims</td>
</tr>
<tr>
<td>POLYPROPYLENE Homo-polymer and co-polymer</td>
<td>0.90</td>
<td>90</td>
<td>Good resistance to chemical environments&lt;br&gt;Extremely tough but the co-polymer hinges well&lt;br&gt;Good high temperature performance&lt;br&gt;Mainly indoor but some external use&lt;br&gt;Low toxicity levels, LSOH grades available&lt;br&gt;Bio-degradable, low cost&lt;br&gt;Homo-polymer is clearer and stiffer</td>
<td>Non load bearing hinges, toys, tubing, protective plant and tree sleeves, oil pump tubes</td>
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<tr>
<td>CLEAR P.E.T.G.</td>
<td>1.27</td>
<td>75</td>
<td>Food approved&lt;br&gt;High clarity&lt;br&gt;High impact&lt;br&gt;Medium cost&lt;br&gt;UV stable grades available</td>
<td>Packaging tubes, point of sale, card shelves, menu holders, electronic component carrier tubes</td>
</tr>
<tr>
<td>CLEAR IMPACT ACRYLIC</td>
<td>1.20</td>
<td>80</td>
<td>High clarity&lt;br&gt;Good impact resistance&lt;br&gt;Medium cost&lt;br&gt;Good light transmission</td>
<td>Point of sale, card shelves, menu holders, lighting applications</td>
</tr>
<tr>
<td>STANDARD ACRYLIC</td>
<td></td>
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<td></td>
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<tr>
<td>POLYCARBONATE</td>
<td>1.20</td>
<td>120</td>
<td>Good high temperature performance&lt;br&gt;Extremely tough&lt;br&gt;Wide range of grades available including U.V. stabilised and superior flame retardant grades&lt;br&gt;Clear and opaque grades available&lt;br&gt;Higher cost&lt;br&gt;Limited chemical resistance</td>
<td>Light diffusers, low voltage light tubes for marking and directing applications&lt;br&gt;Roof trims&lt;br&gt;Light box</td>
</tr>
<tr>
<td>PC/ABS ALLOYS</td>
<td>1.2</td>
<td>110</td>
<td>Good high temperature performance&lt;br&gt;Superior flame retardant properties&lt;br&gt;Reasonable chemical resistance</td>
<td>Electrical shrouds profiles that call for superior flame retardance</td>
</tr>
<tr>
<td>NYLON 6</td>
<td>1.2</td>
<td>85</td>
<td>Many grades available&lt;br&gt;Cheapest nylon&lt;br&gt;Good fatigue resistance&lt;br&gt;Some moisture pick-up&lt;br&gt;Low friction and wear properties</td>
<td>Automotive applications, Pump immersion tubes for Barrels, Pneumatic airline tubing for machinery, Rods, Tubing</td>
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</tbody>
</table>

Condale also supply extrusions in the following materials:- Nylon 66, Nylon 11, Nylon 12, PPO (Noryl and Lurynal), TPE, TPV, TPU, EVA and MPR.
Please visit our web-site www.condale.co.uk or contact our sales staff for further information.
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| Nylon 66      | 1.14             | 110                | Very good chemical resistance  
                                                                 Very stiff and tough  
                                                                 Good for irradiation  
                                                                 Engineering grades  
                                                                 Low coefficient of friction  
                                                                 Low wear           | Machined parts and articles  
                                                                 Some Profiles  
                                                                 Rods               |
| Nylon 11      | 1.03             | 125                | Very good chemical resistance  
                                                                 Very good high and low temperature performance  
                                                                 Very good ageing resistance  
                                                                 Good dimensional stability  
                                                                 Good fatigue resistance  
                                                                 Very low coefficient of friction  
                                                                 Very low permeability  
                                                                 Very low moisture pick –up  
                                                                 Degree of clarity | Fuel, oil and gas lines  
                                                                 Air brake hosing  
                                                                 Catheters  
                                                                 Hydraulic hoses  
                                                                 Automotive  
                                                                 Textiles          |
| Nylon 12      | 1.01             | 100                | Huge range of grades  
                                                                 Low moisture pick-up  
                                                                 Low co-efficient of friction  
                                                                 Good dimensional stability  
                                                                 Good ageing resistance  
                                                                 Good oil resistance  
                                                                 Low specific gravity  
                                                                 Fire resistant grades  
                                                                 Good fatigue resistance | Cable sheathing  
                                                                 Pneumatic tubing  
                                                                 Air brake hosing |
| PPO (Noryl and Lurynal) | 1.1             | 100                | Good high temp performance  
                                                                 Good dielectric strength  
                                                                 Wide range of grades  
                                                                 Limited colours  
                                                                 Fire resistant grades  
                                                                 Good chemical resistance  
                                                                 Low smoke  
                                                                 Zero halogen grades | Electrical shrouds  
                                                                 Busbar covers  
                                                                 Automotive profiles |
| TPE (SBS & SEBS) | 0.9 - 1.2   | -                  | Wide range of grades and hardness  
                                                                 Including clear grades  
                                                                 Co-extrudes to HIPS, ABS & polypropylene  
                                                                 Replaces flexible PVC  
                                                                 Medical uses  
                                                                 Good recovery  
                                                                 Good cold set | Tubing, straps  
                                                                 Labels  
                                                                 Door seals and gaskets |
| TPV (EPDM Rubber & Polypropylene) | 1.0             | 125                | Good high and low temperature performance  
                                                                 Guide range of grades & hardness  
                                                                 Co-extrudes to polypropylene  
                                                                 Good recovery  
                                                                 Good cold set  
                                                                 Drinking water grades | Peristaltic pumps  
                                                                 Drinking water tubing  
                                                                 Seals and gaskets |
| TPU (Polyurethane) | 1.1             | -                  | Polyether & polyester type  
                                                                 Co-extrudes to rigid PVC & PETG  
                                                                 Mainly harder grades  
                                                                 Good recovery  
                                                                 Good wear & tear properties  
                                                                 Dynamic applications  
                                                                 Good clarity  
                                                                 Fire resistant grades  
                                                                 Good tube bend grades  
                                                                 Drinking water grades | Pneumatic tubing  
                                                                 Medical tubing  
                                                                 Marine and underwater applications |
| EVA           | -                |                    | Good recovery  
                                                                 Range of hardness  
                                                                 Good clarity | Crane and railway pads  
                                                                 Gaskets, labels  
                                                                 Tubing |
| MPR (Alcryn)  |                  |                    | Melt processable rubber  
                                                                 Co-extrudes to UPVC & ABS  
                                                                 Good cold set and recovery  
                                                                 Available in black and white | Door seals  
                                                                 Tubing  
                                                                 Co-extrusions |

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