

smart
aluminium extrusions

EXPERTS IN PRECISION ALUMINIUM EXTRUSION



YOUR EXTRUSION EXPERTS

SMART ALUMINIUM EXTRUSIONS is one of the UK's leading producers and suppliers of bespoke aluminium extrusion systems, with a reputation for product innovation, design excellence.

THE COMPANY

With over 30 years' experience, Smart Aluminium Extrusions (SAE) has grown to become the UK's most modern and efficient manufacturer of extruded aluminium profiles. During that time, we have earned an enviable reputation for the manufacture of aluminium extrusions to the highest quality standards, with our products used across a wide range of applications and industry sectors.

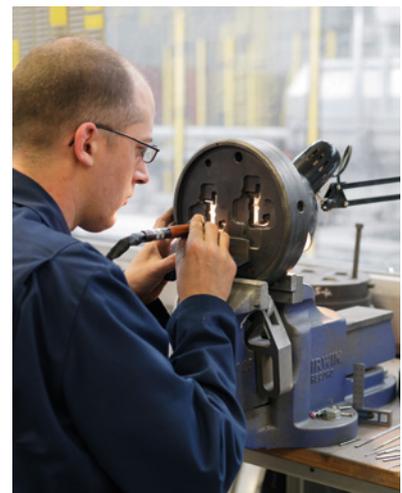
We are part of the global Corialis Group of extrusion companies which has its headquarters in Belgium and manufacturing plants in France, Poland and China. Currently employing over 1,500 people worldwide and with a turnover in excess of £250 million, the Group's success is underpinned both by outstanding research and development capabilities and state-of-the-art manufacturing facilities. If required, we can draw on the wealth of expertise and experience within the Group to meet specific customer needs.

OUR REPUTATION

Our commitment to every customer is that we strive to deliver the highest levels of product quality and customer service, together with competitive prices and lead times. Firmly established in the UK, our customers can be assured that we fully understand their expectations in terms of quality, reliability, economy and responsiveness.

We also take pride in our ability to deliver innovative solutions whatever our customers' requirements may be and our highly experienced sales team is always available to help quickly resolve any queries.

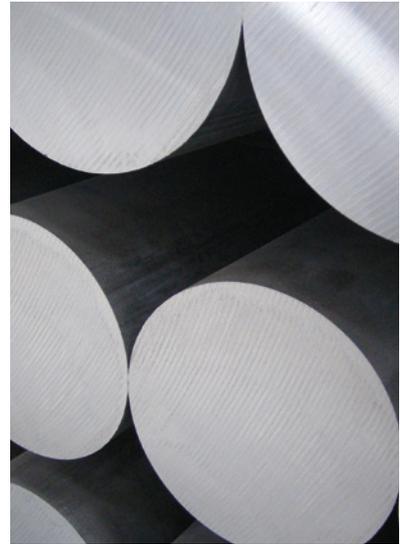
Located on the outskirts of Bristol, our purpose-built 30,000m² plant is close to a number of major transport hubs and our dedicated transport fleet makes daily deliveries nationwide.



To ensure optimum performance all extrusion dies are cleaned and maintained to the highest standards by our Technicians.

MINIMISING ENVIRONMENTAL IMPACT

has always been at the heart of development and Smart are leading the way with the greenest manufacturing operation of it's kind in the country.



ENVIRONMENTAL POLICY

Smart Architectural Aluminium is fully committed to working towards a greener environment and so every aspect of our activities, from the procurement of raw materials to the delivery of finished goods, is conducted in accordance with sound environmental practices and in line with UK and EU environmental regulations and legislation.

Our aim is to achieve a completely carbon neutral production operation, and we are working towards this through a combination of continued investment in efficient machinery; the operation of effective environmental management systems; the use of waste capture and recycling techniques and the introduction of sustainable power generation from natural resources.

To help realise this goal, we are also continuing to build a high level of understanding of the key environmental issues amongst our staff, customers, suppliers and stakeholders – recognising our responsibilities to deliver long term, sustainable benefits within our business and the local community and striving to continually improve the environmental impact of our total global activities.

As a responsible business, we formally publish an annual environmental statement as a commitment by both our management and staff to minimise the impact of our total operations on the environment.

- **Working Towards a Carbon Neutral Production**

It is our aim to achieve 100% carbon neutral production operation

- **Sustainable Power Generation**

As part of our aim we are committed to generating 100% of our power requirements from sustainable natural resources.

- **Smart have attained the following accreditations:**

ISO 9001 Quality Management Systems

ISO 14001 Environmental Management Systems

ISO 18001 Occupational Health and Safety

PHASE 3: EXPANSION PLANS

To keep pace with our continued growth, we are again planning to develop our site with the construction of a 15,000m² extension to our manufacturing facilities.

This new extension, which represents the third phase of our expansion in just seven years, will see the installation of a third, state-of-the-art extrusion press and a second paint line and will add around fifty percent to our overall manufacturing capacity.

This new development is a key element of our growth plans and will allow us to continue to meet the increasing demand for our aluminium extrusions across the UK.





BESPOKE EXTRUSION

STATE OF THE ART FACILITIES which ensure we can extrude, finish and deliver any design you require.

EXTRUSION PRESSES

We currently operate two modern extrusion presses:

- 1 x 8 inch, 2,200 tonne extrusion press
- 1 x 8 inch 2,500 tonne extrusion press

These combine to deliver a total annual extrusion capacity of over 20,000 tonnes.

This capability enables us to extrude a wide range of profiles to meet our customers' exact requirements, within the following parameters:

Maximum length: 14,600mm

Maximum height: 165mm

Maximum width: 205mm

Maximum weight: 8.000 kg/m

Minimum weight: 0.250 kg/m

The precise specifications of the extrusion may vary depending on the particular design.

Our experienced sales and technical support teams are always available to offer advice, and to respond to specific queries. Both extrusion presses utilise the latest manufacturing software to minimise production waste – whilst maximising the efficient use of aluminium billets. 100% of the waste aluminium from the extrusion process is captured and then recycled into aluminium billets for future production and as a result, up to 30% of the aluminium used in our profiles is extruded from recycled billets.

We are investing in technology that will recycle heat generated during the extrusion process to pre-heat the extrusion dies, which will significantly reduce the power requirements of the equipment.



Extrusions are trimmed and packed prior to tempering to our customer's specification.



ALUMINIUM

SUSTAINABLE BILLET FROM RESPONSIBLE SOURCES

To ensure that we consistently deliver aluminium extrusions to the highest possible quality standards, we source our aluminium billet only from three of the world's leading suppliers, Emirates Aluminium, Dubai Aluminium and Hydro Aluminium. Sourcing from these responsible and highly reputable companies guarantees continuity of quality and performance for each and every one of our extruded aluminium profiles.



WE BELIEVE IN QUALITY

The quality of the aluminium extrusion is dependant on the quality of the alloy used, and so we use only 6000 series aluminium alloys - specifically, 6005A / 6060 / 6063 / 6063A and 6082 tempered to designations T4 to T6. 6000 Series alloys provide the perfect combination of strength, hardness, durability and corrosion-resistance - even in marine environments - and are the most widely-used alloys in extrusion and are ideal for structural extrusions and machining.

Used in a wide range of industrial sectors, including the construction industry, 6000 series alloys are found in a wide range of applications including window and door profiles, lighting, awnings, handrails and furniture.

The 6082 alloy in particular offers the highest strength of any of the 6000 series and is frequently used for load carrying structures in shipping, transport, building and offshore industries, as well as for platforms, bridges, scaffolds and handrails.

QUALITY STANDARDS

Our extrusions fully conform to all the relevant British Standards. Covering the mechanical property limits, tolerances and temper designations of aluminium extrusions as well as the testing requirements, the specific British Standards include the following:

BS EN 515:1993	Aluminium and aluminium alloys	Wrought products - Temper designations
BS EN 573-3:2009	Aluminium and aluminium alloys	Chemical composition and form of wrought products
BS EN 755-1:2008	Aluminium and aluminium alloys	Extruded rod/bar, tube and profiles. Technical conditions for inspection and delivery
BS EN 755-2:2008	Aluminium and aluminium alloys	Extruded rod/bar, tube and profiles. Mechanical properties
BS EN 755-7:2008	Aluminium and aluminium alloys	Extruded rod/bar, tube and profiles. Seamless tubes, tolerances on dimensions and form
BS EN 755-8:2008	Aluminium and aluminium alloys	Extruded rod/bar, tube and profiles. Porthole tubes, tolerances on dimensions and form
BS EN 12020-2:2008	Aluminium and aluminium alloys	Extruded precision profiles in alloys EN AW 6060 and EN AW 6063
BS EN 10204:2004	Metallic products	Types of inspection documents
BS EN ISO 6892-1:2009	Metallic materials	Tensile testing
BS EN ISO 6892-2:2009	Metallic materials	Tensile testing
BS 1139-1.2:1990	Metal scaffolding	

QUALITY ASSURANCE

Our market-leading, in-house tensile testing facility is able to meet customers' specific requirements and to test to whatever standards are requested. If required, we are also able to offer external, independent testing by Zurich Laboratory Services, a UKAS registered testing facility. Our quality procedures and management systems are all maintained in accordance with the following standards:



ISO 18001:2007
Occupational Health and Safety Management Systems



ISO 9001:2008
Quality Management Systems



ISO 14001:2009
Environmental Management Systems



FINISHING & DELIVERY

THE LATEST IN PAINTLINE TECHNOLOGY

and extensive colour and finishing options ensure the finest quality product available.

THE PERFECT FINISH

With a production capacity of 200m² per hour, our horizontal powder coating paint line is the most advanced of its kind in the UK, with extrusions able to be polyester-powder coated in an extensive range of standard and non-standard finishes – including the RAL colour range.

We also offer a full range of finishing options, including Polyamide thermal breaks and extrusions can be wrapped and packaged to our customers' precise specifications. In line with our commitment to sustainable manufacture, our finishing plant incorporates a number of environmental features.

For example, the rain water capture system holds 220,000 gallons of collected rain water which is filtered for cleaning prior to use in the pre-treatment process – the alkaline-based pre-treatment process is 100% chromate free.

Following use, the ionized water is filtered again, before being released into the environment (at this stage, it is cleaner than mains drinking water). During the painting process, our advanced technology allows us to capture 98% of the excess powder that is used in the booth during coating; the powder is then re-used.

NATIONWIDE DELIVERY

We operate our own fleet of vehicles to ensure a prompt and reliable delivery service, across the UK. The modern, curtain-sided vehicles ensure that every aluminium extrusion reaches its destination in prime condition, with all extrusions being carefully packaged in stillages and painted material wrapped prior to despatch, to our customers' specifications.



Our hand powder booth is ideal for minimum quantities and special coloured orders.

For illustration purposes only.

Maximum Profile Weight: 8.000 kgs/m

Minimum Profile Weight: 0.250 kgs/m



ALUMINIUM: A WORLD OF POSSIBILITIES

Aluminium extrusions are hugely versatile, lightweight, high strength, modern materials which retain their properties over a long life.

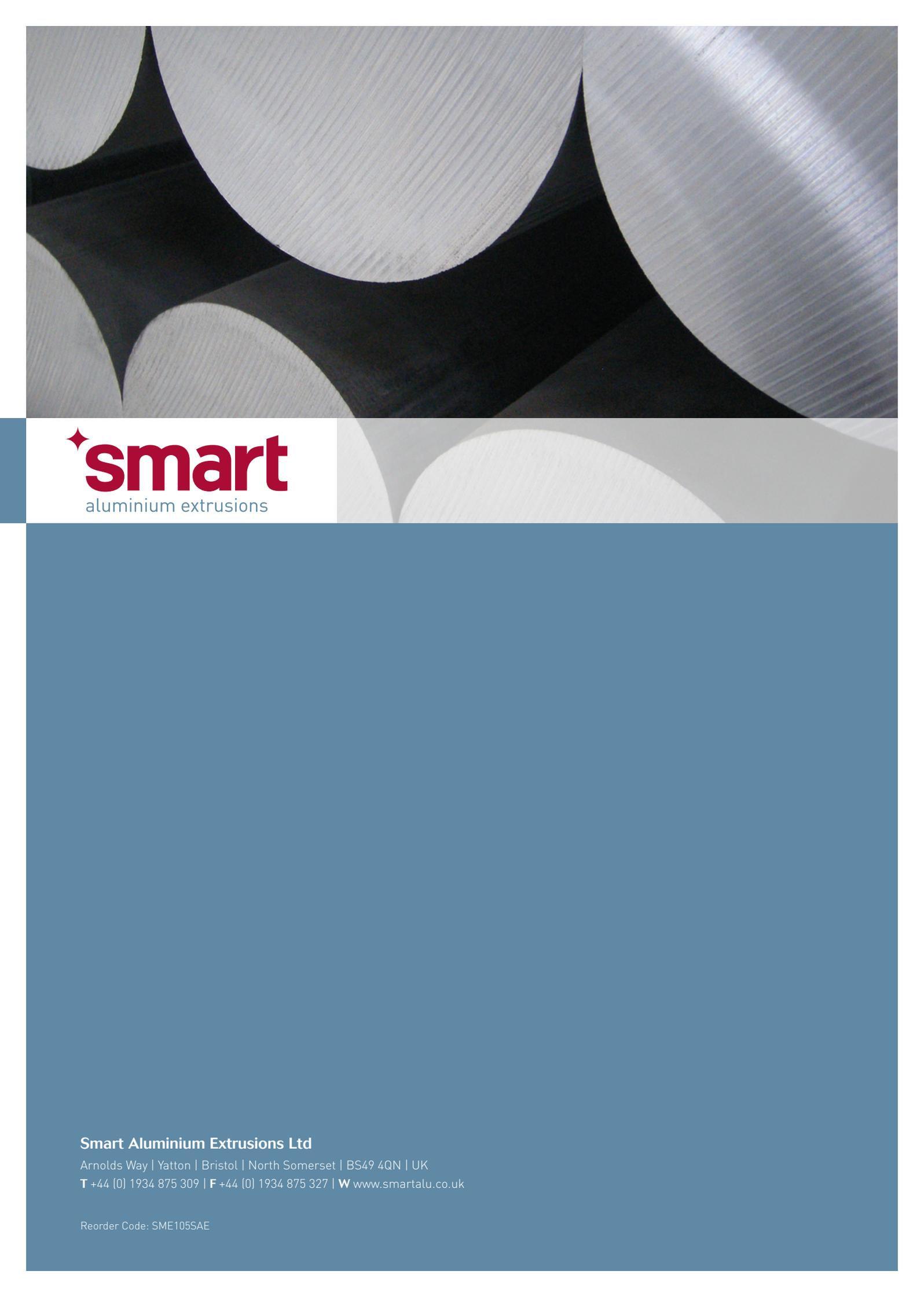
Being naturally corrosion resistant and requiring only minimal routine maintenance, they also retain their aesthetic appeal over the lifetime of the material. For extruded profiles, the material has great 'formability' characteristics making the most complex shapes achievable and then subsequently

making the machining and joining together of multiple extrusions a very straightforward process. These innate qualities make aluminium extrusions the perfect material for a host of finished products and applications, from materials for the home and office - including windows, doors, lighting tracks, awnings,

balustrades, tables and chairs to solar panels and exhibition stands.

At the end of their life, aluminium products can be recycled again and again without any loss of quality and, as the re-melting of aluminium requires little energy, 95% of the energy required for primary aluminium production is saved through recycling.





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Smart Aluminium Extrusions Ltd

Arnolds Way | Yatton | Bristol | North Somerset | BS49 4QN | UK
T +44 (0) 1934 875 309 | F +44 (0) 1934 875 327 | W www.smartalu.co.uk

Reorder Code: SME105SAE