

Automotive & Transport

 EXPERTISE  COLLABORATION  INTEGRITY

- Aluminium
- Stainless Steel
- Copper Alloys
- Engineering Plastics
- Titanium

With a rapidly expanding product range for the automotive and transport industry

Righton Blackburns is on the road to being recognised as a leading supplier of quality road and rail products to customers across the UK.

Products & Services

From rolled products, through standard and special extrusions, to dropside sections and systems, Righton Blackburns has the answer.



Market leaders for the supply of material to the automotive & transport industries



Aluminium

Aluminium is strong, durable and lightweight, making it the preferred material for transport applications where weight reduction is vital in improving fuel consumption and increasing payload.

This meets the ongoing demand for enhancing fuel efficiency and low emissions, with the range of surfaces and finishes meeting manufacturers' and designers' requirements.

The use of aluminium in its various forms - plate, sheet, extrusion, casting and forging - is increasing across transport applications. Additional benefits include corrosion resistance, low maintenance, design flexibility and recyclability.

Aluminium is widely used in engines, chassis, drivelines, suspension, steering, brakes, closures, heat shields, bumpers, hoods, heat exchangers and radiators.

Extrusions are also ideal for engine blocks, transmission housings, panels, roof rails and chassis of cars, boats, trucks, and railway and subway cars, as well as for the bodies and component parts of vehicles. Demand has also grown for extrusions as structural components. Other applications include cant rails, skirts, trims, chassis systems, awning rails and wheel arches.

Aluminium Treadplate is also used in numerous applications - floors, boat gangways and decks, catwalks - as well as in decoration for stairs, ladders and floor coverings.

Grades

6082 T6	6063 T6	6063A T6
1050-H14	5251-H22	5754 H111

Stainless Steel

The automotive and transport sectors are making increasing use of stainless steels to reduce weight, improve aesthetics, enhance safety and minimise life cycle cost. Characterised by superior fire and corrosion resistance, they ensure safety and reliability. With stainless steels exhibiting a superior combination of high strength, ductility, formability and toughness compared to other metals and alloys, the intrinsic weight of vehicles decreases, thereby improving its load carrying capacity and fuel efficiency. Maintenance costs are also lower and a stainless steel component at the end of its long life is easily recycled.

Stainless steel in plate and sheet, coil, strip, precision strip and bar is used extensively in the automotive and transportation industries.

Applications of stainless steel include structural parts, engine components, exhaust and GDI systems, trim elements, automotive fuel tanks, seat structures, steering columns, channels, pillars and bumpers, freight railway wagons, coaches, high speed trains, exhaust systems of passenger and commercial vehicles, bus bodies, refrigerated containers, tankers and waste disposal vehicles.

Other applications see stainless steel used as the primary lightweight structural material for integral components such as fuel tanks, bumpers or chassis, with internal structural framework for doors, trunk lids, hoods and other practical uses.

Grades

1.4003	1.4301/1.4307 (304/304L)	1.4401/1.4404 (316/316L)
430	A-286	13-8Mo
15-5 to AMS5659	17-4 to AMS5643	17-7 to AMS5622
S145	Duplex	Super Duplex



Copper Alloys

The performance racing industry has highly specialised requirements for quality copper-based alloys for products such as timing gears, valve seats, valve guides, rocker bearings, lifter guides and connecting rod bearings.

Materials are available which are ideal for high performance applications, offering:

- Wear resistance
- Low friction characteristics
- Electrical conductivity
- Thermal conductivity
- Strength
- Corrosion resistance
- Oxidation resistance

Grades

C36000

C63000

CA104

C101

ALLOY 400

ALLOY 500

ALLOY 625

ALLOY 718

PB102



Engineering Plastics

High performance plastics are playing an important role in the automotive industry, with the lightweight properties of plastics improving vehicle fuel efficiency.

Beyond the significant contribution engineering plastics have made to lowering vehicle weight and thereby reducing fuel consumption, they have also helped to improve vehicle safety through new features, reductions in parts failure and enhanced electrical performance as the industry moves towards an age of fully electronic and fully autonomous vehicles.

The durability of plastics is a significant factor in their selection for engine and carriage panels, flooring, luggage racks, seating and doors.

Other advantages of high performance plastics used in transport vehicles include: minimal corrosion, allowing for longer vehicle life; substantial design freedom, enabling advanced creativity and innovation; flexibility in integrating components; safety, comfort and economy; recyclability.

Applications for the most popular engineering plastics include: automotive bumpers, chemical tanks, cable insulation, instrument panels, sheathing of electrical cables, pipes, doors, body parts, dashboards, wheel covers, gears, bushes, cams, bearings, weatherproof coatings, electrical insulation, headlamp lenses, windows, displays,

screens, wiper arm and gear housings, headlamp retainers, engine covers and connector housings.

Grades

PVC

NYLON 6

NYLON 66

PC

PMMA

ABS

PP



Titanium

Titanium is an essential material employed in the automotive industry due to its exceptionally high strength-to-weight ratio, making it a sought-after metal in the manufacture of vehicles in which weight reduction is a primary focus.

Within the automotive industry, the motorsports sector is the primary user of 3D-printed titanium parts. Demand for titanium within the automotive industry is expected to continue to increase, arising mostly from its adoption in the manufacture of high-performance parts for racing vehicles.

In addition to the more specialist motorsport applications, titanium is also employed in the production of many other vehicles including passenger vehicles, rail, commercial vehicles, coaches & buses, public service vehicles, fuel tankers, livestock vehicles, motor homes, trailers and catering vehicles.

Grades

Ti-6AL-4V to
AMS4928 CL AAS

4911

4935

4904

4907 Ti-3AL-2.5V
to AMS4975

4976

4919

BS2TA11

On the road to being recognised as a leading supplier of quality road and rail products to customers across the UK.

- Passenger vehicles
- Rail infrastructure & rolling stock
- Commercial vehicles
- Coaches & buses
- Public service vehicles
- Fuel tankers
- Livestock vehicles
- Motor homes
- Trailers
- Catering vehicles
- Exhibition trailers
- Motorsport



Righton Blackburns is an independent metals and specialist plastics stockholder and distributor. We have been a trusted supply partner for premium quality products for over 100 years.

Today we are recognised as the leading supplier to a diverse customer base including safety-critical markets, government agencies and departments, and FTSE 100 companies.

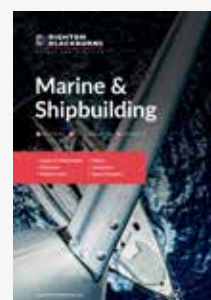
Our reputation is founded on both the efficiency and integrity of our business dealings, as well as our proven ability to innovate and respond to change. This strength and agility remain true today.

Operating from 10 Service Centres across the UK, we are well placed to service any requirement from one-off supplies, to direct-to-line feed services and long term contracts.

Dedicated to the continued development of new business and backed by our ISO9001-2015 status, we guarantee that exceptionally high-quality products and service will always be the Righton Blackburns' standard.

Specialist Markets

For further information on the full range of products we supply into our specialist markets, please contact your local Service Centre to request a copy of the brochures dedicated to those specific markets.



Service Centres

Operating a reliable and efficient delivery service from our 10 Service Centres nationwide, we offer in-house processing facilities. In addition to next day delivery from locally-held stock, we also provide non-standard or customer specific material.

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