RIGHTON BLACKBURNS

METALS AND PLASTICS

Precision Engineering

EXPERTISE COLLABORATION INTEGRITY

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

www.rightonblackburns.co.uk

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Precision machining creates accurate and specialised parts for a diverse range of applications.

Precision machining providers must work with a variety of different materials whilst maintaining the same quality, precision, and accuracy of the part created.

We supply an extensive range of material suitable for precision engineering, including:

- Aluminium
- Stainless Steel
- Titanium
- Copper
- Brass
- Bronzes
- Nickel Alloys
- Engineering Plastics

Available in round bar, hexagon, flat bar, tube, sheet and pipe & fittings, our extensive range of products are used for precision engineering, repetition engineering, tooling, auto-turning, bar feeding and precision & machined components.

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The specialist supplier of high specification metals & alloys for the manufacture of precision engineered components

Copper Alloys

There are more than 400 copper alloys, each with a unique combination of properties. Pure copper has the best electrical and thermal conductivity of any commercial metal whereas beryllium-copper is the hardest and strongest of any copper alloy, in the fully heat treated and cold worked condition.

Today, copper and copper alloys make a significant contribution to the latest developments in renewable energy, information and communication technology, architecture, health and sanitation.

Choosing the best material for any given application depends on a variety of factors including machinability, repetitive processing, corrosion resistance, ease of fabrication, strength, fatigue resistance, hygienic properties and electrical & thermal conductivity.

Grades

Brass
CW606N (CZ131), CW614N (CZ121), CW721R (CZ114), CW624N (CZ130), CW505L (CZ106), CW508H (CZ108H)

Copper
CW004A (C101), CW024A (C106)

Aluminium Bronze
CW307G, C63000, C63200, BS B23

Phosphor Bronze
CW451K (PB102), CC481K (PB1)

Leaded Bronze
CC491K (LG2), CC492K (LG4), C93200 (SAE660)

Beryllium Copper
C17200, C17300, C17500, C17520

Copper Nickel
90/10 & 70/30

Hardiall®
AMS4596, AMS4597, AMS4598

Stainless Steel

Stainless steel is a popular material in precision machining as it is versatile, durable and efficient. A variety of stainless steels are available to suit the specific needs of each application.

For example, type 1.4305 (303) is the most readily machineable of all the austenitic grades and is used in applications that require parts to be heavily machined.

High performance options like Duplex and Super Duplex are used because they have twice the design strength of austenitic and ferritic steels, along with toughness, ductility and a wide range of corrosion resistances

Grades

Austenitic
1.4305 (303S31)

Austenitic
1.4404 (316S11)

Duplex
1.4462 F51 Duplex UNS S31803

Super Duplex
1.4501 F55 Super Duplex UNS S32760

Precipitation Hardening
1.4545 (17-4)

Precipitation Hardening
1.4545 (15-5)

Righton Blackburns is a preferred distributor in the UK for all LBA produced Copper Alloys. UK exclusivity agreement for all sales of Hardiall.

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Aluminium

Infinitely recyclable, lightweight, resistant to corrosion and as strong as steel when alloyed with other metals, aluminium is a versatile metal which makes it an ideal choice for designers.

It is the number one metal for machining, displaying material properties that make it easy to mill, drill, cut and punch, while remaining strong, durable and aesthetically pleasing.

Free Machining Alloy (FMA) has high mechanical strength and excellent machining capabilities and is an excellent choice for projects carried out on automatic lathes.

Grades

2014 T6511	6029 T6	6063 T6
6082 T6	Free machining aluminium 2011 T3/ T6	Free machining aluminium 6262
Free machining aluminium 6064	Free machining aluminium 6026	Free machining aluminium 2033 LF

Nickel Alloys

Offering superior mechanical properties and corrosion resistance compared to many other alloys, nickel alloys are commonly used in challenging applications. They offer excellent performance over a wide range of temperatures, operating environments and media - where strength and corrosion resistance are critical.

Marine engineering, chemical and petrochemical processing and the oil and gas industry all benefit from the use of these alloys in diverse components, ranging from shafts and splash zone sheathing, springs and fasteners to valve stems, drill collars and instrumentation.

Grades

Alloy 400	Alloy 500	Alloy 625
Alloy 71C276	C276	

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Engineering Plastics

Offering enhanced mechanical and/or thermal properties in comparison to the more widely used commodity plastics, engineering plastics are much easier to manufacture into complicated shapes than wood or metal. They can offer many benefits over metal including weight reduction, good wear properties, superior corrosion and chemical resistance, ease of processing, electrical and thermal insulation and cost saving.

Properties exhibited by various grades include heat resistance, mechanical strength, rigidity, chemical stability, self-lubrication and fire safety.

Grades

Nylon 6	Nylon 66	Nylatron GS
Nylatron GSM	Acetal	PETP
PTFE	PEEK	PPS
PAI		

Righton Blackburns offers JIT deliveries and a range of services

Including cutting, packing, fabrication and processing, reducing the process requirements for those involved in precision engineering applications for supply into the following industries:

- Oil & gas
- Defence
- Food & drink
- Autosport
- Marine
- Aerospace
- Packaging
- Logistics
- Electronics
- Automation
- Space engineering
- Robotics
- Medical
- Composites
- Rail
- Transportation
- Hydraulics
- Pneumatic
- Construction
- Home & leisure

RIGHTON BLACKBURNS
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Supplying premium quality products
for over 100 years

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.

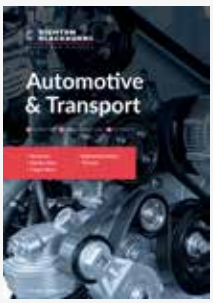
Our reputation is founded on both the efficiency and integrity of our business dealings, as well as our proven ability to innovate and respond to change. This strength and agility remain true today.

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.



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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.

Bedford
+44 (0)1234 684 100
bedford@rblimited.co.uk

Birmingham
+44 (0)1384 282 630
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Bristol
+44 (0)117 948 2600
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+44 (0)1656 683 900
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bsi ISO 9001 Quality Management Systems CERTIFIED