

METALS AND PLASTICS

# Marine & Shipbuilding

🔒 EXPERTISE 🌐 COLLABORATION 🛛 🐯 INTEGRITY

- Copper & Nickel Alloys
- Aluminium
- Stainless Steel
- Plastics
- Composites
- Special Products



METALS AND PLASTICS

# Righton Blackburns is the leading supplier of metals and plastics to today's marine and shipbuilding industry

## Offering the most comprehensive and market specific range of products available.

The first choice for quality and service, Righton Blackburns satisfies the diverse and exacting requirements for high strength and corrosion-resistant material for all marine markets, including:

- Naval & Commercial Craft
- Pleasureboats
- Workboats
- Fast Craft
- Outfitting
- Marine Subcontractors

# The specialist supplier

# of metals & specialist plastics to the marine industry



#### **Copper & Nickel Alloys**

Copper is a very versatile metal, offering good resistance to corrosion in marine atmospheres and in seawater with moderate flow velocities. Its properties, both in terms of corrosion resistance and mechanical strength, can be further improved by alloying. The main copper alloys for marine service are bronzes, brasses, copper and copper nickels.

Aluminium Bronze Grades		Brass Grades	
NES 833 (DEFSTAN 02-833)	DTD197	CW614N (CZ121)	CW712R (CZ112)
CA104	NES 834 (DEFSTAN 02-834)	Copper Grades	
CW307G	CA107	CW024A (C106 HH)	NES837 (DEFSTAN 02-878)
C63000	CW301G	Cooper Nickel Grades	
BSB 23		NES 780 (DEFSTAN 02-878) 70/30	NES 779 (DEFSTAN 02-878) 70/30
Phosphor, Leaded & Manganese Bronze Grades		NES 835 (DEFSTAN 02- 835)	NES 780 (DEFSTAN 02-879)
CC491K (LG2)	NES 838 (DEFSTAN 02-838)	Nickel Alloys Grades	
CC492K (LG4)	C93200 (SAE 660)	Alloy 400	Alloy 500
CW451K (PB102)	CW721R (CZ114)		



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#### Aluminium

Vessels constructed from aluminium can stay in service for several decades without sustaining any measurable corrosion. Aluminium is lightweight and requires little maintenance, can be easily fabricated and has good post-weld yield strength and fatigue resistance. Aluminium can be used in a variety of applications including hull and deck structures for fast ferries and workboats, trim for pleasureboats, ladders, hatches, portholes and bulkheads.

#### Grades

5083 F	5754 H114
5083 H321	Triplate®
6082 T6 Treadplate:	



#### **Stainless Steel**

A hugely versatile material with many unique properties, stainless steel is an exceptional option for many marine applications. It has superior corrosion resistance, as well as high impact and temperature strength. Easy to clean and with good visual appeal, it is the ideal material for handrails, heat exchangers, deck fittings, propellers, offshore rigs, hydraulic systems and fluid storage tanks.

#### Grades

Commercial	Precipitation Hardening
1.4307 (304L)	1.4542 (17-4)
Duplex	Nitrogen Strengthened
1.4462 (F51)	XM-19 (UNS \$20910)
Super Duplex 1.4501/F55	



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#### **Plastics**

The marine applications for plastics are wide and varied including boat screens, flat panelwindows and hatches. With exceptional optical clarity, weather and UV resistance and resistance to scratching, acrylic sheet is ideally suited to screen and window applications.Polycarbonate sheet is the perfect choice for windshields, windows and other safety glazing and protective screening applications. PVC foams are excellent for applications where resistance to humidity, weathering and aggressive substances is required.

#### Grades

Cast and Extruded Acrylic
PVC Foam

Polycarbonate
Image: Cast and Extruded Acrylic and

#### Composites

Composites have grown in popularity for marine use because they offer a more practical alternative to wood or steel. Favoured for their low magnetism and resilience to wave-induced shock loads, they are also light, strong in tension, stiffer for their weight than steel or aluminium and fatigue resistant. They do not corrode in the marine environment, absorb vibrations, are low maintenance and can be fabricated into complex shapes. Composites now have suitable marine fire approvals and simplify outfitting.

#### Grades

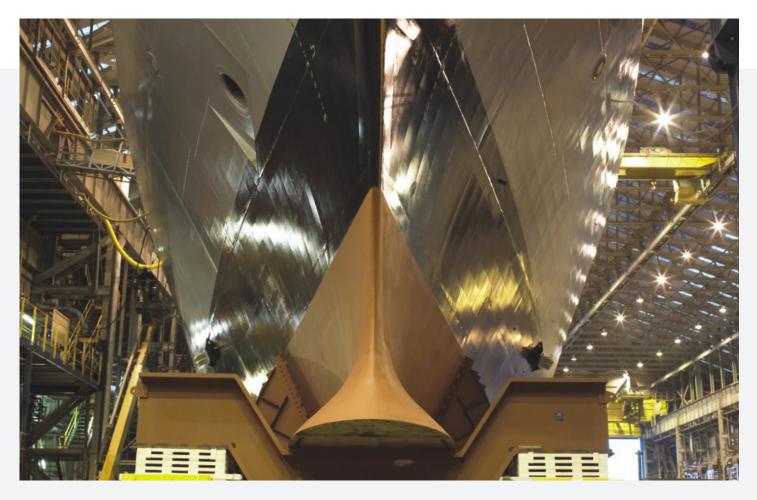
Alucore<sup>®</sup> -Aluminium honeycomb panel

Alucobest<sup>®</sup> -Aluminium composite panel Kapatech® -PUR foamboard with aluminium skin

Bondal<sup>®</sup> -Vibration reducing composite material



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#### **Special Products**

A range of special products can be supplied to meet the exacting needs of different marine applications.

For example, titanium offers exceptional corrosion resistance so is ideally suited to particularly harsh environments, as is Tungum, an alloy which is highly resistant to seawater and its atmosphere.

If high structural strength is an overriding consideration, then Corten is a good option, while tube bundles, forgings and castings, and general and high yield steels can all offer benefits to meet specific marine requirements.

#### Grades

Titanium	Castings
Corten®	General and High Yield Steel
Tungum <sup>®</sup>	Carbon Steel Pipe and Fittings
Tube Bundles	Machined Components including Connectors, Fittings and Flanges
Forgings	



#### 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.



















METALS AND PLASTICS

Glasgow

# 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 birmingham@rblimited.co.uk

#### Bristol

+44 (0)117 948 2600 bristol@rblimited.co.uk

#### **Cardiff** Sales Centre

+44 (0)1656 683 900 cardiff@rblimited.co.uk

#### Edenbridge Sales Centre +44 (0)1732 582 700 edenbridge@rblimited.co.uk

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