BCB International

Company Profile 2022

SAVING & PROTECTING LIVES IN HOSTILE ENVIRONMENTS

INTERNATIONAL

v19



Our History



Browns Cough Bottle = BCB As supplied to British troops in the Crimean war





A TRUSTED HISTORY

- 1854 strated in business
- 60 years working for the MoD
- 30+ years supplier for the UN

AWARD WINNING

2 x Queens Award for Export achievement
 3 x Soldier Technology Awards
 Sunday Times Best company to work for
 2 x Welsh Innovation Awards
 Business Language Champion
 Special Recognition Award











ISO Approved to since 1993 With over 200 N.A.T.O. approvals and many SOLAS approvals



PRIME CONTRACTOR





Quality Assured



Meet the team





2 x Modern Manufacturing Sites







Officially opened by HRH Prince of Wales







Sales, Operations, Manufacturing & Distribution



Prime Manufacture in Cardiff



Creams – liquids - powders



Camouflage Cream







Focused on 4 key end markets

- Well established customer relationships
- Respected brand •

• High quality innovative products •



70%

13%

12%

5%



Impressive customer base





Research & Development

CARDIFF UNIVERSITY
PRIFYSGOL





- Over £1 million invested into R&D in the last few years
- Collaborative University and Business
 partnerships
- Diverse expertise
- Rapid prototyping
- Lifetime, invention, trialling, innovation and manufacture.
- Continuous And Never Ending Innovation CANEI
- Military focus user group







Some of our new or developing products



5 Colour Camo Cream



Thermal Camo Net



Folding Field Desk



Heating Kits



Sanitiser

10



Defence – core market

Highly innovative product range trusted by our military customers

Long history of serving the UK military market with the UK MoD and MoJ's a significant customers. BCB's owns the IP protection for 9 innovative products.





FREDRAGEN High Performance Eco fuel

A patented solid eco friendly fuel for the future. Green & Clean



In extensive field and laboratory testing by the British Army, FireDragon proved to be the best of all solid fuels tested



Hand Cleanser



All-Weather





Quick & Clean Burn Easy to Light

Fuel for the future:

- Sustainable
- ✓ Cooks quickly
- Burns intensely
- Easy to light
- ✓ Safe to carry & transport
- ✓ Non toxic
- ✓ Gives off a very little soot







It is a safer fuel for both the user & the environment. FireDragon outperforms all other solid fuels.

Based on bio-ethanol, FireDragon is sustainable and not a fossil fuel.

FireDragon's bio-ethanol purity is very high at approximately 96%.





High Performance Eco fuel

- Water resistant and easy to ignite with a single spark
- Environmentally-friendly solidified ethanol
- Can be packed safely with food
- Fast boil and long burn high heat output
- Clean burn (doesn't stain cooking equipment)
- Air transportable
- Safe to burn in enclosed spaces
- Also effective as a hand sanitizer or "waterless soar
- Can be used in a range of existing cooking systems
- Worldwide patent

"The small FireDragon tablets are easy to use and fit perfectly into my survival tin and mess kit"



Non toxic and made from natural ingredients





FireDragon is more efficient (28MJ/Kg) than kerosene, methyl esters, and paraffin.



Sqt, Special Forces





Blast Boxers

- The original patented pelvic protection
- Sculpted design increased comfort
- Breathable fabric
- Laboratory and field tested
- Fire Retardant
- Anti microbial and anti odour
- No ballistic degradation following washing
- US Berry compliant MADE IN THE UK and USA

Performance — Tested in accordance with MILSTD – 662F | V50 2gr RCC







Inner thigh = 910 ft/s [227 m/s] Upper front & back = 910 ft/s [227 m/s] Genital region = 1020 ft/s [311 m/s]



Patented Design





Fox Sleeping System

- Comfortable, compact and versatile
- A modular 3 in 1 jungle shelter system that can be combined or used independently
- System developed in conjunction with Special Forces



1. Forest Hammock

A generously sized, parachute grade, ripstop nylon hammock

3. Jungle Mosquito Net

A rugged, close weave polyester mosquito net. Clipped to fabric loops.



2. Lightweight Waterproof cover (Basha) A lightweight robust shelter sheet forming fully tape-seamed and reinforced points.

- Compact and lightweight
- PU coated Ripstop Nylon
- NATO approved



Location Marker Balloon

- Designed by the military for the military.
- Can be quickly used to mark your Drop Zone position or if in need of rescue.
- Tethered high above any jungle on a 75 metre Kevlar cord
- Can be operated by one person within minutes
- Uses inert helium gas to inflate 136 litre Radar Reflective balloon
- Lightweight carbon fibre cylinder
- Large 1 meter balloon
- Day/night visible
- Radar Reflector
- Reusable









Camo Cream

BCB manufacture for most NATO forces, apart from USA and Turkey.

We are the global leader in camouflage cream.

Our formula is;

- Non-irritant and non toxic
- Infrared Reflective (IRR)
- 3 types available; Compacts, sticks and tubes
 Numerous colours available
- Not affected by rain or sweatEasily removed with soap.High sun protection

- Moisturises the skin



We have been manufacturing camouflage cream for more than 30 years

Our cream is the only cream in the world which is proven to be Infrared Reflective (IRR).











Camo Nets Mk7

We have been making MK7 camo nets for over 15 years for the UK MoD in conjunction with The Ministry of Justice (MoJ).

Our MK7 nets are;

- NATO codified and approved
- Lightweight
- Infra red reflective(IRR)
- Numerous colours and sizes
- Offers excellent 3D visual camouflage.
- Our current Mk 7 nets hide the vehicle, user, field camp in the visual and Infra Red (IRR) spectrums.









Mk8 Multispectral Camouflage (MSC)

Technology

We have developed the new multi-spectral camouflage material called our Phantom Mk8 over the last 5 years in conjunction with a local university, specialist material manufacturers and the MoD.

The Mk8 is very effective from visual through hyperspectral to the broadband/multispectral spectrums.

Our Mk8 gives an excellent emissivity reduction and are, in certain criteria, better than the competition.

Infrared spectrum (400 – 1200) Thermal spectrum • Visual spectrum





Above: Our subject lay under a sheet, looking out



Mk8 Multispectral Camouflage (MSC)

Our camonets will camouflage and hence protect the user from modern thermal optics, which are currently being used to terrible effect in the Ukraine.

It will hide vehicles, field camps and personnel from the modern optics on their drones in the visual, near (NIR), short (SWIR), medium (MWIR) and long range infra-red (LWIR) spectrums.

A range of nets would be needed as no one net fits all climatic conditions or user needs.



Patterns, colours and sizes can be customized according to customer requirements







Using BCB's new Multispectral CAMNET (MSC) material, our new Mk8 Phantom nets will be;

- Camouflaging in the visual, thermal and infra-red spectrums
- Lightweight
- Robust
- Fire retardant

- Available in numerous colours and sizes
- Reversable
- 3D to break up the object's outline

Suitable for

Static



Mobile



Personnel





Multispectral CAMNET – Phantom Mk8

"Thermal Image (TI) Properties.

The ability of the CAMNET to conceal against TI was found to be excellent.

The image below was captured from a MOSQUITO thermal optic. Only the front portion of the HMTV is visible as the CAMNET was purposely raised to show a comparison between areas of the vehicle that are covered.

Note the net held in position by rocks due to the nature of the terrain."





After Camouflage net applied



"This material can also be further enhanced with an additional semiridged lightweight material, which provides extra thermal protection."





Field Furniture

Functional, simple furniture currently in service with the UK MoD

- NATO codified
- Robust
- Lightweight
- Space efficient







Survival & Medical Kits

- Innovative and intuitive survival solutions for over 50 years
- For fast jets, rotary wing and transport planes, tanks and armoured vehicles
- Individual or group survival packs
- Supplied to Special Forces, Air Forces and Land Forces
- We have helped save many thousands of lives over the years







Field Cooking Systems

- Designed for efficient air intake whilst shielding against the wind
- Wind shield and heat exchanger
- Multi fuel system
- Fast boil time
- Compact, lightweight and robust
- Fast and efficient field cooking with low CO levels







FATS (Floating Armour Torso System)

A unique, versatile floating body armour incorporates a life jacket with both soft and hard armour. Low bulk and close fitting.

- Life jacket protected from bullet and fragmentation attack
- Automatically inflates within 3 seconds of water immersion
- Can be deactivated allowing diving up to 20m
- Reusable
- Waterproof armour
- Available in 2 variants Low Profile (175 Newton) for air crew or vehicle crew or High Buoyancy (275 Newton) for Marine/Navy/Coastguard and Marine Police











Boat Stopping System (BSS)

- Non-Lethal
- 100% effective; it doesn't need to snag or entangle the propeller
- Simple to use; just uses compressed air
- Provides a layered defence
- Scalable for large & small boats
- Does not damage or sink the target boat
- Can also be used to deploy survival equipment
- Extensively tested and in service
- Significant and reliable stopping power

- More can be seen at: https://youtube/zTCqceRSeX4
- We have had repeat orders from the UK navy.
- The US Navy and maritime Army have conducted extensive trials over a 2 year period.
- US Navy purchased for extended trials at the US Naval Surface Warfare Centre. (MVSOT – Maritime Vessel Stopping Occlusion Technologies)
- Other forces are keen to trial including the UAE navy, Singapore, India, Kuwait, Indonesia, Japan, Malaysia, Spain, Malta, Saudi, Korea, France etc.
- World patents granted





Outdoor Market Camping, Bushcraft, and fishing products

User friendly B2C eCommerce site, "trade only" section, and Rapid dispatch



Available in over 800 outlets ...





Marine Market





BCB developed the first ever survival and medical equipment for life rafts and lifeboats. High cost of entry as it is highly regulated and requires extensive testing and thus has few competitors. This market, though only growing at 5.3% (2019 Plimsoll) does provide a regular, reliable demand for our life saving marine products.



Medical Equipment -

BCB designed the first medical equipment for use in life rafts and lifeboats over 60 years ago. The Company produces its products to international SOLAS or EU standards.



Survival Kits -

BCB is the developer of much of the current survival equipment that is now standard in life rafts and lifeboats. The kits are SOLAS and IMO approved.



Marine Polar Range

Specialist Marine and extreme cold weather survival equipment for commercial. Personal kits larger group kits.





Both kits comply with the Polar Code (IMO Resolution MSC.385(94)), PART I-B paragraph 9.2 <section-header>

<u>Polar Kits -</u> A new regulation called "The Polar Code" which required all international shipping to carry new extreme cold weather survival packs. BCB was instrumental in helping design the products which have now been extensively adopted by most vessels going into the Polar regions. Due to climate warming the North West passage is now more accessible than ever.





BCB have developed polar survival kits in accordance with the new IMO Polar Code. BCB Designed and manufactured.

Waterproof durable, robust, float when packed in their bespoke waterproof kit bags. They are specially designed to aid survival in the polar regions. Tested in the extreme of the Polar regions.



MARINE SURVIVAL



Marine Offshore

Marine offshore health, safety and personal protection equipment is carried for support vessels or each turbine.

Running stock will be maintained at the onshore OMS logistics facilities. To permit overnight occupation in the turbine in the event of poor weather or support vessel issues.

- First aid kits for minor injuries
- Advanced medical kits
- Eye-washing kits
- Gloves and safety boots
- Ear defenders and safety eyewear
- Fuel and diesel spill kits
- Fire extinguishers and suppressants
- Survival suits, personal locator beacon and flotation devices
- Emergency rations and water
- Emergency communications devices
- Rescue equipment including descenders, spinal boards and stretchers
- Toilet A needless dangerous transfer back to the support vessel, off and on then a possible 80 meters can all take 30 minutes to go to the toilet.
- Catapult guide to an offshore wind farm







Summary

- Expertise in light engineering, medical, camouflaged products and chemical formulations.
- Balanced and experienced management team with good financial control and proven production, quality control and distribution structure.
- Approx 550 lines, with many NATO approved. Key items include: medical and survival kits, camouflage and concealment, and field equipment, many of which are BCB's own design, unique, consumable and IP protected.







- Historically, BCB's primary customers have been the UK MoD and manufacturers of life rafts and lifeboats.
- Exports 40% to military, security and marine services.
- Well established network of sales distributors
- Eor over six decades BCB has been at the forefront for some world leading innovations to help save lives and
- areavel Concerning its Constrances for the quality of its





Conclusion

- BCB is a long running and well established company.
- Comprehensive innovative quality product range.
- Designing and manufacturing life saving equipment for the elite.
- Well respected brands.

ethical.

Excellent quality and

- Considerable investment into R&D and capital equipment.
- Having 3 large diverse markets is a great strength, especially in these uncertain times
- Defence and Marine markets provide good long term contracts which underpin revenue streams.
- Product rich IP protected company.

DR BROWNE'S



"Saving & Protecting Lives in Hostile Environments Through Rapid Innovation"