

Bender UK

Pendants and Trunking
for Safe, Efficient Supply of Services



About us

Market leader in turnkey operating theatre solutions

Bender is a global pioneer of electrical safety technology. Established since 1997, Ulverston based Bender UK is exclusively responsible for the sales, project management, service and through-life technical support of Bender technology in the UK and the Republic of Ireland.

Bender UK pioneered the development of today's critical care Medical IT power systems (IPS) and played a key role in the formation of medical standards and wiring regulations for healthcare.

Highly regarded for its knowledge and expertise in the design and supply of turnkey operating theatre solutions for Group 2 medical locations, Bender UK is also a leading supplier of clinical equipment packages.

A chosen partner for NHS Trusts and private hospitals Bender UK has an extensive service network, supplying round the clock maintenance and call-out to over 400 hospitals.

For high quality, patient safe, resilient technology you can rely on Bender UK.

Overview

As the use of advanced theatre equipment and technology develops in hospitals, the demand for safer working practices and efficient storage solutions increases.

Bender UK has established a comprehensive range of ceiling mount Contempo pendants to improve theatre environments. These Class 2 B Medical Devices provide an effective central location for the storage, movement and easy access to medical gases, data, power, electrical equipment and associated cables.

Contempo pendants are commonly used in operating theatres, ICUs, SCBUs, HDUs and many other clinical areas. They enable hospital teams to benefit from an increased spatial environment, reducing trip hazards and improving working conditions.

Alongside the need for enhanced storage and accessibility, hospitals must control the spread of harmful bacteria and reduce the risk of patient infection. Contempo pendants have a flush finish and are easy to clean, reducing the risk of contamination while allowing the most sterile conditions to be upheld.

The Contempo pendant range covers every clinical need, from simple and cost effective single arm solutions to combination tandem pendants to increase capacity and storage in larger theatres.

Bender Contempo pendants provide hospitals with bespoke, custom manufactured solutions, offering a wide variety of configurations to suit all clinical specialities. With built-in medical rails and pole mounting systems, the Contempo pendant range gives you the ability to future-proof your clinical area, installing shelves, monitors and other associated equipment at a later date.

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Fixed Pendants

Bender fixed pendants offer hospitals and clinical teams a high quality, proven Class 2 B Medical Device.

These Class 2 B ceiling mount pendants are fixed permanently in clinical and theatre locations. Bender UK offers three types of fixed pendant for a variety of applications:

Fixed height box pendant

The fixed height box pendant is suitable for use in endoscopy departments, anaesthetic rooms and general theatres. The maximum outlet options are:

- ▶ 9 Gases
- ▶ 8 Blue IPS Sockets
- ▶ 6 Data Outlets

Retractable pendant

This Class 2 B fixed, rigid pendant is retractable in height in comparison to the fixed pendant, enabling up to 330mm of vertical movement. This pendant is ideal for departments such as endoscopy, anaesthetic rooms and theatre areas. The maximum outlets options are:

- ▶ 9 Gases
- ▶ 8 Blue IPS Sockets
- ▶ 6 Data Outlets

Applications

- ▶ Endoscopy
- ▶ Anaesthetic Rooms
- ▶ General Theatres



Fixed column pendant (OK07-5)

The Class 2 B fixed column pendant is ideal for critical care, emergency department and theatre areas. All fixed column pendants are supplied with medical rails. The fixed column pendant is available in both vertical and horizontal configurations and has a variety of source head options, see table below:

Ordering Information

Source head options	L06	L10	L12	L15	A	Z
Maximum electrical sockets	6	12	15	20	8	15
Maximum data sockets	12	20	24	30	13	25
Maximum gas outlets + AGSS	5	8	10	12	5	10
Weight (kg)	55 kg	70 kg	60 kg	100 kg	50 kg	-
Medical rails	2	2	2	2	2	2
Medical rods	2	2	2	2	-	-



Fixed column pendant with L06 source head



Fixed column pendant with L10 source head

Single Arm Pendants

Bender Class 2 B single arm ceiling mount pendants are suitable for use in emergency departments, resus and a variety of theatre environments.

Available in both articulating and height adjustable options, these single arm pendants offer up to 330° rotation from the joint.

Single articulating arm pendant (OKO7-16)

This cost effective, solo arm pendant has an articulating arm that provides lateral movement and is available with either horizontal or vertical columns. There are multiple source head and arm length options available for the single articulating arm pendant, see tables below:

Ordering Information

Arm	Articulating arm					
Payload	150 kg					
Weight	-					
Brake	pneumatic					
Ceiling load	- Nm, - N					
Source heads	L06, L10, L12, L15, A, Z					
Arm length options	450, 600, 800, 1000 mm					
Rotation	330°					
Source head options	L06	L10	L12	L15	A	Z
Maximum electrical sockets	6	12	15	20	8	15
Maximum data sockets	12	20	24	30	13	25
Maximum gas outlets + AGSS	5	8	10	12	5	10
Weight (kg)	55 kg	70 kg	60 kg	100 kg	50 kg	-
Medical rails	2	2	2	2	2	2
Medical rods	2	2	2	2	-	-

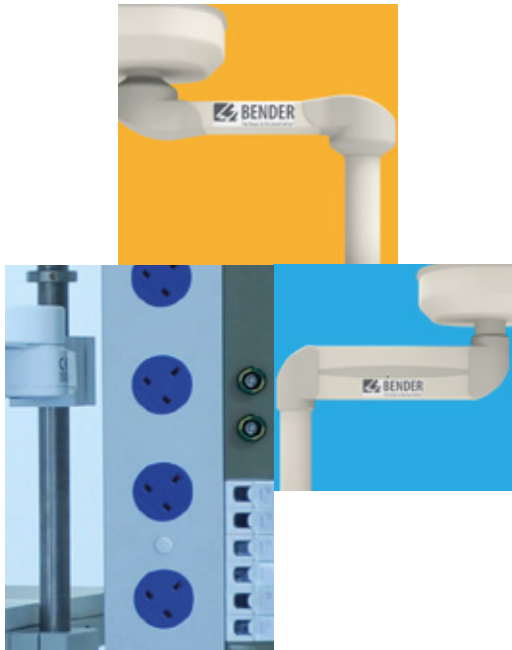
Applications

- ▶ Emergency Departments
- ▶ Resus
- ▶ Operating Theatres
- ▶ Critical Care



Single height adjustable pendant (OK07-55)

This Class 2 B ceiling mount, single arm pendant provides a flexible solution with the ability to adjust in height. This pendant is available with horizontal or vertical source columns and provides up to 500 mm of vertical movement through the arm. For information on source heads and arm options see tables below:



Single arm height adjustable pendant with L06 source head

Ordering Information

Arms	Height adjustable arm				
Payload	150 kg				
Weight	-				
Brake	pneumatic				
Ceiling load	- Nm, - N				
Source head	L06, L10, L12, L15, A				
Arm length	800 mm				
Rotation	330°				
Lift	500 mm				
Source head options	L06	L10	L12	L15	A
Maximum electrical sockets	6	12	15	20	8
Maximum data sockets	12	20	24	30	13
Maximum gas outlets + AGSS	5	8	10	12	5
Weight (kg)	70 kg	70 kg	60 kg	100 kg	50 kg
Medical rails	2	2	2	2	2
Medical rods	2	2	2	2	-

Dual Arm Pendants

Bender dual arm ceiling mount pendants are equipped with two arms and are designed for use in critical care areas and operating theatres. These more adaptable multi-movement pendants offer greater scope for lateral and horizontal movement; or articulating with lateral movement only.

Two types of dual arm pendants are available, with a range of column and arm sizes, and 330° rotation on all joints.

Dual arm multi-movement pendant (OK07-57)

This highly adaptable ceiling mount Class 2 B pendant has two arms for more enhanced positioning around the patient area. This pendant is supplied with either horizontal or vertical source columns combined with lateral and vertical arm movement. This multi-movement pendant has a maximum arm span of 1800 mm. See tables for variations:

Ordering Information

Arms	Lower Multimovement Arm		Upper Multimovement Arm		
Payload	150 kg		150 kg		
Weight	-		-		
Brake	pneumatic		pneumatic		
Ceiling load	- Nm, - N		- Nm, - N		
Source column	L06, L10, L12, L15, A		L06, L10, L12, L15, A		
Arm length	800 mm		450, 600, 800, 1000 mm		
Rotation	330°		330°		
Lift	500 mm		-		
Source head options	L06	L10	L12	L15	A
Maximum electrical sockets	6	12	15	20	8
Maximum data sockets	12	20	24	30	13
Maximum gas outlets +AGSS	5	8	10	12	5
Weight (kg)	55 kg	70 kg	60 kg	100 kg	50 kg
Medical rails	2	2	2	2	2
Medical rods	2	2	2	2	-



Dual arm articulating pendant (OKO7-28)

This lateral movement Class 2 B dual arm pendant with articulating arms is available with multiple source head options. This pendant has a maximum total arm span of 1800 mm. There are a variety of upper and lower arm length options available with this pendant type.

Accessories are available for all pendants.

Applications

- ▶ Critical Care Areas
- ▶ Operating Theatres
- ▶ Emergency Department

Ordering Information

Arms	Lower Articulating Arm			Upper Articulating Arm		
Payload	150 kg			150 kg		
Weight	-			-		
Brake	pneumatic			pneumatic		
Ceiling load	- Nm, - N			- Nm, - N		
Source head	L06, L10, L12, L15, A, Z			L06, L10, L12, L15, A, Z		
Arm length options	450, 600, 800 mm			450, 600, 800, 1000 mm		
Rotation	330°			330°		
Source head options	L06	L10	L12	L15	A	Z
Maximum electrical sockets	6	12	15	20	8	15
Maximum data sockets	12	20	24	30	13	25
Maximum gas outlets + AGSS	5	8	10	12	5	10
Weight (kg)	55 kg	70 kg	60 kg	100 kg	50 kg	-
Medical rails	2	2	2	2	2	2
Medical rods	2	2	2	2	-	-



Dual arm multi-movement pendant with A source head



Dual arm articulating pendant with L06 source column

Tandem Pendants

Tandem Dual Arm Pendants (OK07-28 x2)

Bender Contempo ceiling mount pendants can be configured in virtually any tandem arrangement. Tandem mount pendants provide a cost-effective way of increasing pendant capacity by sharing the same ceiling fixture. The footprint and space used is reduced, optimising working area within the theatre. Tandem pendants allow for multiple source columns to be attached to one fixing.

Configurations & Capacity

A common tandem configuration is two OK07-28 pendants with OK07-57 multi-movement arms. Any combination of arms can be used for the tandem arrangement including articulating or multi-movement arms. They are ideal for ICU, SCBU, and critical care areas to increase capacity for large volumes of services and equipment loads, enabling supplies to be conveniently delivered to both sides of the bed space.

This customised solution enables freedom of choice from our extensive pendant range. All Bender tandem pendant designs are tailored to the exact clinical needs.

Tandem pendants can be supplied with a variety of head type configurations.

Applications

- ▶ Critical Care Areas
- ▶ Operating Theatres



Tandem OK07-28 pendants with OK07-57 multi-movement arms



Bedhead Trunking Units

Compact, adaptable and user friendly

Bender UK offers a range of highly versatile bedhead trunking systems.

Bedhead systems or units provide a convenient access point for sockets and outlets in a range of patient areas from critical care locations such as intensive care and high dependency, to general medical areas, wards, bedrooms and patient recovery.

Intended to be wall-mounted, Bender bedhead trunking systems are adaptable to suit areas with limited wall space and can be positioned between windows, glass walls or supporting columns, maximising the use of available mounting space.

Modular in construction, Bender UK's range of bedhead trunking units provides both vertical and horizontal solutions to suit a variety of healthcare applications, with optional gases, electrical sockets and other installations. The electrical sockets and gas outlets are distributed from separate locations for enhanced working practises and safety. Bedhead trunking systems include direct, indirect or night lighting as required.

Horizontal Bedhead Trunking

Horizontal wall mount bedhead systems are usually located in areas surrounding the bed or patient. They conveniently arrange the required outlets and sockets in one place, improving the use of space, reducing hazards and enhancing patient safety.

Horizontal Range RN07- This incorporates the most basic of units for power and light only, to the most advanced for high and low voltage installations which also include gas outlets and lighting. The unit can be equipped with medical rails and other optional accessories.

Part numbers: RN07-DN0, DN1, DN2, DN3, DN3 single channel, DN3Z and DN4



Applications

- ▶ Patient Recovery
- ▶ HDU
- ▶ General Medical Areas
- ▶ NICU & SCBU

Vertical Bedhead Trunking

Vertical bedhead trunking is mainly used in areas where space is restricted, and the installation is more difficult. This type of bedhead trunking enables the placement of electrical sockets, medical gas outlets and other required electrical installations. Enabling a more optimum use of space, the vertical trunking can be situated in narrow areas such as between windows. The column rod enables adjustable shelves, medical rails and other accessories to be attached and supported from the bedhead system.

Vertical Range ZS - There are two vertical options in this range with both gas and electrical sockets, with and without lighting, with the ZS07L having greater capacity for handling extra sockets and lighting.

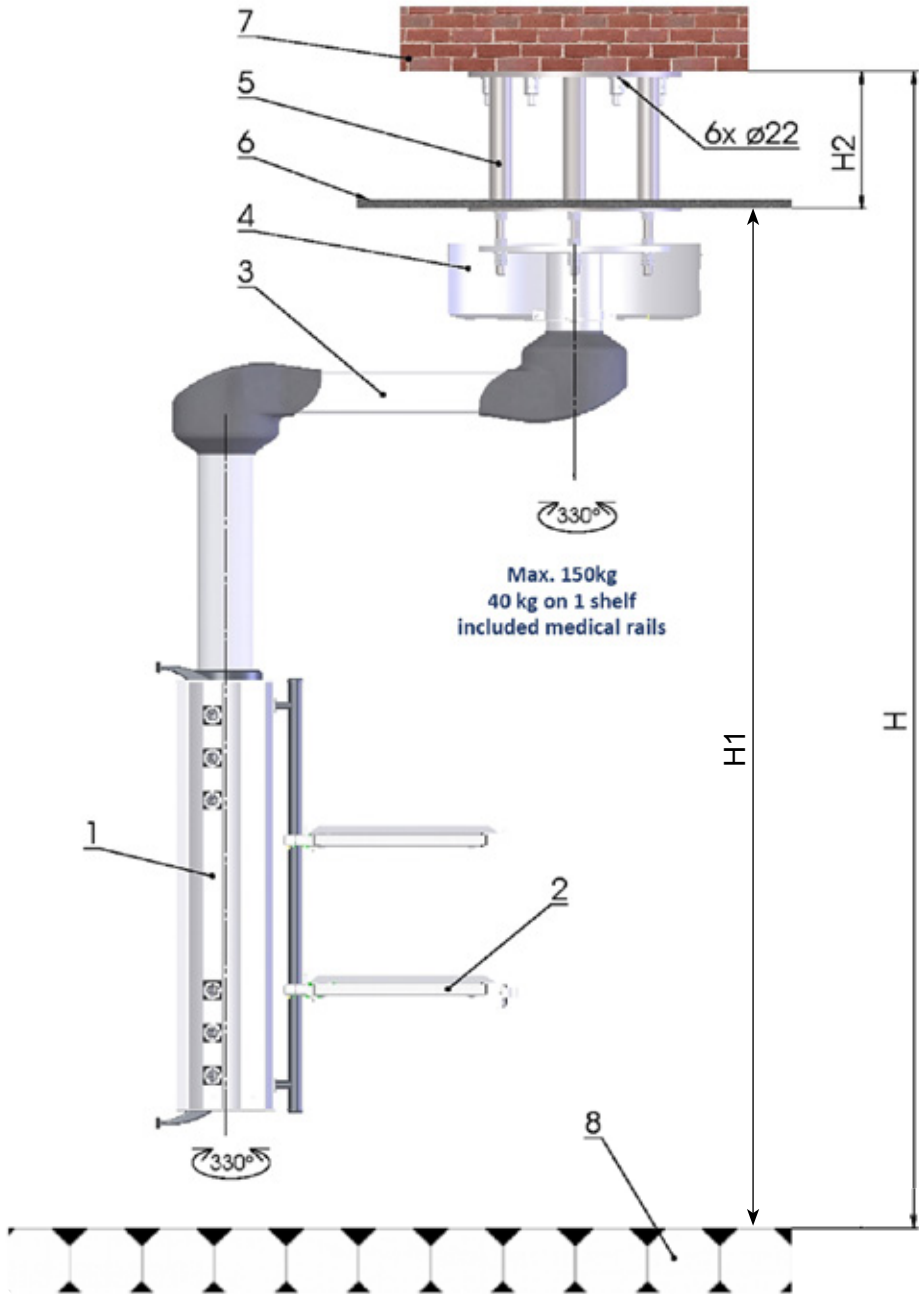
Part numbers: ZS07 and ZS07L



Pendant Survey Considerations

It is vital to consider site specific installation variables when ordering Contempo pendants. (See the table below). You should also confirm the quantities and type of:

- ▶ Gas outlets on the source column
- ▶ Blue IPS sockets
- ▶ Red UPS outlets
- ▶ White outlets
- ▶ Data outlets
- ▶ Shelves
- ▶ Accessories



Space & Installation

1. Source Head (L)	5. Spacer	H Ceiling Height
2. Shelf	6. False Ceiling	H1 False Ceiling Height
3. Rotary Arm	7. Ceiling	H2 Spacer Height
4. Ceiling Cover	8. Floor	



Accessories

Bender UK offers a range of additional accessories for use with Bender Contempo pendants and bedhead trunking.

Appropriate selection of accessories can significantly improve the capacity and capability of clinical equipment, expanding the scope of what a standard system might typically provide.

High quality accessories include:

Ramps, LED examination lamps, a variety of shelves, shelf wire baskets, medical rails, monitor holders, refracted arms, infusion racks and stands and cable holders. We advise safe working practises at all times, and recommend that payload guidance limits are adhered to when selecting and adding accessories and associated equipment.



Shelves

Medical departments require space for placing monitors, laparoscopic systems, and storage space for surgical instruments and other necessary medical material for operations and patient care. Shelf systems can be hinged to bedhead systems and pendants. All shelf systems can be customised according to end-user requirements, load capacity and dimensional requirement. Manufactured from sheet or stainless steel, with a powder coated surface if required.

Medical Rails

Medical rails are supplied for use with pendants or bedhead trunking. Alternatively, they can be mounted to the wall with specialised holders to attach equipment, shelves, hangers, baskets and other accessories.

Infusion racks / stands

Bender offers both fixed and mobile infusion racks or stands. The fixed option can be attached to ceiling pendants and bed head trunking to support infusion bags and bottles.

Refracted arms

Refracted arms or hangers are of benefit where the patient's condition requires the use of many devices simultaneously. Apparatus can be placed on high hangers with accessories such as infusion rods and pumps, dispensers and monitors. Refracted arms can be installed on the pendant or walls.

Monitor Holder

Monitor holders ensure safe attachment of screens. They are compact and can support varying payloads, in single or multiple screen configurations, incorporating optional shelves for keyboards.

LED Examination Lamps

These compact LED lights can be incorporated into bedhead systems. They are designed for basic patient examination. The flexible arm allows ease of positioning of the light in patient areas.

Holders and Baskets

Bender offers a range of stainless-steel wire baskets and equipment holders which can be used in single or multiple configurations subject to the clinical need. They aid orderly working practises and reduce clutter in clinical areas.





Survey, Installation, Maintenance & Repair

Design and Survey

Hospitals demand equipment that is versatile, cost effective and meets the needs of clinical teams. Our experts offer guidance and advice regarding the appropriate design, choice and pendant selection. We recommend a meeting/survey to clarify the exact clinical requirement to benefit product selection and successful project outcomes.

Project Management, Installation and Commissioning

Bender UK has a highly experienced project team, with years of healthcare industry experience. From survey through to project completion, we ensure all installations are executed to the highest possible standards. Our work ranges from turnkey theatre upgrades to small retrofit projects - we guarantee you will receive a professional and high-quality service from our team every time.

Service and Maintenance 24/7, 365

It is vital to ensure hospital equipment is reliable and operates as it should, so it is safe and easy to use, reducing the potential risk of damage or harm to patients and clinical teams.

Bender UK's already extensive service network maintains theatre and critical care power equipment in over 400 hospitals in the UK and the Republic of Ireland.

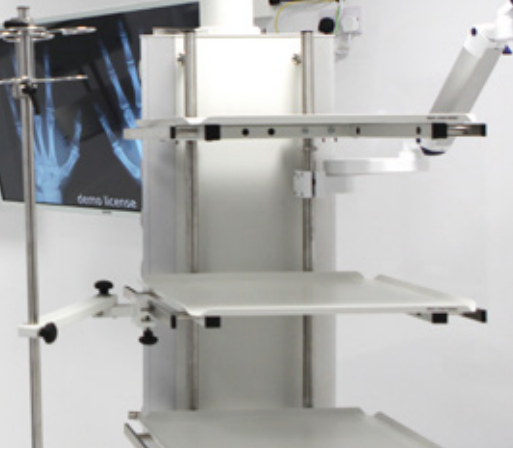
Bender pendants and bedhead trunking systems require minimal maintenance. We recommend an annual verification is conducted which can be incorporated into existing service contracts and executed when we have access to the clinical area. We ensure your service costs and downtime are kept to an absolute minimum.

Our hospital business unit team provide all the help you need, from design, installation, and service, to round the clock through life technical support, call-out and repair services. You can be sure you are in safe hands when you work with Bender UK.

Quality Standards

All Bender Contempo pendants meet relevant British Standards, are CE marked and comply with the Class 2 B Medical Device Directive (93/42/EEC). All pendants are suitable for use according to IET Guidance Note 7 – Special Locations (Section 9).

All products are supplied with 12 months standard manufacturers warranty.



Why Choose *Contempo*

The Contempo range of pendants and associated accessories, offers a versatile and flexible approach to selecting a product that will improve space, movement and accessibility in the patient area.

Features and Construction

- ▶ Constructed of premium grade aluminium for optimum strength and durability
- ▶ Blue sockets are positioned at a 45-degree angle, providing space for leads and wires
- ▶ Screwless pendant surface reduces the risk of harmful bacteria
- ▶ Gas outlets are individually piped, eliminating the single point of failure, improving reliability
- ▶ Pendants are supplied with two individually wired circuits (A & B) ensuring maximum safety
- ▶ Medical rods are included with the source column body
- ▶ Medical rails are optional - provided for increased flexibility
- ▶ Flush mounted outlets for easy clean
- ▶ Bespoke arm length to suit individual theatres

Benefits

- ▶ Comply with regulatory standards
- ▶ Efficient and easy to clean - saves time and reduces the risk of contamination
- ▶ Cost effective - no requirement for a gas line to be installed for EP brakes
- ▶ User friendly - easy to reposition and manoeuvre
- ▶ Flexibility on outlet types
- ▶ Multiple locations for accessories
- ▶ Maximum safety with two individually wired circuits
- ▶ Supplied and installed with confidence by electrical safety experts
- ▶ Reduce maintenance costs by adding equipment to existing service contracts

Ordering Options

- ▶ Customisable colour options to suit the clinical preference and setting
- ▶ Electro-Pneumatic or Electro-Magnetic Brakes in multimovement pendant joints
- ▶ Various arm lengths and types available
- ▶ Comprehensive range of accessories available
- ▶ Incorporating any combination of outlet types to meet the needs of the clinical team
 - ▶ Blue IPS 230V Power
 - ▶ Medical Gases
 - ▶ RJ45 Data CAT6, HDMI, RS232
 - ▶ Left blank for third party outlets
- ▶ Multiple source heads available: L06, L10, L12, L15, A and Z

▶ **VALUE**

Our products are competitively priced - delivering value for money and reduced life cycle costs.

▶ **QUALITY**

As an OEM we are confident in the quality of our products and offer industry leading warranties. Approvals include UL, Lloyds, TUV, Germanischer Lloyd, cULus, Network Rail and Def Stan.

▶ **CUSTOMER SERVICE**

We value and respect our customers and strive to deliver a first class experience every time.

▶ **TECHNICAL SUPPORT**

Our nationwide network of factory trained engineers delivers unrivalled technical support 24 hours a day.

▶ **PRODUCT RANGE**

We produce a range of high quality engineered solutions for diverse market sectors.

▶ **DELIVERY**

We keep our promises and deliver on time.

▶ **INNOVATION**

Since inventing the insulation monitor we now hold multiple patents and continue to be recognised as a world leader in electrical safety products.

▶ **FINANCIAL STABILITY**

High risk projects demand low risk suppliers – Bender’s solid financial position reduces risk.

▶ **INTERNATIONAL**

A family company with a global presence, Bender has offices throughout the world.

▶ **COMPETENCE**

We actively participate in the development of international standards.

▶ **OUR PEOPLE**

Friendly, dedicated and knowledgeable - our enthusiastic team are always willing to help.

▶ **PHILOSOPHY**

We sell products that don’t come back to people that do!

