

# COMMERCIAL HEATING & PLANT

The range of brand leading manufacturers for heating equipment is vast. There are different solutions and efficiencies to match every requirements ranging from plant rooms, boiler houses and small applications.



- ◆ BOILERS
- ◆ WATER HEATERS/CYLINDERS/CALORIFIERS
- ◆ WILO
- ◆ PUMPS
- ◆ PRESSURISATION UNITS
- ◆ BOOSTER SETS
- ◆ DOSING POTS
- ◆ AIR & DIRT SEPARATORS
- ◆ MAGNETIC FILTERS
- ◆ FILTER POT
- ◆ METERING
- ◆ EXPANSION VESSELS
- ◆ WATER TREATMENT
- ◆ STELRAD
- ◆ RADIATORS & TOWEL RAILS
- ◆ HEATERS

## BOILERS



A boiler is a furnace that burns fuel such as gas, oil or LPG used for heating water. There are three main types being combi, system and heat only (for biomass please refer to the renewable section). SBS partner with several commercial boiler manufacturers making sure there is a unit to suit every application. Boilers need to meet both environmental and economical demands and have options for wall hanging or floor standing, which often depends on size range selected. Available kW range varies between model and manufacturer, but by dealing with quality brands all performance and ErP demands can be met.

### BOILER OPTIONS

- Gas
- Oil
- Gas/Oil
- Industrial
- CHP/Biomass (see renewable section)
- Electric



## WATER HEATERS/CYLINDERS/CALORIFIERS

There are a wide range of options available, to offer solutions for every application including; public buildings, commercial properties, construction sites, festivals and sporting events.

Following the change in ErP Regulations it has become extremely important to provide products capable of performing to the required level. Efficiency percentages and recovery rates for these products remain paramount, along with protection against legionella and easy installation as space is often at a premium. Smaller under sink and over sink instant boiler water options are also available, whether it be for domestic or industrial use. Size (litre) range varies between model and manufacturers, so performance demands can be met.



### WATER HEATERS

Water heaters are an efficient, safe and reliable way of heating water in domestic and commercial buildings. They take up a small amount of space, meaning that they are a practical choice for small properties.

### WATER CYLINDERS

Cylinders are used to store and supply hot water. There are different types depending on the needs of system and how the water is supplied to the cylinder, which is either gravity fed or mains fed.

### WATER CALORIFIERS

A calorifier is an indirect or direct electrically heated water vessel that provides hot water in a DHW system. A calorifier does not contain its own burner, but in the case of an indirect calorifier relies instead on an external source of heat, such as a boiler, heat pump or solar collector to heat the water.

### OPTIONS

- Direct (element only)
- In-Direct (element plus drawing heat from the heating system via a coil)
- Unvented
- Vented
- Gravity Fed
- Mains Fed
- Solar (see renewable section)



# WILO



Wilo UK Ltd have been based in the UK since 1985 and is a premium manufacturer of pumps and pump systems for building services, water management and industry.

From our main activity of selling pumps for heating, the organisation has grown into a solutions provider using smart solutions that bring together people, products and services.

## PUMPS FOR ALL APPLICATIONS

### RECREATION

The areas that serve recreation, such as leisure parks, cinemas or sports stadiums, have strongly fluctuating demands for water supply and water disposal over time. Periodic peaks constitute a particular challenge for the pump systems. Wilo's flexible and comprehensive portfolio perfectly meets this need and has solutions for all tasks.



### INDUSTRY

Alongside operational reliability; energy efficiency, material quality and the maintenance of standards have a particular role in industry. With the highest quality requirements for our products, Wilo systems offer high efficiency, long service life and operational reliability for various industrial applications.



### COMMERCIAL, HEALTHCARE & EDUCATION

Office towers, universities, hospitals and hotel complexes encompass large buildings, primarily for commercial use. The growth of towns means increasing complexity in building management and new challenges in terms of technical connectivity. Wilo products offer the opportunity for connectivity and can always be integrated everywhere into existing building services.



### TRANSPORTATION AND INFRASTRUCTURE

The hubs of any city's infrastructure, such as airports, railway stations or ports, constantly demand reliable sewage transport. Wilo solutions ensure simple and efficient sewage drainage with robust and reliable solid separation systems.



### RESIDENTIAL

The living spaces within a town or city are characterised primarily by the need for amenities and individualisation. This means the most demanding requirements for selecting and operating heating and air conditioning systems. Drinking water applications must also meet the maximum hygiene standards. Wilo solutions can also be easily integrated into existing smart-living concepts.



# PUMPS



A pump is a mechanical device that transfers fluids from one location to another. The device lifts and moves fluids from low to high levels of pressure.

SBS deals with various brand manufacturers, and can provide a solution for any pumping requirement in various applications such as; domestic building, commercial building, fire protection, industrial, water supply and waste water. Either from stock or direct from the applicable manufacturer, ErP compliant pumps can be supplied.

Condensate removal pumps are listed the in air conditioning section.



### PRODUCT RANGE

- Variable Speed & in-line Circulators (ErP compliant & suitable for water applications)
- In-line (including twin) & end suction centrifugal
- Multi-stage; horizontal, vertical, immersible, in-series
- Submersible & sewage

### FEATURES (IF CORRECT PUMP IS CHOSEN)

- Simple installation
- Low energy consumption – complying with the latest ErP/EuP requirements
- Multiple pump settings
- Low noise level
- Minimal maintenance and long life
- Pumps to suit regardless of system pressures
- Pressure control and speed duty to suit
- Available for multiple systems including heat pumps and solar systems

To help convert new, old and different model pumps a conversion chart is available in vital statistics to help with replacements and new pumps.



# PRESSURISATION UNITS



A wide range of high-quality pressurisation units are available, which can provide a solution for replenishing water into sealed system heating and chilled water installations. There are units which can be suitable for small domestic/light commercial systems, large industrial high-temperature systems or district heating systems.



- DISPLAY: Digital or Dial (Analogue) Displays
- NUMBER OF PUMPS: Single or Double pump versions
- STYLE: Boxed (cabinet) or open
- SIZE: Available in small to large units

# BOOSTER SETS



High-rise buildings along with flow rate requirements, often mean booster sets are essential in some geographical regions. Along with the fact water authorities only guarantee a pressure of 1 bar at a simultaneous flow of 9 litres/min, buildings of three levels or more will often require a booster set. Solutions are available for all types of installation from domestic to large industrial systems. Booster sets are suitable for water applications for both hot and cold water. The model range varies from single pumps with constant speed settings to multiple pumps with variable speed and inverter controlled sets.



## DOSING POTS

CORE STOURFLEX

Dosing pots are installed in a heating or cooling system to allow rapid introduction of water treatment safely, for the prevention of sludge, limescale and corrosion. The ideal location is where there is a high differential pressure between the flow and return pipework or heaters. The range has both mild steel and stainless steel material construction options, supplied fully assembled ready for installation on site. A non-return valve has been fitted for additional safety due to its anti-flash protection.

SIZE:	3.5 - 50litre
TEMPERATURE:	-10°C to 120°C
PRESSURE:	0.5 to 14 bar
FINISH:	Mild steel & stainless steel available

With help sizing dosing pot required refer to the vital statistics section.



## AIR & DIRT SEPARATORS

CORE STOURFLEX

The range of separators available from SBS, are designed to automatically remove dirt and air from heating, cooling and process systems. These ensure optimum performance of your equipment at all times. They can be installed in all buildings including retrofit, to provide economic and environmental benefits. Installation can be done on any sizeable open or closed loop system, including chilled water systems, condenser water systems and process water systems.

### FEATURES

- Stainless steel internal element
- Designed and manufactured in accordance with Pressure equipment directive 97/23/EC, 1997
- Larger units available upon request

SIZE:	DN50 to DN300
CONNECTION:	PN16 (others available upon request)
TEMPERATURE:	Up to 110°C
PRESSURE:	Up to 10 bar
FINISH:	Carbon steel and stainless steel available



## MAGNETIC FILTERS

BoilerMag ADEY

Magnetic filters can be installed to help prolong the life of the system using magnetic technology to help keep efficiencies high and to maintain optimum performance for both domestic & commercial environments. The purpose of a magnetic filter is to catch most of the sludge that circulates around heating and cooling systems. A wide range of products are available, even for the most demanding heavy duty industrial application with various connection options.

### FEATURES

- Protection from black iron oxide
- Collects large and micro-particles of sludge that build up in the boiler
- Conforms to the pressure equipment directive
- Easy draining/cleaning maintenance
- Helps to maintain optimum heating performance
- In-line, full-flow installation for heating and chilled systems
- Heavy-duty, high-performance magnetic filtration
- Powerful system cleaning and protection with neodymium magnets
- Individual magnet assemblies which can be lifted for ease of cleaning and maintenance – no need to remove and replace the filter lid for servicing
- Sight-glass for visual inspection of debris collection
- Helps to improve system efficiencies and performance, reducing maintenance and running costs, and lowering carbon emissions



## FILTER POT

BSP

The BSP Filter Pot is suitable for water applications Side Stream Filter which removes dirt and debris down to 0.5µm, along with neutralising bacteria with Antimicrobial Cartridge Filters and a rare earth magnetic grate. The units incorporates the functions of a Dosing Pot, Dirt and Air Separator, Magnetic Filtration and Fine Filtration Cartridge Filter all-in-one simple unit.

### FILTER POT MINI

PRESSURE:	10 bar
VOLUME:	90,000litre
MAX TEMP:	110°C
DOSING CAPACITY:	5.5litre
MAGNET:	Rare Earth Magnet Grate
FINISH:	Polished Stainless Steel
VALVES & FITTINGS:	Stainless Steel

### FILTER POT MIDI

PRESSURE:	16 bar
VOLUME:	375,000litre
MAX TEMP:	110°C
DOSING CAPACITY:	24litre
MAGNET:	Rare Earth Magnet Grate
FINISH:	Polished Stainless Steel
VALVES & FITTINGS:	Stainless Steel



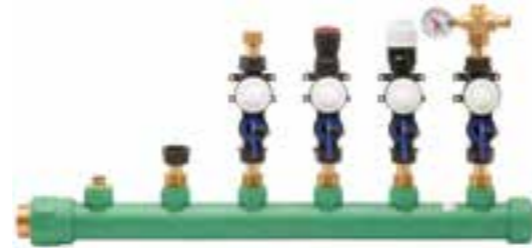
# METERING



Working with leading suppliers of metering products SBS can offer meters for the building services, process and agricultural markets along with a wide range of meters suitable for residential to hygienic applications.

## PRODUCT RANGE

Working with leading suppliers of metering products SBS can offer a wide range of meters for the domestic, commercial and industrial markets. They are available in single and three phase meters, which can have a direct connection or a CT operation with multiple communication outputs. The range can also include diaphragm, turbine and rotary meters. For gas installations, gas regulators and solenoid valves are available.



## APPLICATIONS

Water, Electricity, Gas, Energy, Steam, Oil, Compressed Air & Hygienic environments.

## TENANT VALVE

Combines several functions in one compact, self-contained unit to control and monitor water supply to multi-unit sites, such as flats or offices. Utilising a single cartridge design, the Tenant Valve Plus is quick & easy to install, reduces leakage potential and saves costs.

It incorporates a ball type isolating valve, also approved as a stop valve, pressure reducing valve, double check valve, dual reading pressure gauge/test point and a connection point for optional addition of a Class 'A' water meter.



# EXPANSION VESSELS



The expansion vessel can be found in most pressurised systems, they contain air and water from the central heating system. The purpose of the vessel is to maintain the right level of pressure in the system. They can be used in heating and potable water applications and are manufactured with the highest-grade materials, to ensure long and reliable life.

- SIZE: 8mm (1/4") - 300mm (12")
- TEMPERATURE: Up to 99°C
- PRESSURE: All pre-set at 1.5 bar  
8 bar max up to 24litre  
10 bar max 35 - 500litre
- FINISH: Red epoxy paint, grey & white (potable water)



# WATER TREATMENT

The modern world has often meant we live in an era of aggravated water shortage. The easy access to quality water is limited due to increasing water pollution, exhausted rivers and overused groundwater all threatening our water consumption.

A range of equipment and chemical water treatments are available, from the simple to complex products for both domestic and commercial applications.

- **Water filters:** Filtration is one of the most widely used methods of water treatment, it is the process of removing undesirable elements from your water supply such as particulates, bad taste, odours and even specific trace elements. While a single filter will work in some situations, it is often necessary to use a combination of single, multiple and specialist filters to satisfy the needs of individual projects.
- **Scale inhibitors/reduction:** These are a low-cost answer to problems with hard scale. A complete choice of technologies (single & dual) to match your needs and budget. Products are available with either push-fit or compression fittings.
- **Reverse osmosis:** Available as a single unit form or part of a modular water treatment solution, the products can protect a single appliance or whole facility. Units available can remove 90 - 99% of all dissolved solids, 98% of all bacteria and fine suspended particles below 1 micron particle size.
- **Ultraviolet disinfection:** UV is a safe technology used for the purpose of disinfecting water without the use of chemicals. An effective solution that kills most waterborne viruses and bacteria. As water passes through the shell it is exposed to a high intensity UV light that destroys the DNA within the bacteria cells and viruses.
- **Water conditioner:** The system uses an ion exchange process to remove calcium and magnesium ions from the water supply, replacing them with sodium salts, which do not deposit scale.
- **Water softening:** Hard water can seriously damage central heating systems, pipework, boilers and other applications running off the system. This solution can prolong the life of the system while maximising energy efficiency.
- **Chlorine dioxide:** This chemical is an effective disinfectant and will remove a biofilm. Chlorine dioxide generators are used to accurately mix two chemicals together in a controlled environment. The dosing can be controlled manually or modulated automatically.

## EQUIPMENT WATER TREATMENT



## CHEMICAL WATER TREATMENT



## STELRAD



Stelrad offers one of the widest range of steel panel radiator styles & sizes in the UK and also has a comprehensive selection of designer products and towel radiators, not forgetting the range of low surface temperature radiators. With radiator heights up to 2500mm and width/lengths up to 3000mm, all size requirements can be met. Outputs are as low as 190 Watts (648 BTU/hr (Delta T50)) up to 6,276 Watts (20,591 BTU/hr (Delta T50)).

Elite and Compact products were one of the first radiator ranges in the UK market to have a ten year guarantee. All products conform to EN442, the European Standard for radiators, and are manufactured in ISO 9001 certified facilities. The products are pressure tested to 10 bar (8 bar for LST's) to assure weld integrity and a thorough leak testing regime, followed by a four stage inspection process. Every radiator undergoes a two stage painting process to give an exceptionally hard-wearing finish in RAL 9016 as standard. To complement the range, radiator valves are also stocked, which can be seen in the previous product area.

### ELITE (STEEL PANEL)

One of the slimmest double panel radiators on the market at just 77mm wide, offering a range of 223 models and providing extra sizing flexibility to cover a multitude of application requirements. Specifically designed accessories, such as floor standing brackets, ensure the Elite can be fitted anywhere. Symmetrical convectors allow radiator mounting either way up, a top bottom opposite end (TBOE) or a top bottom same end (TBSE) connection is offered as an important facility in commercial applications and to ensure greater efficiency with high definition pressings to ensure smooth edges. All tappings are aligned with quality nickel-plated plugs and vents, incorporating high quality EPDM 'O' rings.



#### RANGE

K1 – Single panel, Single convector      P1 – Single panel  
K2 – Double panel, Double convector      P+ – Double panel, Single convector  
K3 – Triple panel, Triple convector

### SOFTLINE

This series of radiators have curved top grilles & side panels and offers a mix between design and performance giving the best of both, with the range including Compact, Silhouette, Deco and Plan models. Vertical options are available should size of a room dictate a certain shape radiator is required.



#### RANGE

Available in White RAL 9016 or Anthracite grey RAL 7016 from stock

### COMPACT (STEEL PANEL)

The Compact is one of the UK's best-selling and comprehensive range of compact radiators with integrated top grilles and side panels. With proven high performance award winning characteristics, it is ideal for every room and every application where space is at a premium. Available in a range of 225 models, the range provides extra sizing flexibility and covers a multitude of application requirements. The integrated top grille and side panels have been specifically designed to eradicate any movement, providing a tight, professional fit that will remain in place, even after storage, transit and installation. A range called Compact Vertex is also available to give an extra option when it comes to sizing.



#### RANGE

K1 – Single panel, Single convector      P+ – Double panel, Single convector  
K2 – Double panel, Double convector  
K3 – Triple panel, Triple convector

## STELRAD



### DESIGNER

The range has both horizontal and vertical options to suit various tastes and property requirements. Colours and size vary greatly with a brief outline of the different options seen below:

- **Planar** – Slim profile radiator which is often a favourite with architects after understating radiators
- **Planar Heavy Duty** – A durable and hard-wearing heavy duty radiator. This offers sturdiness and style, with a sleek finish
- **Compact with Style** – Combination of design and value presenting a stylish product
- **Concord** – Constructed from horizontal or vertical tubes creating a flat radiator
- **Classic Column** – Timeless steel column 'old' style classic radiator
- **Swing** - A curved vertical design for a sleek stylish design



### LST STANDARD & i PLUS

Meeting NHS guidelines for 'safe hot water and surface temperature', they are also finished in antibacterial paint as standard making safety paramount in such challenging environments. The LST Standard gives you the option to specify your preferred controls and can be installed in domestic, commercial and public buildings running heating systems.

The i Plus model comes with a Danfoss RAS-D remote sensor designed specifically for commercial heating systems which can be pre-set to allow adjustment of room temperatures between 5°C and 26°C. Every LST radiator is supplied with flat panel outer casing which is totally reversible to allow piping flexibility. The casing is held by security fittings with a unique seam fixing bracket system, to prevent unauthorised access to the emitter accommodated inside. The emitter itself provides high outputs through convection for excellent heating performance. A range called LST Plus Vertical is also available to give an extra option when it comes to sizing.



#### RANGE

K1 – Single panel, Single convector      P+ – Double panel, Single convector  
K2 – Double panel, Double convector

## RADIATORS & TOWEL RAILS



Along with Stelrad, SBS work with other manufacturers providing a range of LST, compact and towel rail radiators. The different products come with various features & benefits, however the most customary is the method of heat transfer via a radiator.

The range of radiators and towel rails has been developed significantly, giving many more options than ever before, to help find a solution for every application/environment.



## HEATERS

In partnership with brand leading manufacturers, an extensive range of heating equipment is available through SBS. With such focus on the energy sector, maximising control & performance, while minimising running costs is key within any heater. A small selection of the range available is highlighted below with various approvals supporting the products.

### UNIT HEATERS (FLOOR STANDING, CABINET AND OPEN)

Unit heaters can be installed in the widest variety of locations, from factories, to warehouses, to exhibition halls and showrooms. The two discharge options, downward or horizontal, meet all likely space configurations. Downward discharge is particularly suited to complex areas where obstacles might impede airflows from a horizontal unit. However, the horizontal discharge units with high adjustability, they are ideal where directional heating (e.g. along production lines) is required.

Most unit heaters can operate with low, medium or high pressure from hot water, steam, natural gas, oil or LPG. This means that most existing factory or commercial units need no major or expensive capital installation before an effective heating solution can be found.

#### ADVANTAGES

- Increased comfort
- Extensive range
- Tried, tested and trusted over many years
- Simple to install
- Control flexibility
- Natural gas, oil or LPG fired options
- Ideal for most industrial and commercial applications with large range of heat outputs and burner options
- CE approved gas models available



### DESTRATIFICATION FANS

With any conventional air heating system, warm air will rise to roof level by natural convection. In high buildings such as factories, warehouses and sports centres, this can result in high temperature gradients and consequently increased energy usage. Destratification fans reverse the natural convection process, recirculating warm air back to working level providing a permanent reduction in roof space temperature and uniform temperature distribution.

#### ADVANTAGES

- Ease of installation
- Low running costs
- Reliable in operation with minimum maintenance
- Extremely effective heat distribution
- Variety of paint finishes available upon request



## HEATERS

### RADIANT HEATERS

Easily installed and requiring minimal maintenance, these gas heaters provide clean, quiet and energy efficient heat. Ceiling mounted and aesthetically pleasing, these heaters are available in a variety of sizes and designs.

#### ADVANTAGES

- Broad range of inputs and tube lengths to fit a variety of building sizes and floor plans
- Durable components help to provide long equipment life
- Ceiling mounting options
- Detailed installation, commissioning, operation and service manuals to assist in reducing installation and service time
- Deep-dish, parabolically-designed reflectors with end caps, to help maximise energy reflection & minimise heat loss by convection
- Reflectors can often be tilted or side reflectors can be added to concentrate heat where needed
- Quick fix couplings and hangers provide ease of installation
- Natural gas or LPG models available
- Unit can be CE design certified to meet industry standards



### AIR CURTAINS

An air curtain does not act as a physical barrier but is designed to retain air conditioned or heated air, reduce cooling or heating while allowing the use of an 'open door' policy and to keep smells and other contaminants out. Applications can be installed in retail premises, sales outlets, cold stores, busy main entrances, warehouse and reception areas. With any air curtain, it is essential that the 'jet' of air reaches the floor and covers the entire door width. An air curtain should therefore enhance comfort and save energy.

#### ADVANTAGES

- Increased comfort
- Energy savings
- Tried, tested & trusted over many years
- Simple to install – plug & play
- Control flexibility



### TRENCH HEATING

Trench heating is very discreet, frees up floor space and does not obscure vision through any glazing. It also reduces the liability for accidental damage and requires minimal maintenance. However, if space beneath the floor is restricted or the floor is solid, low level floor-mounted perimeter heaters or runs of continuous above-floor perimeter heating may provide the answer.

Perimeter heating provides all the benefits of trench heating including; circulating & heating cool air from windows, minimal dimensions and it works well in situations where trench heating cannot be installed.

