### Seal of approval

ADEY's MagnaClean has established a reputation as a powerful and totally reliable magnetic filtration unit. It tackles demanding applications across commercial, industrial, health, leisure, educational and residential environments.

### Cool solution for global UK aerospace company

"MagnaClean was installed within an established installation serving several hundred employees at a major aerospace plant in the Midlands. The cooling system had experienced regular failure over the years, but since the installation of MagnaClean it's been brilliant. We haven't had a single issue.

Whether it's a heating system or a cooling system, the simplicity of this technology and the benefits it brings in terms of performance is catching on fast. I haven't seen anything else to match them and I've no hesitation in recommending them to the industry."

Peter Dashey, Director

Heating & Plumbing Services, Birmingham, West

#### **Top marks at Oakham School**

"A new boiler plant is being introduced on a rolling basis to an ageing central heating system dispersed across a large independent school site that accommodates 1,200 students, so we needed something reliable to protect the new equipment.

We trialled MagnaClean about two years ago and it worked so well that we've put in two more and have experienced no problems with any of the system heat exchangers to date. I'm confident it's doing the job. It's a well-designed product that's built to last. We've proved it works, so we'll be installing further units as the plant upgrade programme continues in the future."

Patrick Trower, Asst. Estates Manager

Oakham School, Rutland, Leicestershire

### Helping deliver a 45% heating bill saving to social landlord

"Residents are benefitting from reduced heating bills, improved comfort with better radiator performance levels and improved control over the system. In fact, since the plant room upgrade was completed in June 2010, we've managed to identify a 45 per cent fuel saving, and the return on investment will continue to grow as the *MagnaClean* technology protects against further problems."

**Stewart McTaggart,** Site Manager Hussey's Almshouse, Salisbury, Wilts

#### Central heating boost for social housing

"We're committed to providing best solutions and best value for all our residents and any initiatives that meet both of these requirements are well received. We're pleased with the early results. Since the initial installation, three further filters have been installed at similar developments and East Thames Group will be incorporating the use of MagnaClean within our service maintenance contracts."

#### **Keith Deane**

**East Thames Group, London** 

### Just what the doctor ordered at Leeds Infirmary

"The MagnaClean units have already been removing high levels of magnetite sludge from the system and this has totally negated the need for far more intrusive and costly maintenance. Based on what we've seen already, I'm confident about achieving the temperature levels required. The theatres are the biggest concern, but we've been fulfilling the requirements and the transformation in the system has been remarkable."

Stuart Keane, Department Mechanical Team Leader Leeds Infirmary Estates

To benefit from a more powerful and reliable commercial central heating system solution, ask your supplier about *MagnaClean* **TODAY**.

Call 01242 546717 NOW or visit www.adey.co.uk

## MagnaClean®



#### MagnaClean

Product Code	Filter Diameter (mm)	Inlet size (mm / " )	No. of magnetic rods	Casing volume (litres)
CP1-03-01123	160	50 / 2"	5	3.3
CP1-03-01124	210	80 / 3"	6	7.08
CP1-03-01125	216	100 / 4"	7	8.18
CP1-03-01126	324	150 / 6"	9	26.37

#### **Technical specifications**

#### MagnaClean

Maximum working pressure: 10 bar Maximum working temperature: 100°C

#### Casing

Material: 304L Stainless steel
Shape: Single inlet/outlet, 1¼" BSPT drain
Lid Seal: EPDM

#### Gaskets

Material: EPDM Size: PN16

#### Inlet/outlet

Size options: 2", 3", 4", 6" Flanges: PN16

- 2" 18mm, 4 bolt holes
- 3" 15mm, 8 bolt holes 4" 15mm, 8 bolt holes
- 6" 18mm, 8 bolt holes

#### Magnet

Material: High power, 'rare earth' high intensity core Sleeve: 304L Stainless steel Lengths: 179mm, 206mm, 229mm, 259mm Diameter: 25mm

#### Sight glass

Weld material: DIN1.4404 stainless steel Collar nut: DIN1.4301/DIN1.4307 stainless steel Glass: Toughened soda lime to BS3463 Product side seal: EPDM Outer seal: Non-asbestos fibre (Klingersil C4400)

MagnaClean manufactured to EN 13445 : 2009

#### **Service guarantee**

MagnaClean will provide years of protection maintaining the high efficiency of your heating system and result in financial benefit and increased system reliability.

The product is backed by a two year guarantee.

#### Information

For more information on the installation and servicing of ADEY's *MagnaClean*, call 01242 546717.

Alternatively, visit www.adey.co.uk





Telephone: 01242 546717 Email: info@adey.co.uk www.adey.co.uk



Produced from recycled material



# MagnaClean®

Powerful protection for commercial heating and cooling systems







A carbon neutral compan















# Magnaclean®

## **Guaranteed commercial heating system protection**

*MagnaClean*® is an exceptionally powerful range of magnetic filters designed to protect and maintain demanding light commercial heating systems through to heavy industrial applications.

The award winning *MagnaClean* design characteristics and high quality production make installation and ongoing maintenance extremely straightforward.

This proven technology effectively tackles black iron oxide sludge and system debris and has been specifically developed to meet commercial needs. The high performance filters not only maintain heating and cooling systems, they provide ongoing protection and contribute significantly to reduced energy, maintenance and repair costs within the organisation.

At the same time, the technology offers flexibility, reliability and a long operational life over many years across the following sectors:

**Industrial** – Factories and production plants

Commercial - Offices blocks, public and amenity buildings

Residential - High-rise apartments and flats, large houses, estates

Health - Hospitals, care centres, practices, nursing and residential

**Leisure** – Sports centres, swimming pools, holiday complexes, hotels and cinemas

**Education** – Universities, colleges, and schools

**Community** – Cathedrals, churches, municipal and public buildings



#### The benefits

The installation of *MagnaClean* within any heating application brings immediate tangible benefits, particularly where there are significant numbers of radiators with larger dimension pipework. These benefits improve performance and deliver savings in time and money.

The principal benefits are:

- Guaranteed central heating system protection from black iron oxide
- Simple, trouble-free installation and servicing
- Manufactured in the UK to the highest production standards
- Restores heating system to peak performance and efficiency
- Extended operational life of the system
- No ongoing running costs
- Collects large and micro-particles of sludge that build-up in the boiler
- Low maintenance costs
- Increased energy efficiency
- Integral sight glass assembly enables easy inspection of debris capture
- Pressure vessel components designed, approved, manufactured and tested in the UK
- Quality of cast body verified by X-ray analysis
- Specification and construction conforms to Pressure Equipment Directive PED 97/23/EC
- EPDM full face flange gaskets for robust sealing at high temperatures
- Drain plug with BSPT threads ensuring effective seal and easy maintenance

## MagnaClean operates in two ways

1. Firstly, it purges even the most demanding and dirtiest commercial system of the potentially damaging black iron oxide, even the micro-particles.

2. The ongoing operation of the heating system is trouble-free as the water circulates through an iron oxide-free zone.

## An effective solution for major commercial heating systems

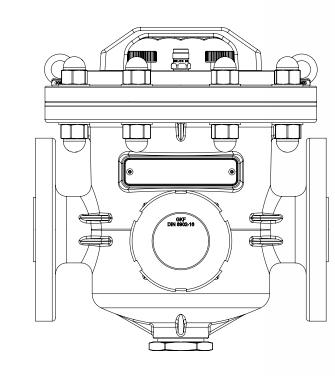
Modern heating systems designed with high efficiency boilers should encounter few problems within commercial and industrial applications, but only if operating at peak performance.

The natural process of black iron oxide build-up quickly impairs system performance and eventually results in boiler damage which can prove extremely costly to repair. Particles bond to all components causing premature failures of heat exchangers, pumps and valves. The larger the system, the more severe the problems.

Black iron oxide deposits contaminate the boiler heat exchanger and pipework resulting in dramatic efficiency losses. Tests have shown that even minimal sludge build-up causes a serious reduction in boiler efficiency and even breakdown.

The indicators are all too evident:

- Radiator cold spots throughout the system
- Poor system circulation
- Blocked system pipes and radiators
- Excessively noisy systems
- Inefficient boiler and system operation
- Frequent breakdown and costly maintenance



## Precision design and flexibility for multiple applications

MagnaClean is manufactured to

EN 13445: 2009 in four sizes to meet the demands of a broad cross-section of light commercial to heavy-duty applications. Engineered to the highest specification, the unit casings are moulded in readily available 2", 3", 4" and 6" pipe dimensions with PN16 flanges.

The product also comes supplied with EPDM full face flange gaskets for robust sealing at high temperatures.

Within the casing, a sight-glass is fitted to enable the engineer to determine when maintenance is required. As with all ADEY *MagnaClean* products servicing the unit is straightforward and takes a matter of minutes.



