

MagnaClean[®]

Industrial

Powerful protection for commercial heating and cooling systems



ADEY

PROFESSIONAL HEATING SOLUTIONS

MagnaClean® Industrial

Guaranteed commercial heating system protection

MagnaClean® Industrial sets the industry standard in delivering an exceptionally powerful magnetic filtration unit, designed to tackle a multitude of demanding industrial and commercial applications.

This proven technology combines exceptional design and precision engineering excellence to create a supreme quality industrial magnetic filter, delivering the highest levels in terms of performance and durability.

MagnaClean Industrial's inherent design characteristics have been geared towards commercial needs. The system introduces efficiency as well as delivering both financial and time saving benefits within an organisation.

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

Industrial - Factories, production plants and processes

Commercial - Office blocks, public and administration buildings

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

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

Leisure - Sports centres, swimming pools, holiday complexes, hotels and cinemas

Education - Universities, colleges, secondary and primary schools

Community - Cathedrals, churches, municipal and public buildings



**TACKLES
IRON-OXIDE
FAST**



The benefits

The installation of *MagnaClean Industrial* within any central heating application brings immediate 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**
- **Restores central 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**



An effective solution for a major commercial heating issue

Modern central 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 expensive to repair. The particles bond to all components causing premature failure of pumps and valves. The larger the system the more pronounced 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 which can prove extremely inconvenient and costly.

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**

Independent heating specialist ADEY delivers a totally effective and reliable solution for all heavy-duty environments with *MagnaClean Industrial*. There is currently no comparable product on the market for professional heating engineers to address this issue within commercial central heating systems.



This robust *MagnaClean Industrial* filter operates in two key ways. Firstly, it purges even the most demanding and dirtiest commercial system of the potentially damaging black iron oxide.

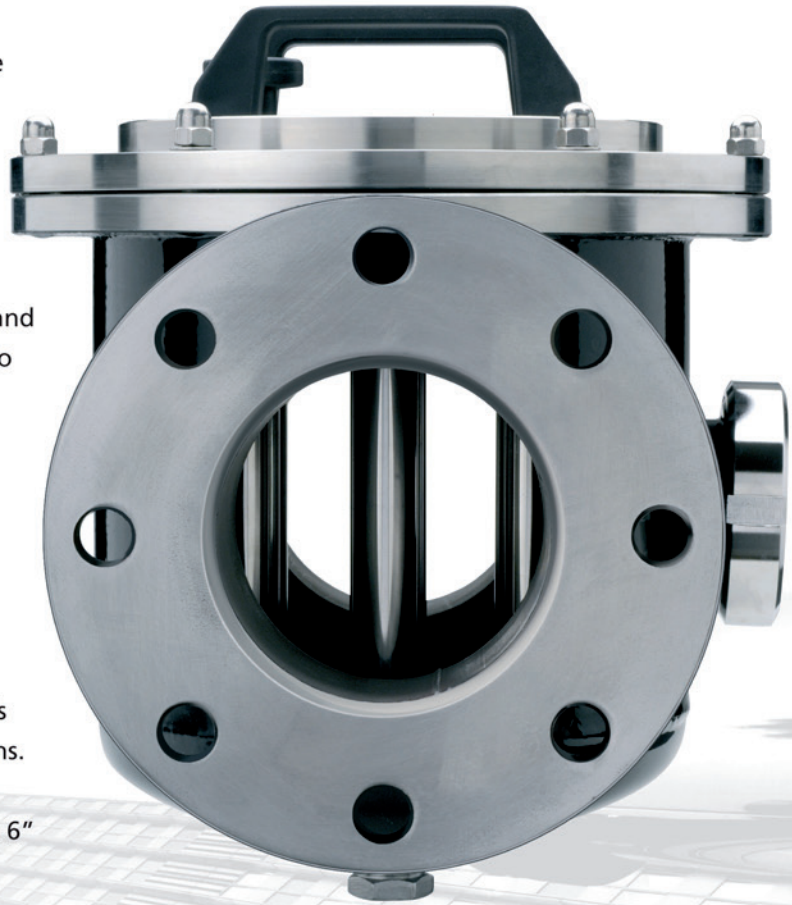
Secondly, the ongoing operation of the heating system is trouble-free as the water circulates through what is effectively a 'protected' black iron oxide - free zone. This ensures far higher levels of system performance and significantly reduced maintenance issues. This also means the system is given a longer working life.

Precision design and flexibility for multiple applications

MagnaClean Industrial is manufactured to ISO 9001:2008 in three sizes to meet the demands of a broad cross-section of heavy-duty applications. Engineered to the highest specification, the unit casings are moulded in readily available 2", 4" or 6" pipe dimensions with PN16 flanges.

MagnaClean Industrial is installed within the heating system onto the return pipe before the boiler. It filters out all sludge, sediment and metal particles so that the system and boiler are both quickly restored to maximum operational efficiency.

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



***MagnaClean Industrial* operates in two ways**

- 1. It purges even the most demanding and dirtiest commercial system of the potentially damaging 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.**

CUSTOMER VERDICT:
Reliable, powerful,
and effective protection

Seal of approval

ADEY's *MagnaClean Industrial*, 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 Industrial* 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 *Industrial*, 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 Midlands

Top marks at Oakham School

"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 Industrial* in spring 2006 and it worked so well that we've put one in each of our boiler houses 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

Residential care home system transformed

"We had a lot of problems with sludge in the central heating system at our 26 bedroom care home which was causing cold spots and inefficiency. With between 56 - 60 radiators in the care home, we needed something more reliable. Having fitted *MagnaClean Industrial*, I couldn't believe how much sludge was removed in the first week. It was phenomenal. Now after 32 months, we're still removing a pint of sludge from the system every month which shows the unit is doing its job and protecting the boiler. The system has been transformed. The cold spots have been eliminated, the radiators are hotter and it's operating far more efficiently."

Mike Hucker, Senior Partner

Breach House Care Home, Stourbridge,
West Midlands

Divine solution at central London church

"We put two *MagnaClean Industrial* units to the test on a sizeable heating installation in a large church in Mayfair, central London and have found it an excellent solution. The pipework from the original system goes back 50 - 70 years and had been causing major problems requiring the installation of a new boiler every 5 - 6 years. We actually flushed the system three times before we got clean water, but the following day it had oxidised and was dirty. With the two *Industrial* units operating in conjunction with a water treatment system, there have been no problems. The water in the system is now clean and the boiler lifetime has been extended saving ongoing maintenance and replacement costs running into thousands of pounds."

Norman Morley, Director

B & N Building Services, London

For more information, visit www.adeysolutions.co.uk

To benefit from a more powerful and reliable commercial central heating system solution, ask your supplier about *MagnaClean Industrial* TODAY or call **01242 546700 NOW**

MagnaClean[®] Industrial



MagnaClean Industrial flow rates

Product code	Filter diameter (mm)	Inlet size (mm)	No. of magnetic rods	Flow rate - cubic m/hr	Volume (litres)
MCIN2001	150	50	5	16	3.4
MCIN4001	200	100	7	69	8.0
MCIN4001HF	300	100	9	78	22
MCIN6001	300	150	9	100	23.8

Technical specifications

Casing

Material: Stainless steel
Maximum working pressure: 10 bar
Shape: Single inlet/outlet; 1/4" BSP drain
Lid seal: Nitrile 70 'O' ring

Inlet/outlet

Size options: 2", 4", 6"
Flanges: PN16 - 15mm (4 or 8 bolt holes)

Magnets

Material: High-power, 'rare-earth' high intensity core
Sleeve: Stainless steel
Lengths: 145mm, 205mm, 243mm
Diameter: 25mm
Maximum temperature: 140 degrees

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)
Maximum pressure: 10 bar (correct installation)
Maximum temperature: 145 degrees

MagnaClean Industrial manufactured to ISO 9001:2008

Service warranty

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

The product is backed by a two year warranty.

For more information

To protect your central heating or cooling system, or for further information on ADEY's MagnaClean Industrial range and how it can deliver a far more efficient and cost effective solution, call 01242 546700

Alternatively, visit www.adeysolutions.co.uk



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Telephone: 01242 546700 Email: info@adeysolutions.co.uk

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