

# Corrosion Master Test Data Sheet

SCALEMASTER®

Over a period of 12 months ending April 2001, Advantica carried out a series of independent tests on Corrosion Master at its world renowned research centre in Loughborough UK.

The test objectives were as follows:

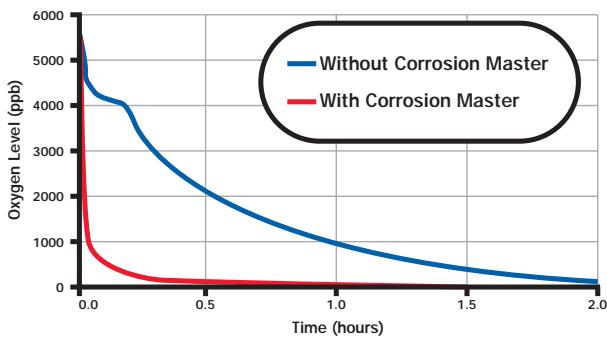


- to test the effectiveness of Corrosion Master in reducing dissolved oxygen levels in a wet central heating system.
- to evaluate the corrosion protection qualities with mixed metals typically found in wet central heating systems.

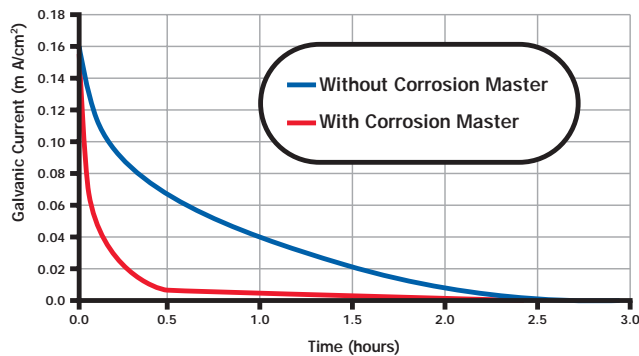
### Dissolved Oxygen Reduction

Repeat tests confirmed that the product clearly demonstrated its ability to reduce dissolved oxygen levels from both fill water and simulated pump over conditions.

#### Oxygen Monitoring data after cold pump over



#### Galvanic Current Monitoring after cold pump over



### Corrosion Protection Qualities

Weight loss measurements taken from metal coupon samples (with 1mm wall thickness) in a system fitted with Corrosion Master demonstrate the material life as detailed below.

Material	Years
Mild Steel – Crevice	150
Mild Steel	100
Cast Iron	100
Brass	1250
Copper	3000
Aluminium (wrought)	1000
Aluminium (cast)	300



**Corrosion Master**

## TECHNICAL INFORMATION

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### General Product Information

Oxygen plays a central role in the corrosion of central heating systems, entering in the form of dissolved oxygen (D.O.) via tap water used for filling. As fire dies upon the removal of oxygen so the corrosion process also ceases.

Corrosion Master significantly retards the corrosion process by raising the pH and restricting the amount of D.O. in the water. Once the D.O. has been eliminated the unit shuts down to be automatically reactivated upon the introduction of fresh oxygenated water. Additionally Zinc species that polarise existing corrosion cells are released into the water.



### Product Life

The CM5 and CM10 are designed to continue working unattended for 5 and 10 years respectively and are supplied with an installation date label.

### Application

Scalemaster Corrosion Master is designed to inhibit corrosion, scale and bacteria in domestic hot water heating systems.

### Fitting Location

Central heating system, closed circuit.

### Position

Fitted in flow or return of heating circuit.

Corrosion Master	CM10		CM5
Fitting sizes (mm)	22	28	22
Flow Rate, litre/min (max)	36	63	36
Fitting type	Compression		Compression
Body material	Copper/brass		Copper/brass
Length (mm)	170	280	135
Diameter (mm)	42	42	35
Requires earth bonding	No		No
Guarantee (years)	2		2

### Power Source

Not required.

### Fitting Instructions

Supplied with packaging, available on request.

### Operating information

Designed and tested for use in wet central heating systems. Pressure tested to 14 bar. Maximum working pressure 8 bar.

### Site Requirements

Prior to installation the heating circuit should be flushed out thoroughly with either a Cleaner or Sludge remover such as Scalemaster SM3 or SM4 in line with BS 7593.

### Approvals

Corrosion Master has been continuously specified by many UK local authorities/housing associations over the last 8 years. In addition, the packaging carries an endorsement of performance from Advantica (formerly part of British Gas plc). Extracts from their report are on the reverse side of this sheet.

