**Installation and operating instruction**

For articles UE...WI

**Instruments**
These instructions should be left with the end user and kept for future reference.

Applies to product types UE...WI.

Manufacturer: Spirotech bv, Helmond, The Netherlands.

This Spirotech product is designed and manufactured according to the Sound Engineering Practice as stated in the Pressure Equipment Directive (97/23/EC art.3.3) adopted by the European Parliament and the European Council in May 1997.

**Application**
Fully automatic removal of dirt when held in suspension from central heating water, cooling water, water/glycol mixtures (max 50% glycol) and process water.

Not suitable for demineralised water, potable water and (max 50% glycol) and central heating water, cooling water, water/glycol mixtures.

Equipment Directive (97/23/EC art.3.3) adopted by the European Parliament and the European Council in May 1997. Spirotech guarantees this product for the life time of the boiler, with a maximum of 20 years from the date of purchase. Incorrect use or installation and any attempt to carry out repairs to Spirotech products make any claim on the guarantee invalid. Normal wear and tear is not included in the guarantee. Damage resulting from failures is not included in the guarantee.

**General**
- The unit comes with compression fitting (22 or 28 mm) or threaded fitting (Rp 3/4 or 1 ).
- The units do not require isolation valves to be fitted.
- They are sealed units and do not need to be dismantled or removed from the system to be cleaned.
- Ensure there is clearance below the unit in order to drain the collected debris.
- We recommend that the SpiroTrap MB3 unit is installed as it comes out of the box as a complete unit and not split. This to make sure that the "O"ring is not lost or damaged during installation.

**Fig 1: Pressure and temperature range**
From 0 to 6 bar; from 0 to 110 °C, unless clearly indicated otherwise on the product (see drawing 1).

**Fig 2-7: Installing Position and Flow Direction**
Installation and maintenance should only be carried out by a competent person.
When working on the SpiroTrap MB3 always ensure that the installation has cooled down.
Ensure the SpiroTrap MB3 is positioned vertically (see drawings).

Installing the SpiroTrap MB3

The SpiroTrap MB3 should be installed preferably before the components to be protected: i.e. Boiler, Pump etc.

- Drain down the heating system.
- Fit the SpiroTrap MB3 preferably on the boiler return pipe work as near to the boiler as possible.
- The arrow on the unit indicates the direction that the water should flow through the unit.
- Installation with compression fittings:
  - Measure and remove the section of pipe (60 mm) where the SpiroTrap MB3 will be installed.
  - For installation on rigid pipework, one connection has been designed to allow the pipe to enter further into the unit than is normally required. This is to allow the unit to slide onto the pipe and then slide back across to the pipe at the other side of the unit it is important that the pipe is fully inserted into this last connection and fits the pipe stop.
  - Installation with threaded fittings:
    - Prepare and cut the pipework to fit the SpiroTrap MB3 in the right position. Ensure PTFE tape or a suitable sealing paste is applied to the thread.

  - Ensure the SpiroTrap MB3 is positioned vertically (see drawings)
  - Hand tighten the ring nut, and then tighten with gland nut pliers to achieve the final seal. max. 40Nm recommended.
  - Fit the supplied drain valve to the bottom of the SpiroTrap MB3: Ensure PTFE tape or a suitable sealing paste is applied to the thread on the drain valve: Shut off the valve using the safety cap as the valve key, then screw the safety cap back on to the drain valve.
  - The drain valve can be used to drain the system.
  - Make sure that the drain valve is always accessible.
  - Drain the SpiroTrap MB3 regularly, once a year is recommended.
  - Important: Never use the drain valve as a filling valve.

**Fig 8: Draining off the SpiroTrap MB3**
Using best practice, take care when touching the unit as it is a brass product and may become too hot to touch and when draining the unit hot water or steam may escape. Mount a hose resistant to the pressure and temperature concerned to discharge the water to a suitable drain or container.

- Shut the pump off or make sure that the pump is not running.
- Remove the magnetic jacket by sliding down.
- Unscrew and remove the safety cap from the drain valve.
- Mount a discharge hose onto the drain valve, taking care that the hose can not slip off.
- The safety cap is then used as the key to open the drain valve. Put the cap onto the valve spindle.
- To empty the collected debris slowly turn the safety cap to open the drain valve 1/4 of a turn for 5-10 seconds or until the water becomes clear then close the valve.
- Release the collected debris from the unit to a suitable container to catch the debris. For disposal of the captured debris and fluid, please follow the local regulations.
- Screw the cap back on to the valve and normally no more cleaning is required until the next annual service.
- If required this sample of the system water will allow a chemical inhibitor test to be carried out.
- Replace the magnetic jacket on the SpiroTrap MB3.
- Turn the pump on.
- Finally, check the installation pressure after the draining and fill up if necessary.

**Guarantee**
Spirotech guarantees this product for the life time of the boiler, with a maximum of 20 years from the date of purchase. Incorrect use or installation and any attempt to carry out repairs to Spirotech products make any claim on the guarantee invalid. Damage resulting from failures is not included in the guarantee. Normal wear and tear is not included in the guarantee.

For further information on Spirotech products please contact Spirotech:

Spirotech bv phone: +31 (0)492 57 89 89
www.spirotech.com

Spirotech UK Ltd phone: +44 (0)208-451-3344
www.spirotech.co.uk

Spirotech bv, The Netherlands, www.spirotech.com

Spirotech België bvba phone: +32 (0)800 99 988
www.spirotech.be