



The SYSTEMSURE IK6 injector enables corrosion inhibitors, flushing chemicals, and boiler noise silencing chemicals to be injected directly into the main flow of heating systems.

It injects liquid chemicals through the air bleed screws of radiators, with no need to drain off any water, or even to locate the feed and expansion tank. With no need to enter the loft space, the whole process can be carried out in less than five minutes.

The SYSTEMSURE IK6 injector is equally as effective when injecting chemicals into sealed systems, removing the need to re-pressurize a system after injection of chemicals.

It is supplied with two nickel plated steel air bleed valve adapters to fit the most common radiator bleed valve sizes, and a 1/2" BSP threaded filling loop adaptor. This enables the IK6 to inject chemicals directly into a system through a standard filling loop, or into radiators through an upper 1/2" BSP plug when bleed screw threads are non standard.

By using the filling loop adaptor, flushing chemicals may be injected directly into the primary pipework so that they will reach a partial blockage faster than if added via a radiator.

The IK6 has a 4 litre tank, enabling it to be used to add chemicals to larger heating systems with one operation.

Spray applications

The Systemsure IK6 may also be used for spray application of

chemicals. It is constructed of thermoplastic materials suited for use with a wide range of industrial chemicals, including acids, and may be used for cleaning, disinfecting and degreasing. The IK6 sprayer/injector includes an adjustable nozzle, a spray lance incorporating an on/off valve and integral filter. The see-through tank has a visible filling level scale, an external safety valve with red over-pressure indicator, and clip for the lance.

Usage to inject chemicals into central heating systems through a radiator air bleed valve:

Ensure that the heating system and circulator pump are switched off. Assemble the IK6 unit with the two supplied flexible hoses connected each end of the combined handle and on / off valve.

Unscrew the pump unit from the top of the tank, pour the liquid to be injected into the tank, and screw the pump unit firmly back onto the tank.

Select the air bleed screw adapter suited to the radiator into which chemical is to be injected. (If the bleed valves are non standard, use the filling loop adaptor to connect into a 1/2" BSP plug at the top of the radiator.)

Close both radiator valves on the selected radiator. Unscrew the air bleed nipple, taking care to catch any liquid with an absorbent cloth.

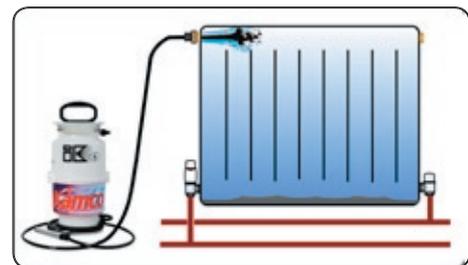
Screw in the air bleed screw adapter, using PTFE tape if necessary to obtain a seal. Fasten the end of the flexible tube onto the adapter, and reopen the radiator valves.

Pressurise the unit by pumping the handle 20 times. When the red indicator on the safety valve appears, stop pumping, Air will be expelled through the valve, and no more pressure will be raised within the tank.

Squeeze the metal handle on the injector lance, and hold until contents of tank have been injected into radiator. Release handle, and pull out external safety valve until pressurised air in IK6 is released. Again close radiator valves. Unscrew air bleed screw adapter, replace radiator bleed screw, and reopen radiator valves.

The normal circulation of the heating system will now distribute the chemical throughout the system.

Applications:
Injects chemicals directly into heating systems.
Enables system blockages to be cleared.



The SYSTEMSURE injector unit connected to the air bleed screw of a radiator.

SYSTEMSURE IK6 hand operated injector

Usage to clear an individual radiator blocked with sludge or corrosion debris:

Assemble the IK6 as previously, and select the air bleed screw adapter suited to the radiator.

Close both valves on the radiator. Unscrew the radiator air bleed nipple, taking care to catch any liquid with an absorbent cloth. Screw in the air bleed screw adapter, using PTFE tape if necessary to obtain seal. Fasten the end of the flexible tube onto the adapter, and pressurise the IK6 by pumping the handle 20 times. When the red indicator on the safety valve appears, stop pumping.

Squeeze the metal handle on the injector lance in order to pressurise the radiator, and then open ONE radiator valve only. Wait for two minutes, close the open radiator valve, and pump the IK6 twenty times to restore pressure.

Squeeze the metal handle on the IK6 injector to re-pressurise the radiator, open the other radiator valve, and wait for two minutes. Open both radiator valves and put the full flow of a power flushing pump on that radiator alone, by shutting off all other radiators. In most cases, there should now be water flow to that radiator.

In the case of severely blocked radiators, if the power flushing pump is struggling to clear the blockage and achieve an even temperature across the bottom, get an assistant to continually operate the flow reverser of the power flushing pump.

At the same time, fully charge the IK6 injector with air, and blast it into the top of the radiator. The extra agitation, and the effect of concentrating the full pump flow across the base of the radiator, can often be enough to remove the last of the stubborn deposits.

A convenient way to pressure test a heating system:

Whether connected up to a radiator through a bleed valve fitting, or via the filling loop adaptor, the fully charged IK6 can put 3 bars air pressure on a heating system to enable easier detection of leaks whilst on site.

Spray applicator for cleaning, degreasing, and descaling chemicals:

Assemble the IK6 with one flexible hose running from the connector near the base of the unit to the combined handle / on/off valve. Screw the rigid spray lance, with appropriate spray nozzle, on the other end.

Unscrew the pump unit from the top of the tank, and fill the tank to the required level with the liquid to be sprayed. Screw pump unit firmly back onto the tank.

To spray, squeeze the metal handle on the spray lance, and adjust the nozzle to obtain the desired spray. Pressure, and therefore spray intensity, drop with use. Pump more to regain pressure.

Technical characteristics:

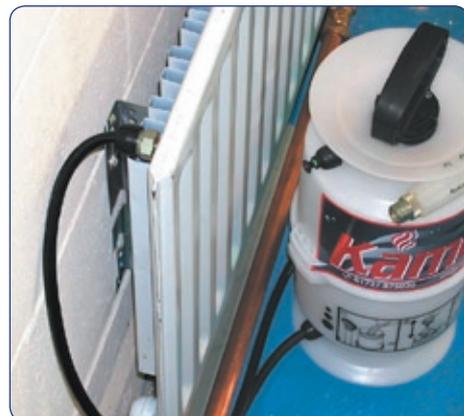
Maximum pressure	3 bar / 42 psi
Flow rate at 3 bar	0.50 lt/min
Standard lance length	0.58 metre #
Useful capacity	4 litres
Flexible hose length	2 x 1.3 metre
Seal material	Viton
Weight	1.75 kg

0.5 metre extension pieces are available for the lance, and may be coupled to give the required lance length.

MAINTENANCE

most frequent malfunctions and their solutions

1. Avoid seals becoming dry by washing the unit after use, and applying a few drops of oil at the points shown in instructions leaflet (diagram B).
2. If the spray nozzle becomes obstructed, clean with water jet or non-metallic probe.
3. If the filter becomes blocked, unscrew the handle, remove the filter from inside the handle, and clean.



The SYSTEMSURE injector connected to the rear mounted air bleed screw of a round top radiator.