

Who decides what is best practice?

Heating engineers might be forgiven for wincing when they see the term 'Best Practice' applied to procedures varying from treating heating systems with chemicals to installing a combination boiler. They soon realise that the 'best practice' referred to is not necessarily 'best' for the heating engineer or the householder, but generally IS best for the interests of the purveyor of the items or procedures being recommended.

A hefty dose of cynicism is required, tempered with experience, and never more so than when the best method of flushing a heating systems is under consideration. Most of the current fashionable ideas for cleaning and protecting central heating systems have 'filtered' down from research work carried out on commercial heating systems; ideas such as high velocity purging, and magnetic filter protection.

With the rapid growth of magnetic filter technology now being used to protect many domestic heating systems, some engineers are asking the question "do they still need to power flush, why can't they just rely on a magnetic filter".

This presumption seems plausible, but it ignores the fact that the water in a system has been circulating in one direction since installation, and that standard circulator pumps are designed for relatively low circulation speeds which can only move small particles. This means that much of the heavier debris has little incentive to move, so settles and compacts in radiators which are the areas of low flow.

Magnets can only collect passing debris, so accumulated deposits will remain static within radiators and pipe work continuing to diminish the efficiency of the system.

Static deposits will remain until forcibly encouraged to move; optimism is wonderful, but experienced engineers know that this often takes more than a bit of gentle persuasion.

As pioneers of central heating system cleaning, Kamco's own research has confirmed that successful power flushing is achieved by moving water as fast as possible through a system to mobilise and transport the debris to a point where it can be forcibly discharged to waste. It is almost twenty five years since the first power flushing pump arrived on the market. Since that time the old fashioned gravity drain down method of cleaning heating systems has been recognised as inadequate especially as during that time boiler developments have seen more compact boilers and smaller debris critical waterways.

Kamco power flushing pumps are optimised for this high velocity process, and always incorporate an instantaneous flow reversal device to ensure that turbulent water reaches all parts of the system.

Their experience is backed up by such august bodies as the BSRIA, CIBSE, and the Institution of Mechanical Engineers, who have established 'hydro-dynamic' high velocity flushing as real best practice to thoroughly cleanse systems, often in conjunction with filtration equipment to snatch debris from the fast moving water to prevent re-circulation through the system.

Why the expression hydro-dynamic? Scientific research proves that the amount of debris removed is directly related to the velocity of the flushing water – the higher the velocity, the better the effect. This becomes increasingly critical as particle size increases.

Conversely 'hydro-lethargic' flushing, i.e. using only a magnetic filter and the systems own pump, whilst seeming tempting as a cheap and labour saving proposition, is simply no substitute for the long proven technique of **hydro-dynamic** flushing when it comes to a thorough and effective system cleanse.

So.....is hydro-dynamic or hyper-lethargic flushing the way ahead?

Kamco's Clearflow CF90 Quantum power flushing pump boasts double the flow rates of most pumps on the market, removing more debris from a system in less time. Optional accessories, such as the CombiMag magnetic filter, can reduce flushing time and provide an excellent visual aid to show householders exactly what is being removed from their system.

All pump purchasers are entitled to a free training place at Kamco's St Albans training centre to increase their proficiency and confidence.

