

We all know the importance of dust extraction and of the need to wear a mask or respiratory helmet. But how many of us have considered the ambient dust – that which remains in the air for hours, even days, after its creation?

Yet this is the very dust which causes serious health problems, and needs to be largely eliminated from the workshop air.

Microclene recently sent me the new Compact 1000 model to test in my 12 x 4m (40 x 12ft) workshop. It has the same motor and diameter as the 1200 I installed last autumn, but instead of the filter area surrounding the unit, it is in the base. And the unit is only 305mm (12in) high, the idea being that you hang it over the work station.

Before hanging the unit over one of the lathes I thought I'd test at what point it would pick up stationary dust from the surface below it. So I slowly lowered the Compact 1000 to the floor. At 230mm (9in) from the floor it not only picked up dust but shavings too! Remarkable!

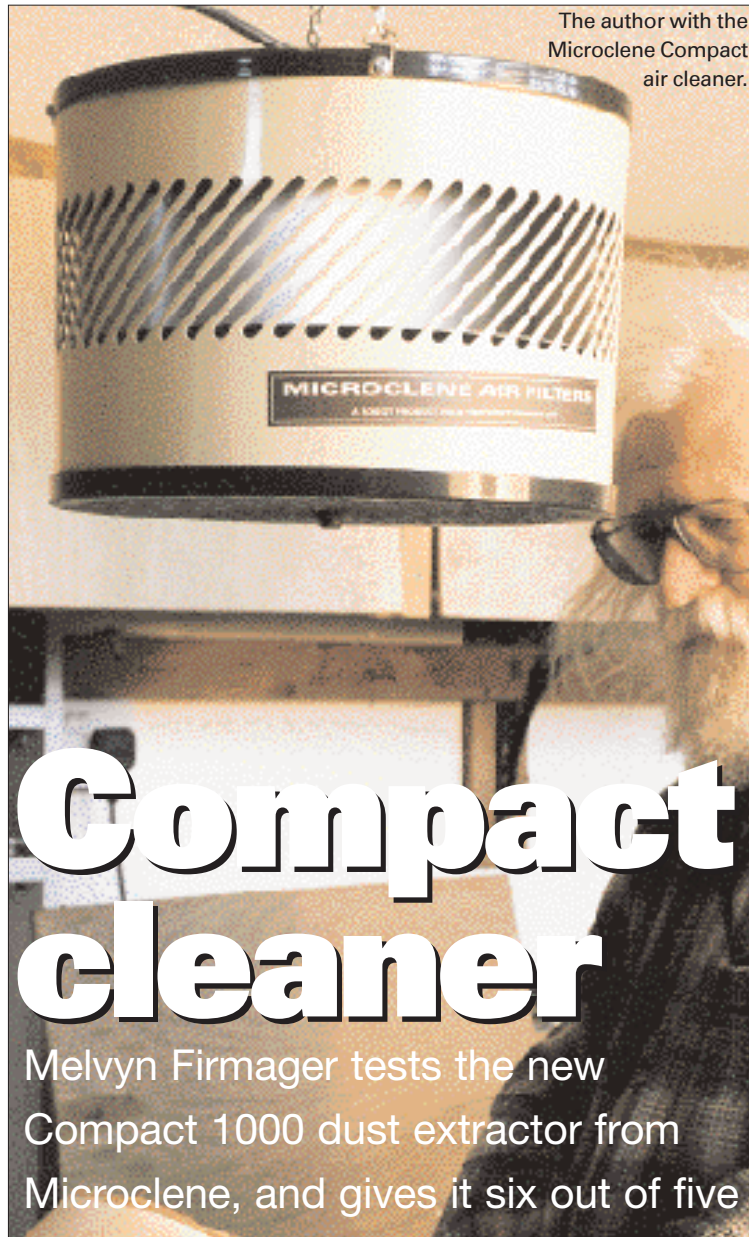
I hung the extractor over one of the lathes and ran some tests. The first was to brush to dust off of the lathe with the Compact switched on. Nearly all the fine dust went straight to the unit 405mm (16in) away.

Power sanded

Next, I power sanded the outside of a bowl with an angle grinder. With the other dust extractor on, all dust not collected by it seemed to go towards the Compact.

This model can also be mounted over a jigsaw, fretsaw, router, radial arm saw, sanding machine etc. etc.

How much they cost to run? will be most turners' concern. Well, both Compact and 1200 models have a 90W motor, so the cost is the equivalent of one light bulb. If you are good



The author with the Microclene Compact air cleaner.

Compact cleaner

Melvyn Firmager tests the new Compact 1000 dust extractor from Microclene, and gives it six out of five

at turning off lights as I am, then it will cost you 9p per eight-hour day.

I'm often asked by students how long will the filters last? But it's an impossible question to answer, as it depends on your circumstances. All I can tell you is that the filters in my two 1200s are still going strong after eight months of intermittent-to-heavy use. They are still capable of taking out the ambient dust from up to five people power sanding at one time.

People are also concerned about noise. Well, the Compact and 1200 both have the same size motor and I can hear them above the noise of a VB36, which is not surprising, but not above my custom-built lathes.

All three units running at the same time are no noisier than my dust extractor, and that is housed outside the workshop. I am sensitive to noise, but only find the Microclenes slightly intrusive if I'm holding a conversation. I cannot imagine anyone finding it a problem.

The filters apparently clean the air to 1 micron at 97% efficiency and at an estimated .5 micron at 40%, within the industry standard. To put it another way, I used to see millions of dust motes when the sun shone into the workshop – now I don't!

To check for efficiency, place a sheet of paper over the filter. If the paper sticks, the filter is working. Turn the Microclene off and if the paper drops off fairly quickly it is time to vacuum the filter. Sooner or later the filter will, of course, need replacing. I am still waiting!

While the Compact is slightly less efficient as an ambient air cleaner than the 1200 and 400 models, it would be very suitable for the small workshop, especially where the ceiling is low, as it could be mounted above head height. As its name implies, it is very compact.

The effectiveness and efficiency of these units in relation to their small motors is down to the excellence of Ron French's design. I took one apart to see how it worked and to see how well they are made – no complaints at all. I envisage many years of good service from these machines.

Collector Tube

If the above isn't enough, Ron French has now come up with an ingenious ►

TEST REPORT

◀ accessory to make the Compact even more efficient as a directional air cleaner. The Collector Tube, made from clear flexible plastic, removes dust from source as efficiently as possible.

Its efficiency as a directional air cleaner is astounding. With the tube very close to the workpiece the Compact maybe taking out something like 90 to 95% of dust created from power sanding, making a mockery of my ¾ hp extractor.

The 5 to 10% it missed the first time is recycled around the workshop and ends up in the compact filter within minutes. You may wonder how I know? By using angle lamps and having the afternoon sun streaming into my workshop and school, I could previously see the dust motes – and not see them when the air was clean!

There are two sizes of tube. The one 305mm (12in) long is for jig sawing, routing, spindle moulding etc, while sitting down. If you stand, as most of us do at the lathe, and need to have the Compact exhaust vents above your head, then go for the 510mm (20in)

Prices

400 model	£159.99
Spare filter:	£4.25
Compact model	£229.99
Spare filter:	£4.75
1200 model	£148.99
Spare filter:	£4.99
Tubes for	
Compact: 12in	£7.99
20in	£9.99
Hanging bracket (fits all):	£3.99

Suppliers

For a list of suppliers, contact:
Microclene Filters Ltd, A52C Sanderson
Centre, Lees Lane, Gosport, Hampshire
PO12 3UL. Tel & Fax: 01705 502999

tube.

For faceplate work, the Compact need not be moved laterally. But for spindle work it may pay to rig up an overhead rail arrangement so that the unit can be moved along the length of the bed for best effect. A piece of 50 x 50mm (2 x 2in) or strong pipe would do nicely.

Another possibility would be to rig up suitable hanging facilities over all appropriate machines and operations, so the unit could be moved quickly to where it's needed. Or a swinging jib arrangement mounted on a wall with a couple of door hinges, could cover two or three machines, depending on your workshop layout and your imagination.

Some means of raising and lowering the Compact could be another consideration when using the tube. It depends on the size of the piece you are working on. Microclene have introduced a hook for hanging any of the three models.

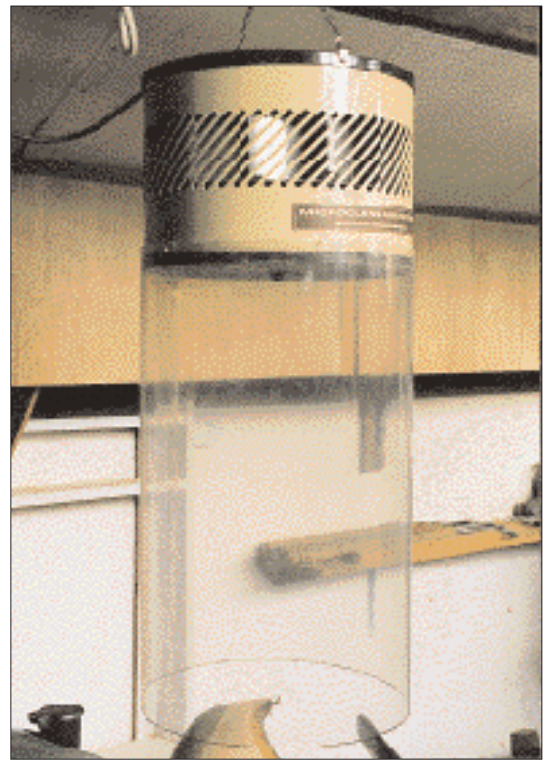
Whatever the arrangement you come up with for hanging the units, make sure it's safe. There is a certain amount of rotational force when the units are first switched on, so they do need to be securely held.

Buy one!

I may be biased, as Microclenes are included in my catalogue, but since I care about your health as well as my own I strongly advise you to buy one and get your workshop air cleaned up quickly.

If you have not yet developed the woodturners' cough don't wait until you do, for you are never totally free of it, as I know, all too well! I really feel the benefit of the Microclenes. For me, the only question is not whether to buy, but which!

Microclene have a chart to help you make this choice, providing an easy



The Microclene Compact with Collector Tube. This is incredibly effective, collecting all the dust from hand sanding and about 90% from power sanding.

way to check out workshop size in relation to which model. You can choose from a 400 or a 1200 or a Compact.

Or, indeed, think of a Compact as a very efficient directional air cleaner and combine this model with one of the former models for unsurpassed protection.

If you have to make a choice about which comes first, Microclene, dust extractor, or respiratory helmet, choose Microclene. But I'd strongly advise buying all three to protect your lungs and skin.

The beauty of these products is minimal return of dust into the atmosphere (almost nothing), retention of heat, recycling of heat throughout the workshop (my saw dust burner now heats the workshop evenly), and with the Compact and extra Collector Tube an extremely efficient directional air cleaner. I've just one complaint – why didn't we have them 10 years ago?

If I was giving gold stars, I'd have to give Microclene six out of five! ■

The author

Melvyn Firmager lives and works from his home in Somerset. Melvyn is internationally known for his multiple-rim Sea Flower vessels and for his woodturning courses and videos. People from 24 countries have attended his woodturning school. Details of these courses are advertised elsewhere in this magazine. Melvyn also designs and makes tools.