



Air force

Melvyn Firmager puts the Microclene MC3000 ambient air filter through its paces

I was eager to put the MC3000 to the test, and when it arrived the delivery man and I managed to carry the large carton on its pallet into the schoolroom with some effort. Opening the box, the brand-new MC3000 looked very

much the part, confirming the weight with the appearance of quality and solidity. Make no mistake, this is one heck of a machine. To raise it is at least a two-person operation, but preferably two lifting and one

hooking it up to its four fixings. Well, I did the hooking up – someone had to do it! I couldn't wait to try it out, so switched it on and started cutting some small wood for my stove. I purposely didn't put on a respiratory helmet – which I would normally do as a matter of course – as I wanted to do the 'nose-twitching' test. I spent around 10 minutes doing this with barely a twitch.

I then observed the dust moving across the aperture of the angle lamp towards the MC3000 and thought, 'if only I could pick out an individual speck, label it and count many seconds it took', but the specks were travelling far too quickly to even count up to one, let alone catch one!

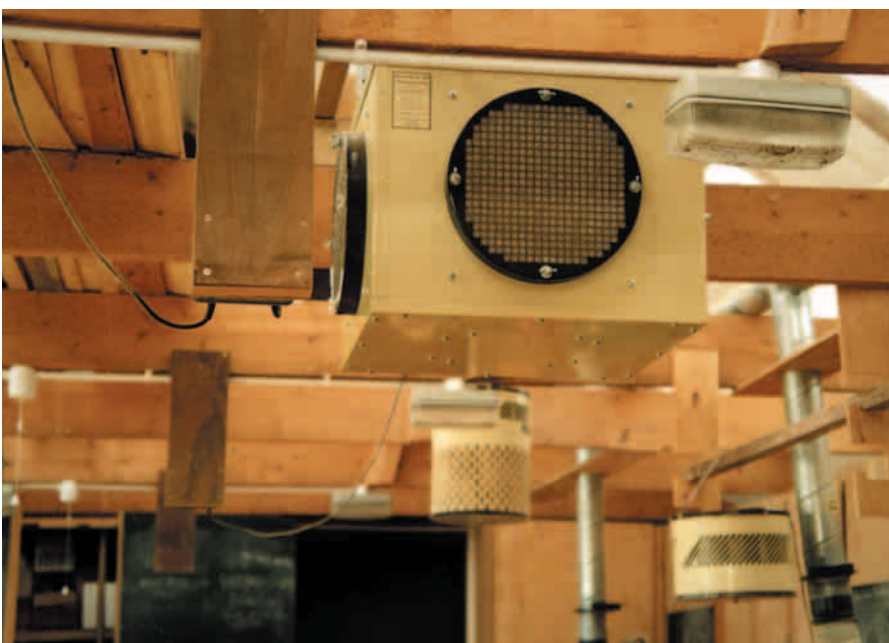
Further tests

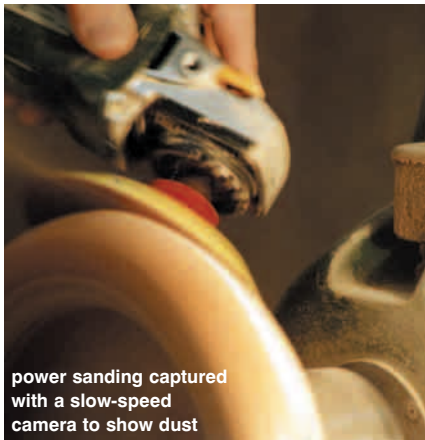
The second test was to sand the outside of a bowl two metres from the Microclene with an angle grinder. This is as good a test as any with clouds of dust spraying out. In trying to photograph the dust it really brought it home to me how fast it was disappearing. Within 20 seconds, 95% of the dust had disappeared with the rest leaving shortly afterwards.

Now we know specks of dust like to meander and mingle, creating crowd scenes wherever possible. This, however, is one mean machine. It will not allow such behaviour to last more than a few seconds. Bearing in mind my woodturning schoolroom is 40 x 18ft (12 x 5.5 metres) and that the whole room was cleared of dust in 10 minutes. Impressive!

My next test was to sand an elm board three metres away. In this case the sanding took place directly in line with one of the inlets of the air cleaner and so took the dust out even faster than before. The final test was to sand a bowl on a lathe four metres away. 95% of the dust had gone in 40 seconds. ▶

The MC3000 in its overhead position





power sanding captured with a slow-speed camera to show dust

Airflow

With all this amazing shifting of dust, it is evident that air is moving at a considerable rate, and yet there is little sense of it. I would have expected a wind blowing around the schoolroom. So I wondered about the design. Ron French has come up with a number of ingenious configurations of airflow with the models he has designed.

Several follow the principle of recycling the air 360° in all directions. This one differs in that, while the intake is like the cylindrical models – MC1200 and MC400 – taking in air from all around the circumference and in this case from all four sides, the exhaust is through the top. Could this be the reason for excellent ambient air-cleaning ability, but without the resulting hurricane you might expect from such efficiency?

The MC3000 is powder-coated in the Microclene livery of cream and brown. It looks very smart, fitting into any environment, from woodturning workshop and factories to stone masons and electronic components assembly plant. If you have a double garage-sized workshop or larger then this is the one for you.

Impressions

Will it replace the need for a dust extractor and respiratory helmet? Well, it will go some way, but in reality there is nothing like taking dust out at source where possible, though extractors never take out the ambient dust. We also know that the dust has to pass you to reach the air cleaner and you are bound to



Power sanding a board

inhale some of it en route. So the real answer is you can't have too much clean air, so install as much as you can.

How about noise? The motors are silent, but there has to be wind noise. Considering the power of the MC3000, I am impressed by the low level such sound, which is considerably lower than MC2800, though a little higher than the MC1200. It is a 'whoosh', which is not unpleasant.

Can it be used to filter a pond? Well yes, that is, if you want fried fish! No kidding, this question has actually been asked! Don't, please don't! So do I like the MC3000? It is an answer to a prayer for clean air like never before.



More power sanding

For me the biggest problem is having students here all sanding at the same time. The MC3000 will deal with it, for sure. ■

Specifications and contacts

The MC3000 moves 3000 cubic metres of air per hour
 Four 100w silent motors
 Weight: 36kg
 Size: 550 x 550 x 450mm (21½ x 21½ x 18in)
 Price: £400 plus VAT
 Pack of four filters: £15 plus VAT
 Tel: 02392 502999
 Email: info@acrolltd.co.uk