This information will help employers, the self-employed and franchisees comply with the Control of Substances Hazardous to Health Regulations 2002 (COSHH), as amended, to control exposure to flour dusts, etc, and protect workers health.

It is also useful for trade union and employee safety representatives.

Main points

- This sheet summarises the design specification for the ‘immaterial lid’ dust collector.
- See ‘Further information’ for a reference to the full specification.

Equipment

- The ‘immaterial lid’ design gives efficient control of dust for transferring and mixing dusty ingredients.
- It is usually made from pipework in the form of a ring.
- For dough mixers, the modified design is a horseshoe of pipework.
- Dust is captured through a row of holes around the pipework inner surface.
- The ‘immaterial lid’ needs to be large enough to sit on top of the weighing/transfer container or the mixing bowl. See illustration.
- The estimated cost of an ‘immaterial lid’ is around £100 when attached to an existing dust collector.

Instructions

- Construct the ‘immaterial lid’ from circular ducting, 90 mm internal diameter. Plastic ducting is acceptable.
- Drill holes 20 mm below the centre line. The holes should be 10 mm in diameter, with their centres 20 mm apart.
- Mark which way up to use the lid, with the holes below the centre line.
- Assemble it using push-fit fittings – these make cleaning easier.
- Mount the ‘immaterial lid’ on a floor-standing frame. You need to be able to adjust the height, and position the device as close as possible to the rim of the mixing bowl or container.

Use

- You need an extraction volume flow between 250 and 350 cubic metres of air per hour (4 to 6 cubic metres per minute) for the lid to work properly.
- Turn on the extraction about 30 seconds before the dusty job, and keep it running for one minute afterwards to allow dust to clear from the ducts.
✓ Align the holes correctly when putting the lid back together after cleaning. Use it the right way up.

**Maintenance, examination and testing**
✓ Keep equipment in effective and efficient working order.
✓ Repair faulty extraction as soon as possible.
✓ Every day, look for signs of damage.
✓ Get a competent ventilation engineer to examine the system thoroughly and test its performance at least once every 14 months. See HSE publication HSG54 - see ‘Further information’.
✓ Keep records of all examinations and tests for at least five years.

**Further information**
- *Maintenance, examination and testing of local exhaust ventilation*
- Design specification for ‘inmaterial lid’ Report IR/WQ/004/97
  HSL 1997 - contact Infoline.
- For environmental guidelines see sheet FL0

**Useful links**
- HSE priced and free publications are available from HSE Books
  Tel: 01787 881165 Website: www.hsebooks.co.uk.
- For information about health and safety ring HSE’s Infoline Tel: 0845 345 0055 Textphone: 0845 408 9577 e-mail: hse.infoline@natbrit.com.
- Contact the British Occupational Hygiene Society (BOHS) on 01332 298101 or at www.bohs.org for lists of qualified hygienists who can help you.

**Suppliers**
- Rigid plastic circular duct: ABS or PVC, 90 mm internal diameter, is available from manufacturers such as Durapipe, BSS, and other suppliers.
- Flexible plastic duct is available from PVC manufacturers such as Nederman Ltd, Arco Ltd, and other suppliers.

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**Employee checklist**

☐ Is the extraction switched on and working properly?
  Check the gauge.

☐ Look for signs of leaks, wear and damage.

☐ If you find any problems, tell your supervisor. Don’t just carry on working.