Surface preparation: Pressure blasting (medium-sized items)

Control approach R  RPE

Access and premises
✓ Exclude all unprotected workers.

Equipment
✓ Can you use wet blasting or high-pressure water jetting in place of dry abrasive blasting? Or an automated system?
✓ Provide respiratory protective equipment (RPE).
✓ Provide blasting equipment with a fast-actuating cut-off under the operator’s control.
✓ Wherever possible, do this work in a fully enclosed, extracted booth. See illustration.
✓ You need an air speed of at least 2 metres per second into the booth.
✓ Fit a manometer, pressure gauge or tell-tale to show that the extraction is working.
✓ Discharge cleaned, extracted air to a safe place outside the building, away from doors and windows.
✓ Have a supply of clean air coming into the workroom to replace extracted air.

Procedures
✓ Make sure that workers check their RPE works properly every time they put it on.
✓ Visually check compressed gas and air lines for signs of damage before use.
✓ Confirm that extraction is turned on and working.
✓ Make sure that blast hoses are uncoiled for use.
Maintenance, examination and testing
✓ It is vitally important to maintain RPE in effective and efficient working order.
✓ Follow the instructions in the manual.
✓ If any equipment is faulty, stop work until it is repaired.
✓ Daily, look for signs of damage to ducting, fans and air filters. Noisy or vibrating fans can indicate a problem.
✓ Make sure that users examine their RPE and test it works properly before each use.
✓ Examine and test RPE thoroughly at least once every three months.
✓ Check the air flow and air quality to air-fed RPE at least once every three months or before use. Ensure that compressors take in only clean air.
✓ At least once a week, check that the extraction system and gauges work properly.
✓ You need to know the manufacturer’s specifications to check the extraction’s performance.
✓ If this information isn’t available, hire a competent ventilation engineer to determine the performance needed for effective control.
✓ The engineer’s report must show the target extraction rates.
✓ Keep this information in your testing log-book.
✓ Get a competent ventilation engineer to examine the extraction thoroughly and test its performance once a month. See the HSE publication HSG54 - see ‘Further information’.
✓ Keep records of all examinations and tests for at least five years.
✓ Review records - failure patterns show where preventive maintenance is needed.

Personal protective equipment (PPE)
✓ Ask your safety equipment supplier to help you get the right PPE.
✓ Provide storage for clean and contaminated PPE.

Respiratory protective equipment (RPE)
✓ RPE is always needed.
✓ Use a compressed air line-helmet to BS EN 270 standard. See sheet R5.
✓ Use a P3 standard of RPE (assigned protection factor 20) for maintenance and cleaning. See sheet R3.
✓ Make sure all RPE is properly fit-tested - get advice from your supplier.
✓ Make sure that workers check their RPE works properly before use.
✓ Replace RPE filters as recommended by your supplier. Throw away disposable masks after one use.
✓ Keep RPE clean and store it away from dust.

Other protective equipment
✓ Provide and ensure that workers use blasting suits and protective gloves.
✓ Use a properly equipped contract laundry or a suitable equivalent to wash work clothing.
Employee checklist

- Do you know how to use the controls properly?
- Is your RPE working properly?
- Check the RPE clean air supply.
- Is the extraction working?
- Use, maintain and store your protective equipment in accordance with instructions.
- Look for signs of leaks, wear and damage.
- If you find any problems, tell your supervisor. Don’t just carry on working.
- Co-operate with health monitoring.
- Wash your hands before eating, drinking, or using the lavatory.
- Never clean your hands with solvents or concentrated cleaning products.
- Use skin creams provided as instructed.

Further information
- Maintenance, examination and testing of local exhaust ventilation
- Respiratory protective equipment at work: A practical guide
- For environmental guidelines see sheet WL0

Useful links
- Your trade association may advise on health and safety consultants and training providers.
- For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit www.hse.gov.uk/. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.
- Contact the British Occupational Hygiene Society (BOHS) on 01332 298101 or at www.bohs.org for lists of qualified hygienists who can help you.
- Look in the Yellow Pages under ‘Health and safety consultants’ and ‘Health authorities and services’ for ‘occupational health’.
- Also see www.nhsplus.nhs.uk.

This document is available at: www.hse.gov.uk/pubns/guidance/ and www.hse.gov.uk/coshh/essentials/