

Industrial Air Purifiers for Laser/Soldering Fumes

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Extraction & Ventilation

Industrial air purifiers filter the air in enclosed laser, soldering and resin areas, capturing smoke and particulates with multistage HEPA and carbon filters to protect the room air when point extraction is not enough.

Key Features

- Multistage HEPA and activated carbon
- CADR ratings for room size
- Awareness of capture capacity
- Filter change indicators
- Mains powered with fan controls

Typical Uses in the Workshop

- Clean air in laser rooms
- Back up soldering fume extraction
- Filter resin printer enclosures
- General lab air quality

Safe Operation

1. Size the unit to the room volume
2. Place the intake near the source
3. Run continuously during operation
4. Check the filter indicators
5. Change filters on schedule

SAFETY NOTES

- An air purifier is not a substitute for extraction and ventilation
- Place away from water and heat
- Do not block the intake or outlet
- Change filters per the maker
- Keep the unit earthed

Maintenance & Consumables

- Replace the carbon and HEPA stages
- Clean the pre-filter
- Check the fan and motor
- Log the filter changes
- Vacuum the unit exterior

Specification & Buying Notes

Buy an air purifier sized to the room with replaceable HEPA and carbon stages. Check filter cost and availability - that is the running cost. Verified CADR matters.