

# MAKERSPACES

**Elements of safety-by-design, user training, and strategies for monitoring and access control are essential for makerspace safety.**

- Makerspace supervisors and EHS should collaborate to implement safety-by-design. Examples include the selection of equipment to meet guarding and safety requirements; effective general ventilation and local exhaust in areas of manufacturing; work area design; and mechanical lifting device selection.
- Makerspace users should have Documented training that authorizes them to use equipment. Training matrices, tracking specific systems, color coding on badges, or card-swipe-entry can be used to allow access only to those with training.
- Makerspaces used by the public and students should have accessible SOPs. These SOPs should be specific for the equipment, and should include primary hazards, controls, and safe sequence of use.
- Makerspaces should have access control and monitoring. Consider locking, securing equipment and restricting access to certain areas when qualified employees are not present; and prohibit working alone.
- Makerspaces should process hazardous waste from operations such as: Resin 3D printers and related cleaning solvents; metalworking lubrication; coating and paint residue.

