



Safe Operating Procedures

SOPs are designed to help employees identify hazards, limitations, PPE, & safety training for specific equipment/tasks. Environmental Health and Safety, 414 J.M. Smith Hall

	Equipment/ Task Name	Hand Drill with Mixer Attachment
	Departments Impacted	Art & Architecture Department
	Purpose	Hand drills with mixer attachments are used to mix dense and viscous substances in an open container. It eliminates waste and unwanted aeration of materials in addition to cutting mixing time up to 90%
TASK	HAZARDS	CONTROLS
1. Make adjustments to the drill.	Projectile and entanglement hazards.	To prevent accidental starting, make sure that the mixer is unplugged or turned off before making adjustments.
2. Inspect work area.	Slip, trip, and fall hazard.	Make sure the floor of the work area is free from materials, cords, equipment, and debris.
	Electric shock hazard.	Visually inspect the cord to make sure it is in good condition.
3. Install and tighten mixer attachment.	Accidental starting resulting in hand injury and entanglement hazards.	<ul style="list-style-type: none"> • Visually check to see if the drill is unplugged. • As a precaution, keep hands away from trigger. • Tie back hair and do not wear loose clothing.
	Foot injury hazard.	Make sure the mixer attachment is tighten before moving. Unsecured attachment can drop causing foot injuries.
4. Adjust the drill's torque.	Strain hazard.	Adjust the torque of the drill to lessen the strain on hands, wrists, or arms.
5. Add mixture to bucket.	Inhalation hazard.	Wear dust masks to prevent inhalation of dangerous dust particles.
	Back injury hazard.	Use proper lifting techniques when handling materials.
6. Turn on mixer and mix.	Eye injury hazard.	Wear safety glasses to prevent mixture from getting into the eyes.
	Hand injury hazard.	Keep hands away from all rotating parts. Never grab onto the rotating chuck.
	Entanglement hazard.	<ul style="list-style-type: none"> • Tie back hair and do not wear loose clothing. • Keep power cord clear of drill.
7. Stop mixer.	Hand injury and entanglement hazards.	<ul style="list-style-type: none"> • Wait until mixer has completely stopped before moving it. • Keep hands away from mixer.



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8. Clean mixer and work area.	Hand injury and entanglement hazards.	Always unplug mixer before removing mixer attachment from drill.			
	Slip, trip, and fall hazard.	<ul style="list-style-type: none"> • Make sure the floor of the work area is free of cords, equipment, and debris. • Clean up any spills. • Place equipment back in the storage area. 			
9. Maintenance	Electric shock and laceration hazards.	<ul style="list-style-type: none"> • To eliminate accidental starts, unplug equipment before performing any maintenance. • Always lockout/tagout defective equipment and remove it from operation. 			
Required Training:		Required Personal Protective Equipment (PPE)			
1. Handheld power tools.		<ol style="list-style-type: none"> 1. Safety glasses 2. Dust mask 3. Rubber gloves 4. Rubber apron (if appropriate) 			
SOP ID	A011	Related Documents	Art Shop Manual	Creation/Revision Date	11/2018

Suggestions, questions, or comments? Please contact EH&S