EDM SAFETY GUIDELINES

EDM machines are generally not considered an operator interactive machine. Once set-up, they are usually left to perform their programmed operations without operator intervention. There are, however, precautions that must be observed.

1). Always keep safety in mind.

2). Wear eye protection and safety shoes at all times.

3). Do not wear neckties, wristwatches, rings jewelry, etc. when operating the machine. Long sleeve shirts will be rolled above the elbows.

4). During the spark erosion process, the wire (electrode) is powered over its complete length and constitutes a risk of electrical discharge by direct contact.

5). It is mandatory that you do not touch the wire (electrode) while the machine is in the operation mode. The wire (electrode) may carry 80 volts standing and 30 volts cutting.

6). Make sure workpiece, fixturing and table are properly grounded.

7). Never attempt to break wire with hands, use appropriate cutting device.

8). Make sure workpiece, fixturing and table supports clear upper and lower heads and arms.

9). The area around the machine should be free of oil or coolant spills (avoid a slippery floor) and as free as possible from obstructions. Keep the area clean at all times.

10). Do not use compressed air to blow chips from the table machine surfaces, cabinets, controls, or the floor around the machine.

11). For normal lifting, use leg, not back muscles. For heavy lifting, use a hoist.

12). Only qualified personnel should perform maintenance repair work. After a repair, machine alarm, or error message, all protective devices must be put back in place before power is turned on and before any machining takes place.

13). Illuminating lamps should be adjusted so light is not directed into operator's eyes.

14). When work platforms are used around the machine, they should be extremely sturdy, safe, and with anti-slip surfaces.

15). Wrenches, tools, and other miscellaneous equipment should be kept off the machine table as well as off all moving units of the machine.

16). Be mentally alert on the job, always sober, and never dulled by the influence of drugs, prescribed or otherwise.

17). Use the proper hand tools for each job.

18). Report any unsafe conditions to your supervisor.

19). Keep machinery well lubricated and clean.

20). Clean machine and area after each use.

16). Make sure area is clear of excess water - do not stand in puddles.

17). Be sure all wire covers are in place.

19). Make sure control pendant is put up when not in use.

20). Make sure all wire sensing switches are working.

21). Make sure all tank doors and/or splashguards are in place before starting water pump.

22). Do not have hands or arms in work area when machining or dry running programs.

23). Do not watch the spark when skim cutting.

24). Use G.F.I outlets for accessory devices.

25). Do not override interlock switches.

26). Use proper safety procedures for disposal of spent filters and de-ionizers.

Do's and Don'ts

DO get thoroughly familiar with the STOP button and other controls as well as alarms and interventions.

DO make sure that the work is held securely.

DO make sure that all tools and machine parts are clear of the wire heads before starting the machine.

DO keep the shirt sleeves rolled up above the elbows and wear close fitting shop aprons or coats.

DON'T under any circumstances attempt to operate any machine unless you are thoroughly familiar with it.

DON'T try to operate the machine and engage fellow workers in conversation at the same time. Keep your mind on your work and let the other fellow do the same.

DON'T attempt to lubricate the machine while it is in operation.