

## ELECTRIC CONCRETE SAW

Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and shop apron capable of stopping small abrasive or work piece fragments.

### General Power Tool Safety Warnings - Electrical Safety

- a. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b. **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool.**  
**Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f. **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

## OPERATION

### How to hold the machine

- Always hold the machine with both hands, with the right hand on the main handle and with the left hand on the side handle. (This applies even if the operator is left-handed)
- Do not stand directly in line with the blade. Rather, stand in such a way that, if it kicks back, you will not be in the path of the blade.
- Never lean over the blade path. That would put your body in line with the blade if it kicks back.
- Do not cut above shoulder height.
- Never cut while standing on a ladder or other unstable platform.
- While cutting on a vertical surface like a wall, hold the machine in a "tail down" position in such a way that the upper quadrant of the blade does not contact the work piece.

### Before cutting

- Check the area where the cut is to be made to ensure that it is clear of objects which could cause the operator to stumble.
- Before cutting, it is sometimes useful to mark the line of cut with chalk or the like. For straight cutting, a wood plank is also useful in
- Ensure that all bystanders are at a safe distance.
- Ensure that the equipment is grounded, and ensure that all safety equipment is in place.

### Proper Support for the Workpiece

- Support the work piece on in such a way that the kerf will not pinch down on the blade.
- Secure the work piece so that it will not roll, slip away or move due to vibration while cutting
- The cutting sequence is important when making cutouts. Always make the last cut in a way that avoids the blade being pinched. Thus, make the bottom horizontal cut first, then the sides and finally make the top horizontal cut last.
- Make note of the weight of the work piece and the direction which it will fall when it is cut through.
- Whenever there is a situation where severing the work piece will cause a hazardous situation, leave a tab of material intact and finish off the operation with a chisel or the like.

### Cutting Technique

- Holding the machine with both hands to resist the start up torque, press the release button and then squeeze the trigger switch.
- Allow the machine to reach full speed before contacting the work piece.
- Adjust the water flow as needed by turning the water feed valve.
- Then gently begin the cut with the rear portion of the blade until the kerf is established. Make the first cut in the forward direction (so that you can see the line of cut). Then make following cuts in the backward direction.
- Do not try to cut too much depth in one pass. Never exceed about 50mm (2") per pass. It is better to cut in multiple passes to minimize the cutting contact area of the blade and keep the blade spinning fast.
- It's a good idea to first cut a shallow guiding groove in the forward direction before proceeding to make the main cut in the backward direction. If any correction is needed. Lift the blade and cut slightly ahead and then back into the existing kerf. Take care to avoid the blade being pinched.
- In round work pieces, the best technique is to use a slow, uniform back and forth motion while cutting with the bottom quadrant of the blade.
- Do not allow the machine to bog down. Limit your feed pressure to keep the blade spinning at high speed.
- Never side load the blade in the kerf.
- If the work piece is very heavy and may cause a hazard when it is cut through, do not cut all the way through the material. Leave some tabs of material intact and then finish the cut with a chisel or similar tool.
- Concrete cutting is very stressful for the motor: After the cut is finished, it is a good practice to run the machine at no load for a short time to lower the motor temperature before stopping.

**WARNING: Do not set the machine down until the blade has stopped turning.**