



## **Prepping for Your Plasma Table**

*Version 8.26*

Congratulations on the purchase of your plasma table! You've purchased the best, now there are just a couple of things you need to do to get ready.

1. Plasma cutter. We highly recommend purchasing the Hypertherm Powermax 45XP plasma cutter with a 25' machine torch and CPC port. It's Hypertherm part number HYP088121. Not only will Hypertherm give you the best cut, and the longest lasting consumables, but the cut charts takes all the guesswork out of setting the proper speeds and heights for different types and thicknesses of materials. Plus, the CPC port model has an internal voltage divider, and the correct electrical connector, both of which are required to interface and operate the table.

Another consideration is duty cycle. Duty cycle is the time a plasma cutter can continuously remain on before overheating, based on selected amperage. Duty cycles can vary widely - as a baseline, the 45XP duty cycle is 10 minutes at 45 amps.

Finally, there are two methods of how a plasma cutter starts - HF (High Frequency) and Pilot Arc. While pilot arc plasma cutters are a bit more expensive, they are the proper choice for a CNC plasma table. They create less interference with electronics, are considered to be more stable, and therefore, the consumables last longer.

2. Air compressor. You must have a good source of clean, dry, compressed air. While there are many different types of air compressors, in general, most folks will choose either a reciprocating or rotary screw compressor. Reciprocating are least expensive (think Lowe's), but if it's within your budget, rotary screw compressors are much quieter, and some include the added convenience of having a built in cooler and dryer units, making them a complete, compact solution.

No matter which type of air compressor you decide upon, make sure to choose an air compressor whose air output exceeds your plasma cutter requirements. Finally, you must ensure the air is both clean and dry.

3. Proper ground. Many electrical issues can be traced back to improper grounding. Please check our Library article on proper grounding. Additionally, there's a lot of articles online about how to best ground your table. Don't ignore this - doing these procedures can save you a lot of time and headaches! Be sure to check out our library article detailing how to properly ground your table.

4. Electrical. Most plasma cutters require 220 VAC. Most air compressors also require 220 VAC. The ArcStar plasma table requires two separate 110V outlets - one for the plasma table, and one for the exhaust fan.

