



HD PRE INSTALL GUIDE



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Thank you for the purchase of your Boss HD plasma table. In this guide we will go over pre-installation guidelines such as electricity needs, grounding, air and floor space requirements. During the process, contact your Boss Table rep for any questions not covered in this guide.

RIGGING

The customer will handle rigging, but Boss Tables can assist with both rigging and installation upon request. Ensuring the machine is placed safely and without damage is the customer's responsibility. For assistance with the necessary equipment for your purchased machine, please contact a Boss Tables representative. We are here to help!

CONSUMABLES AND MISC:

Boss Tables provides a starter kit of consumables. For additional orders, please consult with your sales representative. Note that consumables and other miscellaneous items are not supplied during installation and must be preordered.

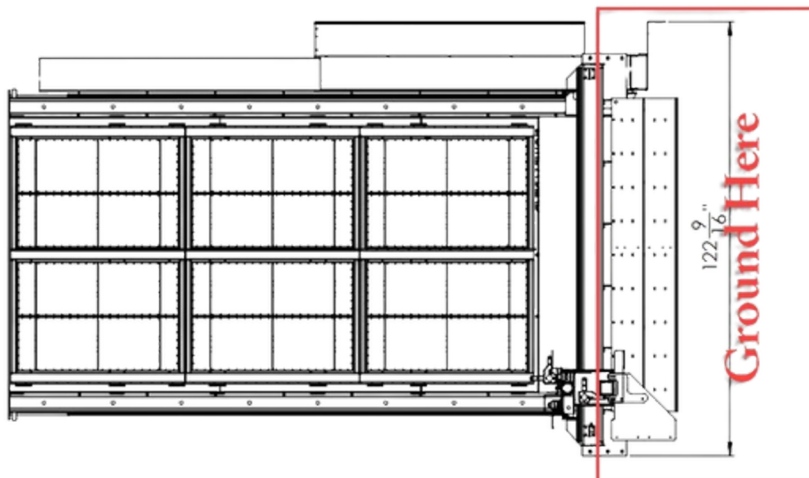
SUPPLIES FURNISHED DURING INSTALLATIONS

- Up to 20' power wire from Kjellberg unit to power disconnect.
- Additional wire length available, customer will be charged for extra length. Must be ordered ahead of time.
- #2 Grounding wire
- 15' will be supplied, this will run from the star ground to the customer supplied ground rod.
- Miscellaneous hardware
- 15' Gas lines
- Longer lengths are available
- They will be supplied with the regulators that are purchased.
- Air Compressor booster
- 150 PSI Min for Kjellberg



CUSTOMER PURCHASED / SUPPLIED ITEMS BEFORE MACHINE INSTALLATION

- Ground rod with a maximum ohm reading of 2. Grounding can be assisted with products such as:
 - An electrician can install and perform a megger reading to check validity.
 - The ground rod will be separate from the electrical installation ground rod.
 - Building grounds are not preferred.
 - Boss Tables can install the ground rod, but the customer will be charged as every site is different.
- Air compressor with a minimum of 14 CFM preferred; the machine will draw 7.
- Air lines with a minimum diameter of 3/8".
- Desiccant regenerative air dryer preferred, available through Boss Tables.
- Gas bottles:
 - Shop air / O2 for mild steel
 - Argon for mild steel / stainless steel marking
 - F5 for thin gauge aluminum and stainless steel
 - Nitrogen for stainless steel / aluminum
 - Hydrogen for thick stainless steel and aluminum
 - Check local requirements for bottle storage.
- Dual-stage regulators available through Boss Tables.
- Consumables for production cutting.
- Disconnect box rated for the required amperage for the power supply.
 - Power to the disconnect box needs to be installed before installation.



UTILITY REQUIREMENTS

- Smart Focus 200: Fuse size 80A, 62A draw (3-phase), wire size 4 AWG.
- Smart Focus 300: Fuse size 125A, 95A draw (3-phase), wire size 2 AWG.
- Smart Focus 400: Fuse size 180A, 140A draw (3-phase), wire size 1 AWG.
- The main cable must be connected to a circuit breaker shut off in compliance with applicable regulations.
- 110V, 20A non-GFCI outlet near the table location, separate from the power unit, for FlashCut machines.
- 240V, 20A cord or outlet needed in close proximity to the machine for ATek installations.

AIR AND GASES

Clean, dry air is essential for the Kjellberg plasma unit. A refrigerated air dryer paired with water/oil capture filtration cartridges can be used, but a desiccant regenerative filter is preferred for removing more moisture. The air pressure must consistently be 150 psi at the Kjellberg unit. An air booster/maintainer is available through Boss Tables. In extreme cases, bottled air or an equivalent can meet this requirement.

A bottle bank for the assorted gases should be near the Kjellberg unit.

Plasma gas bottles will need:

- For steel (AR / O₂): 2 two-stage regulators.
- For non-ferrous metals (H₂, N₂, and F₅): 3 two-stage regulators.

Regulators can be purchased through Boss Tables.



FLOOR SPACE REQUIREMENTS

The Kjellberg unit requires 12” of clearance around all four sides during operation and 48” of clearance during maintenance. It has a footprint of 27”w x 48”d x 72”h. The suggested minimum space around the table is 36”. Bottle banks should be secured in accordance with local regulations. The Kjellberg unit should be placed in an area free of explosion and moisture hazards, with an ambient temperature range of -50°F to 104°F. Relative humidity should not exceed 90% at 68°F or 50% at 104°F. The unit comes with a standard 20ft torch lead from the table to the power unit, with additional torch length available upon request.



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