

LINCOLN[®]
ELECTRIC

Cutting
Systems

TORCHMATE[®]
5100



UNLOADING GUIDE

April 8, 2019

Copyright 2019

Lincoln Electric[®] Cutting Systems

LINCOLN[®]
ELECTRIC

Cutting
Systems

Table of contents

Page:	Contents
i	Title Page
ii	Table of Contents
<hr/>	
1	Unloading your Torchmate 5100 (overview)
2	Unloading, Forklift information
3	Unloading, Forklift, step 1
4	Unloading, Forklift, step 2
5	Unloading, Forklift, step 3
6	Unloading, Forklift, step 4
7	Table Specifications
8	Customer Assistance Policy

Unloading your Torchmate 5100

The Torchmate 5100 machine will arrive via flatbed trailer as at least two separate components. The first being the machine itself, and the second will be the plasma cutter. The plasma cutter may be on multiple skids, depending on the specific model. This guide will cover safely unloading the machine from the delivery vehicle, unwrapping the machine, and placing the machine at its final installation site. The Torchmate 5100 is only capable of being moved via forklift, do not attempt to crane or lift this product.

- **What to expect upon delivery:**

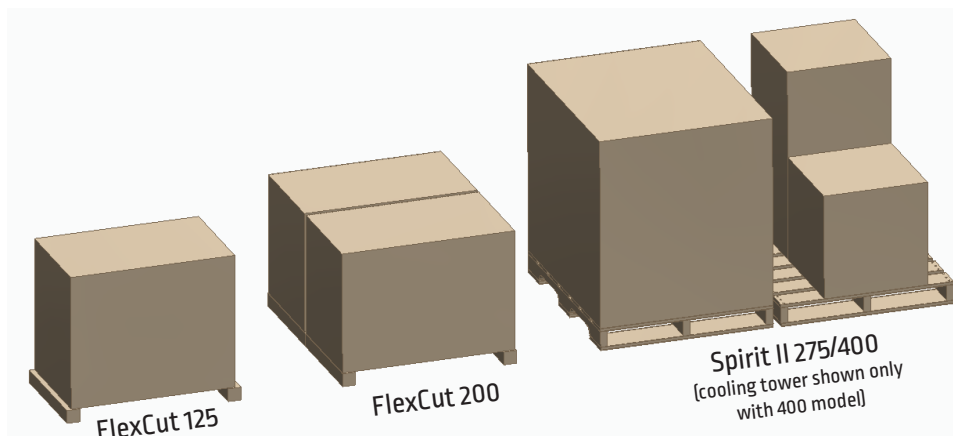
The Torchmate 5100 ships without any external crating or skidding, as the machine has Fork Pockets to be utilized via fork truck to manipulate it around the facility. The top half of the machine will be shrink wrapped to keep moisture and debris out of the machine, as well as keeping components safely inside of the machine. A tarp should also be covering the machine on arrival. This is the primary method of keeping moisture off the machine during transit. **If the product arrives without a tarp covering it or the wrap is damaged in any way after removing the tarp, please contact Lincoln Electric Cutting Systems immediately at 866-571-1066 and do not sign for the shipment.**



Spirit II 400 delivery shown

- **Plasma Cutters**

The Torchmate 5100 machine is offered with several different plasma cutting power supply options. Each have different packaging methods, but will all ship together on the same delivery vehicle as the Torchmate 5100 machine. A separate skid or skids with individual wrapping will be included with your Torchmate 5100 containing just the power supply and cooling tower (cooling tower on Spirit® II 400 only) for safe and easy manipulation around your facility into its final installation site. It is recommended to team lift the FlexCut® 125 (118lbs), or pallet jack/forklift move the FlexCut 200 (190lbs), Spirit II 275 (1270 lbs), or Spirit II 400 (1922 lbs).

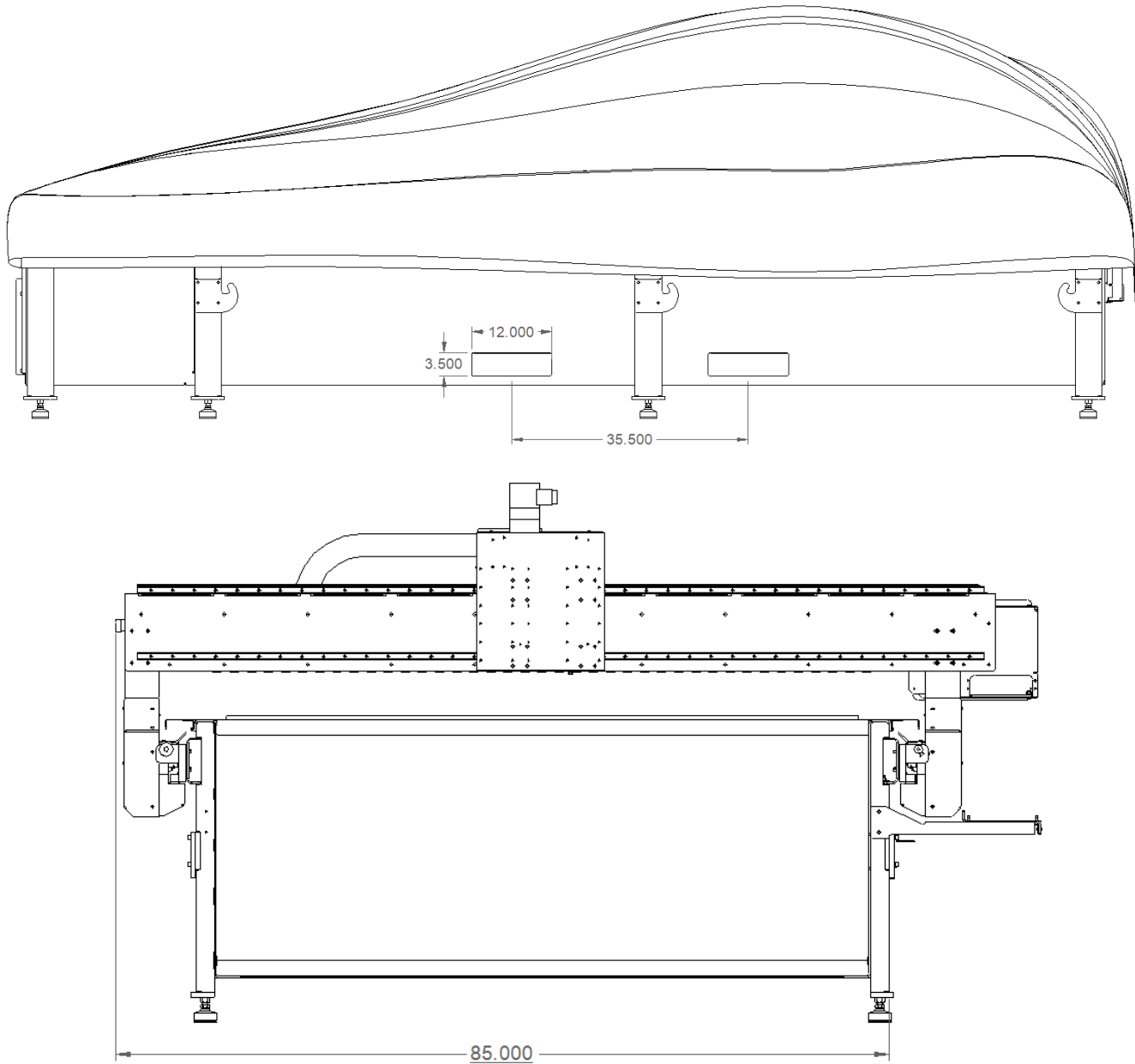


Unloading the Torchmate 5100, forklift information

The Torchmate 5100 machines have fork pockets for loading, unloading, and manipulating its position. Below are the specifications of the fork pockets, and minimum forklift requirements.

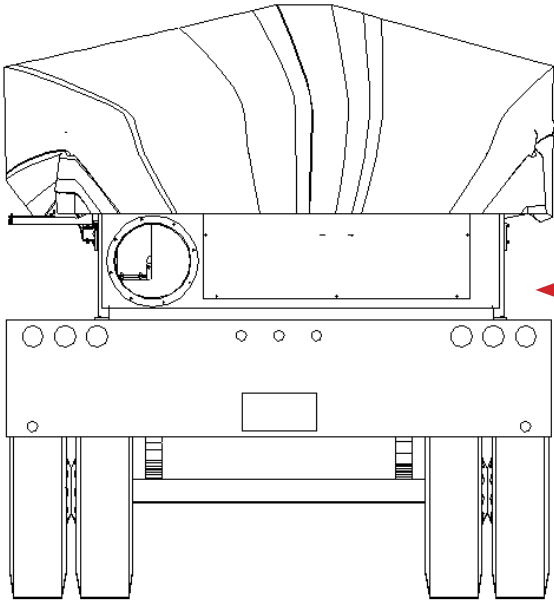
Fork Pockets and Forklift Specifications:

The Torchmate 5100 fork pockets measure 12" wide by 3.5" Tall, and are 32.5" apart on center. In order to safely reach the forks all the way through the machine, the forks must be a minimum of 85" long from the backstop rest. The forklift must have a rated capacity of at least 6,600 lbs at the load center of an 85" long fork.

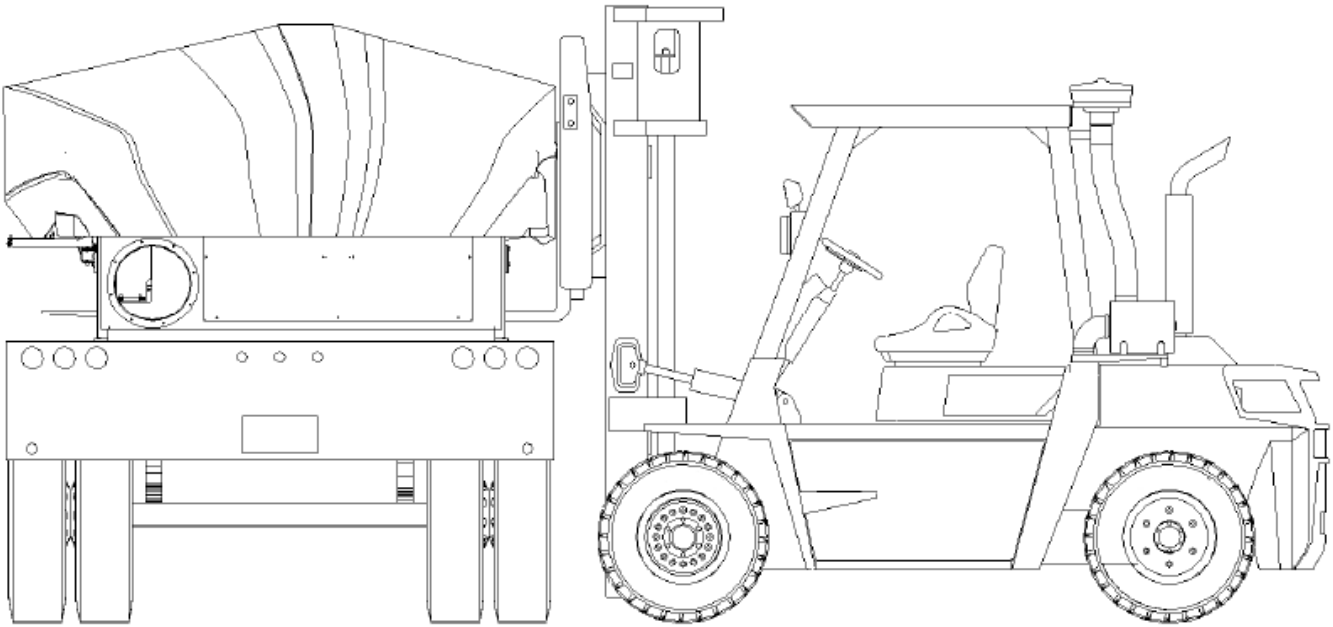


Forklift Unloading (Step 1)

The Torchmate 5100 machine is designed to be manipulated via a forklift with the backrest on the Load side of the machine, opposite of the cable carrier.

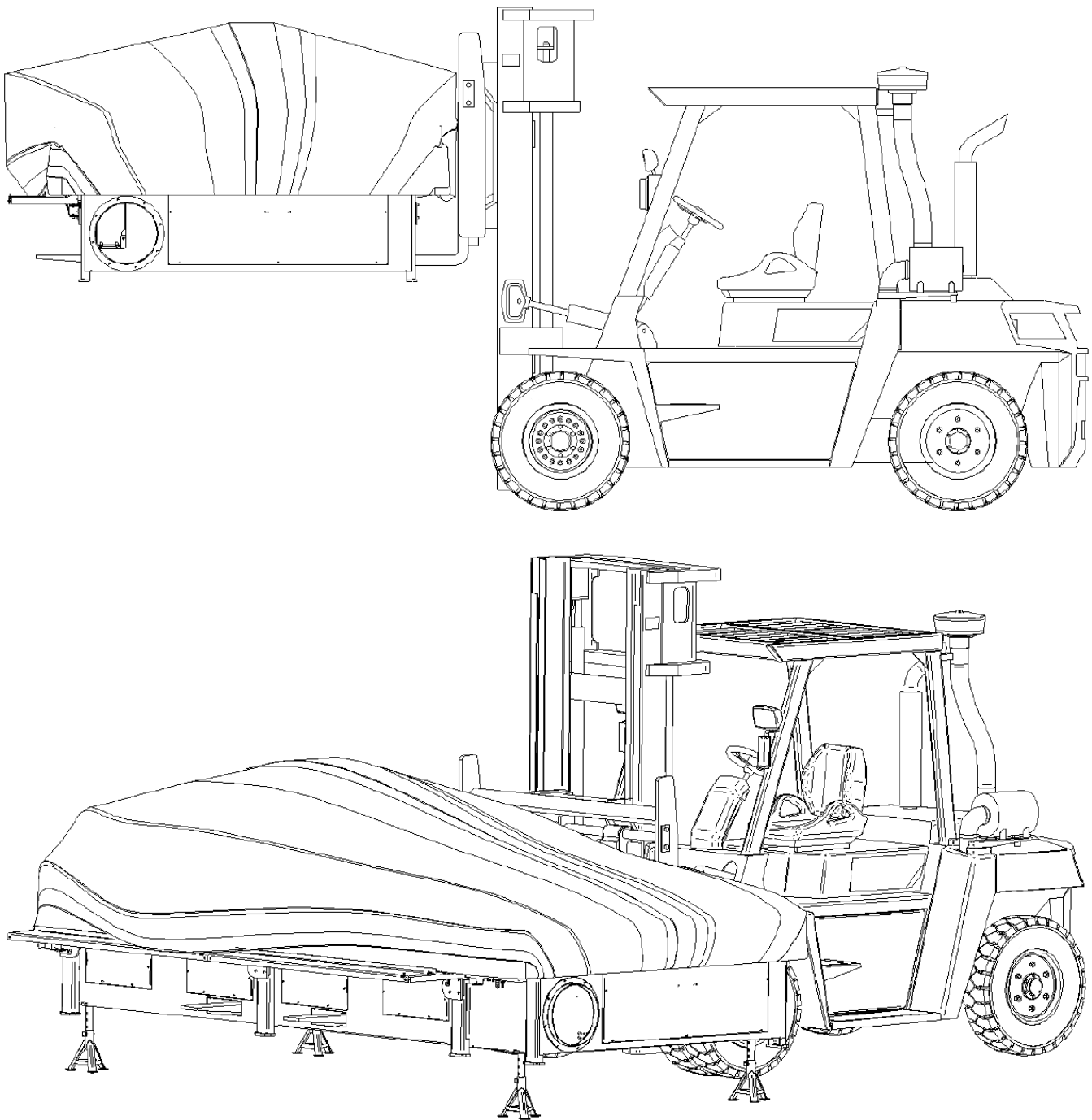


Forklift from this side of equipment



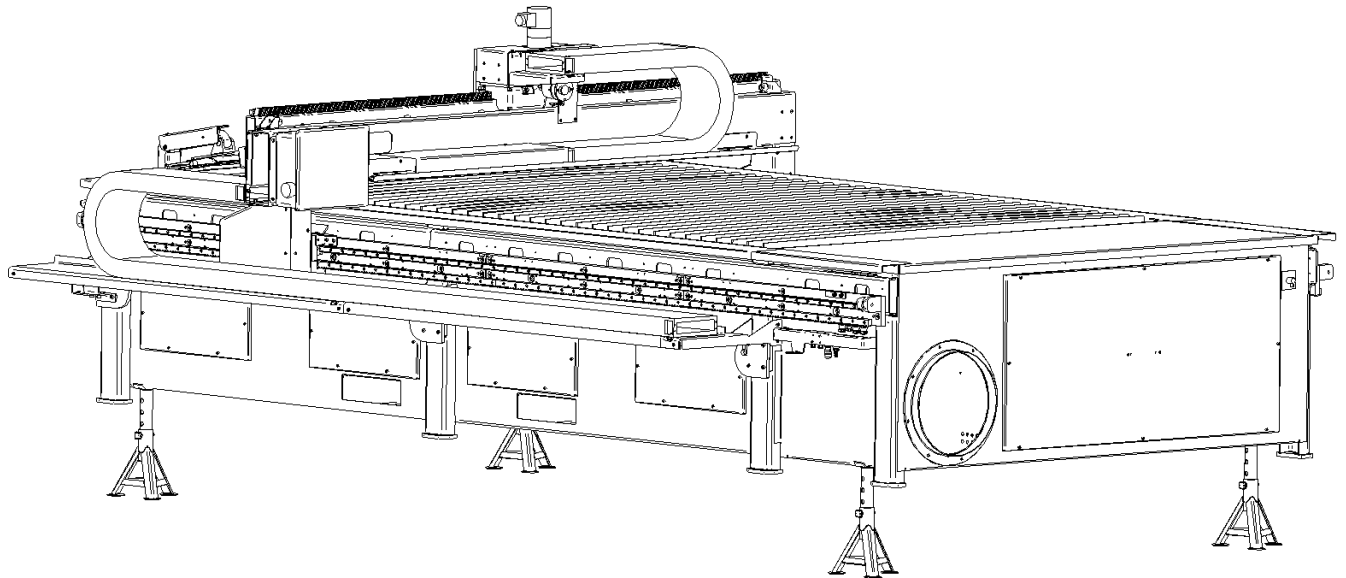
Forklift Unloading (Step 2)

With the Torchmate 5100 removed from the delivery vehicle, place the machine on mechanical supports at all four corners of the machine, that are rated for the weight of the machine at 6,600 lbs total weight. This will allow for un-wrapping of the machine, and installation of the eight (8) adjustable leveling feet. These are removed prior to transit to prevent damaging the feet or the threads in the footpad when manipulating the machine prior to final installation. **Do not attempt to install the leveling feet while the machine is being supported with a hydraulic lift**



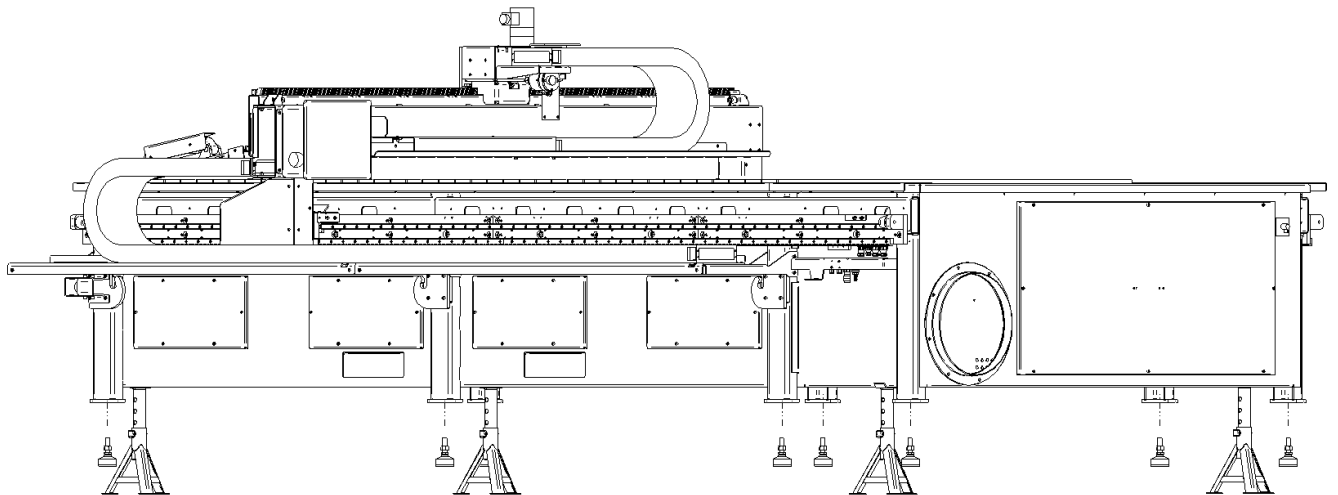
Forklift Unloading (Step 3)

With the machine supported, remove the wrap by locating the nylon cord around the base of the wrap, cutting it in several places. This will free the bottom of the wrap, which can be pulled apart and up/over the top of the machine. At this point it is a good idea to inspect for damage to any components, cabling, etc.



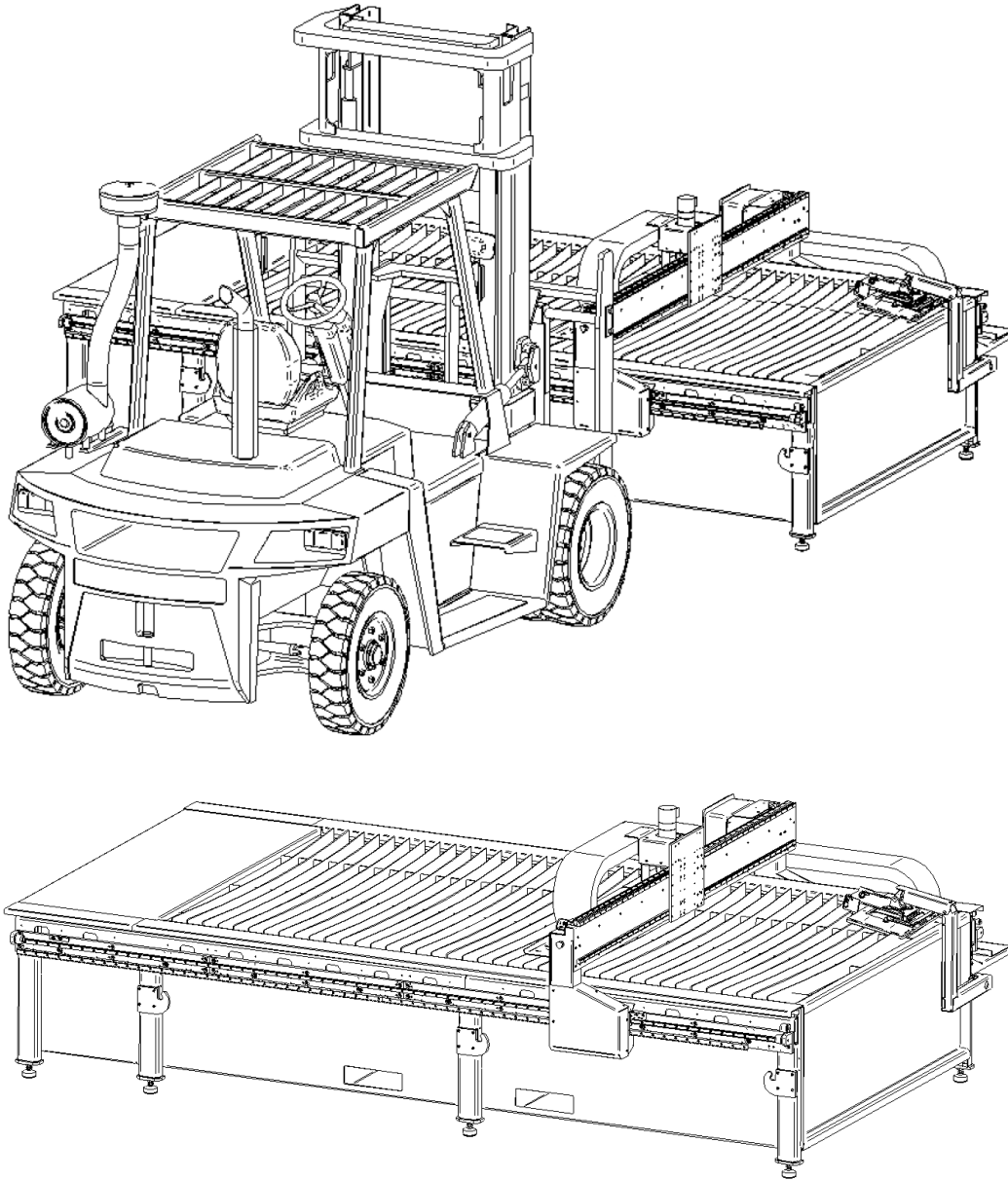
Leveling Foot Installation:

The Torchmate 5100 utilizes 8 adjustable leveling feet that are included inside of the machine bed. These need to be threaded about half way in prior to placing the table into its final position. With the machine safely supported, thread each leveling foot into its footpad.



Forklift Unloading (Step 4)

With the leveling feet installed, forklift the machine into its final position. Do not remove any of the gantry locks or monitor arm components until this step has been completed.



End:
This concludes the Unloading Guide

Table Specifications

Input Power

- 120V / 1Ph / 15A / 60Hz (table and computer)
- 380-600V / 3Ph / 50-60Hz (Plasma Power Supply specific)

Machine Size

- 60" x 120" (1524mm x 3048mm) Cutting Area
- 113.5" x 167" (2895.6mm x 4241.8mm) Footprint

Traverse Speed

- 1,500 ipm (0.635 mps)

Cut Speed

- Up to 1500 ipm

Plate Capacity

- Holds Up To 4" (102mm) 5'x10' (1524mm x 3048mm) Mild Steel

Weight

- 6,600 lbs

Operating Temperature

- 32-104° Fahrenheit (0-40° Celsius)

Motors

- Servo Motors Fitted with Rotary Glass Encoders

Drive System

- Helical Gear Rack and Hardened Pinion with Lubrication System

Linear Guidance

- Profile Linear Rail

Acceleration Rate

- 0.08g (0.06g Bevel)

Deceleration Rate

- 0.08g (0.06g Bevel)

Input Pneumatics

- Minimum 115PSI Supply Pressure
- Volume - 7 SCFM (420 SCFH) @ 90PSI

Height Control

- Ohmic Sensing
- Automatic Torch Height Control
- 6.75" Z-axis Travel

Bevel Capabilities

- +/-45° Rotation (dependent on material thickness and power supply configuration)

Software

- Easy-To-Use Lincoln Electric User Interface
- CAM with Irregular Part Nesting
- Popular Shape Library

Fume Extraction (Optional Accessory)

- 61,801 ft³/hr or 1,750 m³/hr minimum
- Automatic Filter Cleaning, Pressure Controlled

Downdraft Configuration

- Multiple Zones Controlled By Motion Controller

Safety

- Dual-Channel Safety System Supporting Emergency Stop Switch
- Safety System Extended To External Peripherals
- External Drive Power On Switch

Warranty

- *1 Year Warranty

TORCHMATE 5100 CNC PLASMA SYSTEMS	FLEXCUT 125	FLEXCUT 200	SPIRIT II 275	SPIRIT II 400
PRODUCTION CUTTING CAPACITY				
Mild Steel	1" (25mm)	1.25"	1.5" (38mm)	2" (50mm)
Stainless Steel	3/4" (20mm)	3/4" (20mm)	1" (25mm)	1.5" (38mm)
Aluminum	5/8" (16mm)	3/4" (20mm)	3/4" (20mm)	1.5" (38mm)
CUTTING SPEED @ RATED OUTPUT CURRENT				
1/4" MS	210 ipm @125A	200 ipm @200A	230 ipm @200A	230 ipm @ 200A
1/2" MS	88 ipm @125A	110 ipm @200A	125 ipm @ 275A	160 ipm @ 400A
1" MS	32 ipm @125A	40 ipm @200A	65 ipm @275A	85 ipm @ 400A
PROCESS AMPS	20A - 125A	15A - 200A	30A - 275A	30A - 400A
CUTTING GAS				
Mild Steel	Air / Air	Air / Air Oxygen / Air	Oxygen / Air Oxygen / Oxygen	
Stainless Steel	Air / Air Nitrogen	Air / Air Nitrogen	Air / Air - Nitrogen H17 / Nitrogen Nitrogen / Air	
Aluminum	Air / Air	Air / Air	Air / Nitrogen Nitrogen Air	
INPUT VOLTAGE				
	380/400/415V3Ph50/60Hz	380/460/575V3Ph50/60Hz	380V 3Ph 50/60Hz 400V 3Ph 50/60 Hz	
	460V 3Ph 50/60Hz	400V3Ph 50Hz (CE)	415V 3Ph 50/60Hz 440V 3Ph 50/60Hz	
	575V 3Ph 50/60Hz		480V 3Ph 50/60Hz 600V 3Ph 50/60 Hz	

Customer Assistance Policy

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric Cutting Systems for advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric Cutting Systems is not in a position to warrant or guarantee such advice, and assumes no liability, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of fitness for any customer's particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information or advice once it has been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

Lincoln Electric Cutting Systems is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric Cutting Systems is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric Cutting Systems affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.torchmate.com for any updated information.



**Cutting
Systems**

1170 Trademark Suite 101 • Reno, NV • 89521 • U.S.A
Phone: +1.775-673-2200 • www.torchmate.com

US70-040819-MA-02-03