

PLASMATIC™

Industrial CNC Plasma Table

Built with AKS Unitized Systems Technology

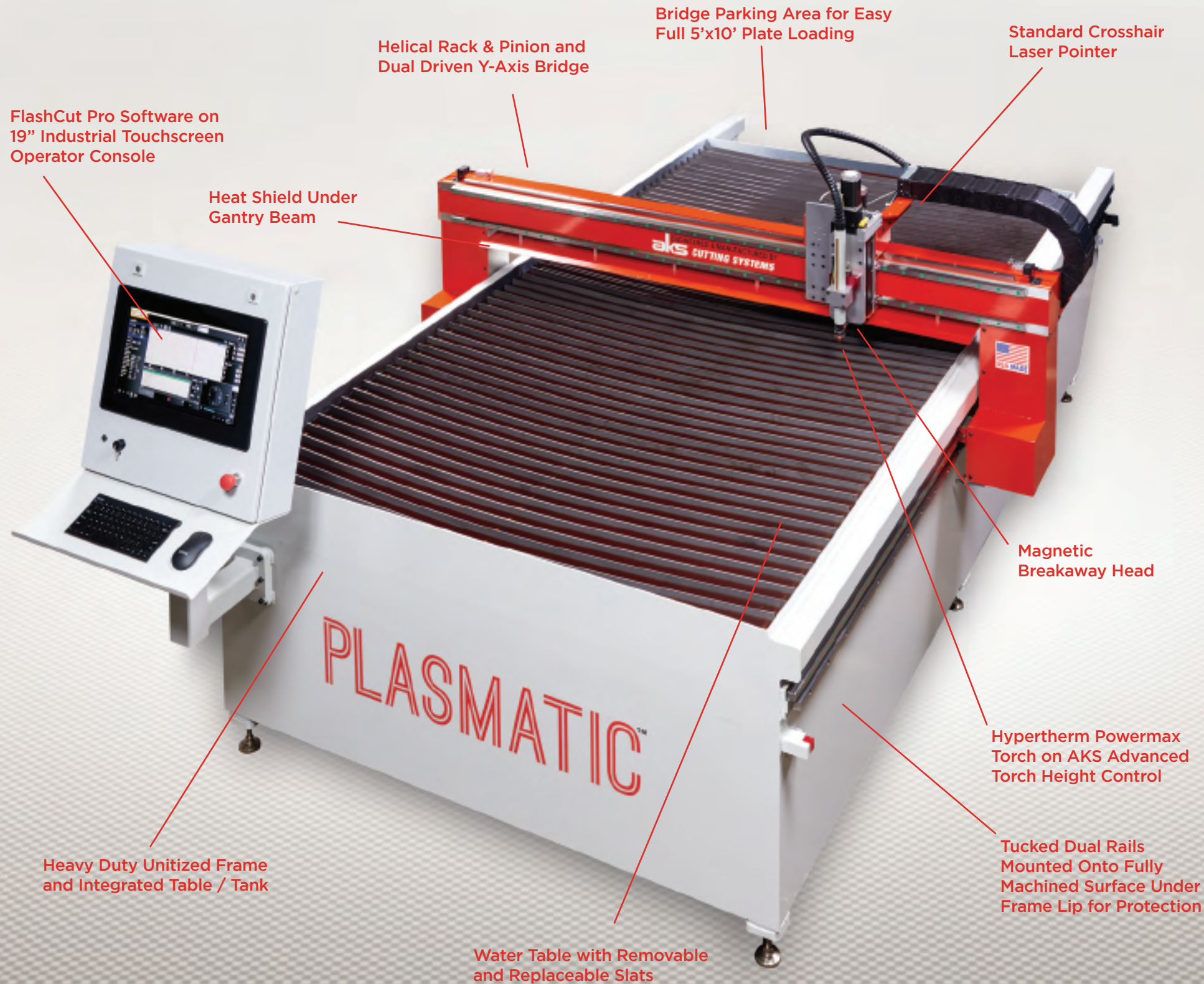


aks CUTTING SYSTEMS

Welcome to the fourth state of matter.

The PLASMATIC™ is an entry-level,² high accuracy, built-to-last plasma cutting system.

AKS PLASMATIC™ tables utilize industry best Hypertherm plasma power supply units and FlashCut Pro user-friendly CNC control & software, backed by over 100 years of AKS machine building experience, to bring you the new industry standard for performance and durability in a light industrial entry-level plasma cutting table.



Precision linear rails mounted on machined surface and integrated with helical rack & pinion and precision bearings



Z-axis carriage automatic lifter with torch height control (THC), magnetic breakaway head, laser pointer and plasma torch



19" Industrial Touchscreen Operator Console with the FlashCut Pro CNC integrated all-in-one CAD/CAM/CNC software.



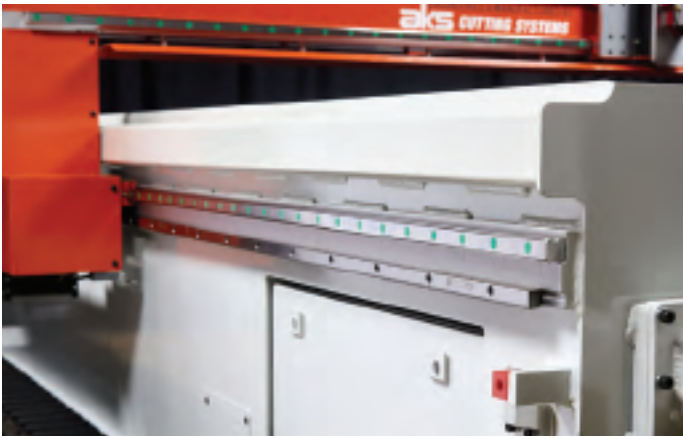
Genuine Hypertherm plasma torch and consumables optimize cut quality, extend consumable life, and boost productivity at the lowest possible operating cost.

AKS Cutting Systems - Over 100 Years of Excellence!

AKS has applied over 100 years of machine building experience to create the new industry standard for performance, reliability and built-to-last entry-level plasma cutting. The PLASMATIC™ is built with the same durability and precision as our more expensive AKS models, while offering a small footprint with a big value.

Standard Features

- Unitized Construction
- Water Table or Dwindraft Table
- Helical Rack & Pinion Drives
- Replaceable Slat Table System
- Crosshair Laser Pointer
- Magnetic Breakaway Head
- Automatic Torch Height Control
- Easy Plug & Play Self Start-Up
- 19" Touchscreen
- Keyboard and Mouse
- Industrial Panel Operator Console
- FlashCut Pro Software CAD/CAM/CNC
- Second FlashCut Pro License for Offline Computer
- Quad Core Dedicated Processors
- Maximum Speed 800 ipm
- Single Point On/Off Switch for All Power Connection
- Consumable Start-Up Kit



DESIGN & BUILD

Rigid and robust design ensures strength, productivity and reliability, with performance and durability far exceeding lighter and less capable models.



CONTROL & SOFTWARE

FlashCut Pro CNC Software is an integrated, all-in-one CAD/CAM/CNC Software, including:

- CAD drawing
- CAD importing drawings
- CAM creating tool paths
- CNC cutting parts accurately
- True Shape Nesting

The FlashCut CNC controller has an integrated power supply with motors and drives using three dedicated microprocessors with parallel processing for full multi-axis interpolation using continuous contouring.



PLASMA SUPPLY

Traditional “air” plasma supply units from Hypertherm including Powermax SYNC 65, 85, 105, 125 and MaxPro 200 Oxygen Plasma System.



MOTION SYSTEM

The PLASMATIC system of motion consists of:

- Single-set-up machined milled surfaces for precision mounting of helical racks
- Precision pinions driven by dual side planetary gearboxes and industrial stepper motors, without forced engagement from pneumatic or spring load
- Precision ground linear bearings

The PLASMATIC™ offers the highest accuracy, smoothest motion and lowest noise in its class.

PLASMATIC™

PLASMATIC™ by AKS Cutting Systems, Inc.
 4905 Rocky River Drive, Cleveland, OH 44135
 800-962-7803 | sales@plasmaticusa.com | plasmaticusa.com



aks CUTTING SYSTEMS
 sales@akscutting.com | akscutting.com

	List Price
PLASMATIC™ 510 Hypertherm PowermaxSYNC 65	\$58,990
PLASMATIC™ 510 Hypertherm PowermaxSYNC 85	\$59,900
PLASMATIC™ 510 Hypertherm PowermaxSYNC 105	\$61,490
PLASMATIC™ 510 Hypertherm Powermax125	\$62,990
PLASMATIC™ 510 Hypertherm MaxPro200	\$77,340

All PLASMATIC™ 510 units include the following:

- 5'x10' Plate Cutting Area
- Heavy-Duty Compact "Unitized" Design & Construction
- Fully Welded One-Piece Frame
- Table has Removable/Replaceable Slat Design
- 5' Y-axis Bridge Single Drive with Helical Rack & Pinion
- 10' X-axis Dual Synchronized Drives with Helical Rack & Pinion
- Standard Water Table
- Total Machine Weight 3,860 lbs
- Advanced Torch Height Control (THC) Lifter with Arc Voltage Sampling
- FlashCut CNC Controller Operator Console
- FlashCut CAD/CAM/CNC Pro Operating Software
- Laser Pointer for Plate Alignment and Location Finding
- Magnetic Torch Breakaway Head
- Hypertherm Plasma Power Supply
- Hypertherm Consumable Start-Up Kit
- Lifetime Phone/Internet Support
- One Year Warranty

Options:

PLASMATIC Plasma Quench available in Red or Green colors	\$216.70 per 5 gal pail / 2 pails needed
Air Scribe Marking System	\$3,440
Air Bubbler system	\$1,430
3 day factory installation and training	\$4,800
Flashcut Smart 360 (advanced hole cutting add-on)	\$1,500

F.O.B.: Cleveland, OH
 Delivery: 2 to 4 weeks after receipt of down payment
 Terms of Sale: AKS Standard Attached Terms & Conditions of Sale
 Warranty: AKS Standard One-Year Parts & Labor on All Components

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GENERAL CONDITIONS
(Plasma Machines: PLASMATIC)

WARRANTY:

One year parts and labor warranty on manufactured AKS components based on max of two-shift operation. One year on FlashCut CNC. One year on Hypertherm torch leads, torch receptables, and torch heads; 1-year oxy-fuel torches. Except as set forth in the Proposal, all warranty is valid FOB Cleveland with freight costs, and travel & living expenses charged to the customer at cost. Travel time billed at Preferred Rates.

SERVICE:

AKS includes a comprehensive service and support package, featuring:

- Free phone support during the machine warranty period
- All critical components normally in inventory for quick delivery
- Most technical issues can be resolved over the phone, but if required we will send a technician to your facility
- An additional preventive maintenance service package is available, involving purchase of consumables

SITE PREPARATION:

The machine site has to be prepared according to our instructions, including providing required electrical, air and gas connections. Ask us for specification details. This work is the responsibility of the buyer and is not included in the above price. Any additional on-site work time required or requested will be billed separately at \$165.00/hr plus travel and living at cost. Gas supply hoses and regulators for plasma unit are not included. Dust collectors are not included. If required, please inquire.

SOFTWARE:

If the customer already has nesting software, or elects to purchase such software directly from another source, it will be the customer's responsibility to work with their software supplier to create and supply the required post processor.

TERMS AND CONDITIONS OF SALE

Kiffer Industries, Inc., including its affiliates and subsidiaries and d/b/a Advanced Kiffer Cutting Systems ("AKS") (collectively referred to hereinafter as "Company") agrees to sell certain products, equipment, goods and/or services to customer ("Purchaser") on the basis of the terms and conditions of sale as set forth herein.

1. Acceptance

Company's sale of equipment to Purchaser is expressly limited to and made conditional upon Purchaser's assent to and acceptance of all the terms and conditions contained herein and as set forth in any related Company sales document, including, but not limited to any Proposal/Quote ("Proposal"), Sales Order Acknowledgment ("SOA") and/or invoice. The terms and conditions stated herein shall be incorporated in and apply to each Proposal, SOA and/or invoice given by Company to Purchaser. In the event of a conflict between these terms and conditions and a Proposal and/or SOA, then the terms of the Proposal and/or SOA shall govern and control. Any of Purchaser's terms contained in any request for quotation, purchase order, release or any other Purchaser document which are in addition to or different from these terms are hereby specifically objected to, rejected and excluded, and shall be of no force or effect.

Orders, once accepted, may not be canceled without Company's written consent, with full indemnification for all direct expenses incurred, including overhead and profit.

Failure of the Purchaser to make progress payments on time shall allow the Company, at its sole discretion, to declare the contract to have been breached by the Purchaser.

The Company reserves the right to make changes in construction methods or materials, at any time without incurring any obligation towards the Purchaser or user of equipment previously designed or sold by the Company.

This agreement and performance by the parties hereunder shall be construed in accordance with the laws of the state of Ohio.

Typographical and clerical errors are subject to correction.

2. Delivery — Loss, Damage, or Delay

Shipping dates are approximate and are dependent upon the prompt receipt by the Company of all progress payments, data, and instructions for the manufacture of the merchandise and all material and equipment required for testing. If the Purchaser delays the furnishing of any such items the dates of shipment shall be automatically extended to compensate for such delay. The Company shall not be liable for delays due to circumstances or acts beyond its control including, without limiting the generality of the foregoing, accident, strike or other labor troubles or disputes, flood, fire, war, or Act of God, civil commotion, lack of or inability to obtain labor or materials, embargo, delays in transportation, or because of compliance with any law or other governmental action, requirements, regulations or restrictions. Acceptance of delivery of the merchandise shall constitute a waiver of all claims for loss or damage resulting from delay. The purchase price of merchandise does not include any expense incident to the installation thereof and the Company assumes no responsibility in connection with such installation, except as otherwise agreed upon in writing.

Unless otherwise specified by the Purchaser, the Company will select the most economical method and route of shipment. Transit insurance is the responsibility of the Purchaser.

In the event that the Purchaser is unable or unwilling to take delivery of all or any part of the equipment, the Company shall place it into storage with all costs, including storage, insurance, demurrage, and transportation at the Purchaser's expense. Further, the date of completion of the equipment by the Company shall be regarded as the date of shipment and payments shall be due on the terms specified herein.

3. Prices

All prices quoted are f.o.b. Cleveland, Ohio, and do not include any present or future sales, use, or other taxes imposed upon the sale. All such taxes are the responsibility of the Purchaser.

4. Payment

Terms of payment are as stated in the Proposal and/or SOA, or as otherwise agreed in writing between Company and Purchaser.

Any and all payments and fees received by Company from Purchaser shall be non-refundable to Purchaser. All late payments shall be subject to interest charges of one and one-half percent (1.5%) per month (18% annual rate) on the unpaid balance, said interest to be added automatically to subsequent progress or final billings. In the case of such late payments, the Company may require payment in full prior to shipment.

Unless otherwise specified in the sale contract, orders may be shipped or delivered in installments and each shipment or delivery shall constitute a separate transaction with respect to the terms of payment. If the Purchaser delays the manufacture of all or any part of the merchandise conveyed by any contract, the Company may adjust the prices thereof to those in effect when the Purchaser authorizes the manufacture and furnishes complete data and instructions therefor. All payments shall be made in United States funds.

5. Title

The title to all equipment/merchandise shall remain in the Company and the same shall remain the personal property of Company until it has been fully paid for by Purchaser. The Purchaser agrees to perform all acts which may be necessary to perfect and assure retention by the Company of title thereto. The Purchaser assumes all risk of loss or damage after the shipping of equipment/merchandise.

6. Drawings and Data

Purchaser shall keep confidential all information, drawings, specifications, or data furnished by Company, or prepared by Company specifically in connection with the performance of this order, and shall not divulge or use such information, drawings, specifications, or data for the benefit of any other party. Except as required for the efficient operation of use of the equipment by Purchaser, or compliance with Purchaser's order, Purchaser shall not make copies or permit copies to be made without the prior written consent of Company. Purchaser shall not use, either directly or indirectly, any such data or any information derived therefrom for any other purpose without obtaining Company's written consent since Company owns and is the creator of such data unless supplied or separately paid for by Purchaser.

7. Installation

Site preparation, installation, and provision of all necessary services shall be the expense and responsibility of the Purchaser. The Purchaser agrees that it has sole responsibility for the proper installation of any equipment including without limitation compliance to all codes and regulations of any local, state, or federal government or authority. Once installation has been completed, the Company can provide the services of a trained technician to demonstrate and adjust the equipment, and to instruct the Purchaser's personnel as to proper operation and maintenance. The Purchaser shall pay for these additional services as agreed by the parties.

8. Limited Warranty and Disclaimer of Other Warranties

Except as otherwise stated in Company's Proposal and/or the SOA, as applicable, Company hereby gives the warranty relating to the equipment: if the equipment shall prove defective within the periods set forth in the relevant General Conditions document or otherwise, commencing on the date of shipment, as a result of any faulty workmanship or materials manufactured by Company, the Company will repair or replace, at its option, free of charge, f.o.b. Cleveland, Ohio said parts.

The obligation of the Company and the Purchaser's sole and exclusive remedy hereunder shall be limited, at the Company's option, to replacement or repair of any equipment, thereof which is returned to the Company's plant, transportation charges prepaid, and there determined by the Company not to be as warranted. Should the equipment or parts thereof be determined by the Company to be nonconforming so as to preclude the remedying of warranted nonconformity by repair or replacement, the Purchaser's sole and exclusive remedy shall then be the refund of the purchase price paid with regard to that portion of the equipment alleged to be nonconforming. Notwithstanding the foregoing, the Company shall have no obligations hereunder if all payments from the Purchaser have not been made or the equipment becomes nonconforming in whole or part as a result of installation or repairs not made by the Company, or as a result of removal, improper use, operation above rated capacities and/or temperatures, or misapplication of the equipment after it has been installed in the Purchaser's plant.

Equipment, parts, and accessories made by other manufacturers are warranted only to the extent of the original manufacturer's warranty to the Company. In addition, wear parts and other expendable parts may have a shorter warranty term as set forth in the Proposal and/or the SOA, or as otherwise communicated from Company to Purchaser.

THIS WARRANTY DOES NOT EXTEND TO, AND THE COMPANY SHALL HAVE NO LIABILITY FOR, ANY LOSS, COST, EXPENSE, LIABILITY, OR DAMAGE (INCLUDING WITHOUT LIMITATION, LOSS OF USE, OR CLAIMED LOSS OF ANTICIPATED PROFITS, BUSINESS

INTERRUPTION, INJURIES, OR DAMAGE TO PERSONS OR PROPERTY, ALL LIABILITIES OF THE PURCHASER TO ITS CUSTOMERS OR THIRD PERSONS, AND ALL OTHER SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES) WHETHER DIRECT OR INDIRECT, AND WHETHER OR NOT RESULTING FROM OR CONTRIBUTED TO BY THE DEFAULT OR NEGLIGENCE OF THE COMPANY, ITS AGENTS, EMPLOYEES OR SUBCONTRACTORS WHICH MIGHT BE CLAIMED AS THE RESULT, PROXIMATE OR OTHERWISE, OF THE DELAY IN OR INABILITY TO COMPLETE DELIVERY OF, OR THE INSTALLATION OF, OR THE USE OR OPERATION OR THE FAILURE OF THE EQUIPMENT.

The Purchaser agrees to indemnify the Company against such loss, cost, expense, liability, or damage (including, without limitation, claims arising from or in connection with Purchaser's possession, use, misuse and/or operation of equipment purchased from Company), provided, however, that if the Company shall install the equipment, such indemnification shall not apply to injuries or damages to employees of the Company incurred during and as a result of the Company's installation work and as a direct result of the negligence of the Company. The Purchaser shall, however, notify the Company promptly, in any event within thirty (30) days, of any accident or malfunction involving the Company's products which results in personal injury or damage to property although such notification shall not create any liability on the part of Company.

EXCEPT AS SPECIFICALLY SET FORTH HEREIN OR AS STATED IN A PROPOSAL AND/OR SOA, IT IS EXPRESSLY AGREED THAT THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NOR OTHER WARRANTY, EXPRESS, IMPLIED, OR STATUTORY, NOR ANY AFFIRMATION OF FACT, OR PROMISE, BY THE COMPANY WITH REFERENCE TO THE EQUIPMENT OR PARTS THEREOF, OR OTHERWISE, WHICH EXTENDS BEYOND THE TERMS HEREOF.

9. Claim Procedure Under Limited Warranty

Purchaser shall notify Company in writing of any alleged defects within seven (7) days after Purchaser learns of the alleged defects, but in no event later than the expiration of the relevant dates as set forth in Section 8 after Purchaser's receipt of the equipment. Failure to give such notice or in any manner changing the equipment shall constitute a waiver of all claims for any defects.

NO EQUIPMENT CLAIMED TO BE DEFECTIVE SHALL BE RETURNED, NOR WILL ANY SUCH EQUIPMENT BE ACCEPTED AT THE COMPANY, PRIOR TO OBTAINING THE CONSENT OF THE COMPANY THERETO AND A RETURNED MATERIAL TAG (contact the Company for information and instructions). No equipment that has been tampered with or altered in any manner will be accepted for repair or replacement. If the aforesaid warranty has expired or is not applicable, the Purchaser agrees to pay for all parts, labor and other expense, including all transportation or delivery charges, incident to repairing and returning the equipment.

10. Risk of Loss

Any risk of loss to the equipment shall rest with the Company up to the time of delivery of the equipment by the Company to the common carrier chosen to transport the equipment. Thereafter, the risk of loss to the equipment shall rest with the Purchaser, including any risk associated with any equipment subsequently returned to the Company. Any breach of this Agreement by either party shall have no effect on the foregoing provisions as to the risk of loss or damage to the equipment.

11. Patents

In case any suit or proceeding alleging patent infringement is threatened, or instituted against the Purchaser, based upon a claim that an apparatus or any part thereof furnished under the sale contract or this acknowledgement constitutes an infringement of any patent issued prior to the date of the Company's proposal, the Purchaser agrees that no claim shall be made against the Company unless the Purchaser has notified the Company promptly, in writing, of the threat or institution of said suit or proceeding, and unless the Purchaser gives the Company full authority, information, assistance, and cooperation in the investigation of all facts and in the preparation and maintenance of any defense in any such event. It is further agreed that the Company shall have the following options: (1) the Company may defend said suit or proceeding on behalf of the Purchaser and pay all damages and costs awarded therein, against the Purchaser; or (2) the Company may replace said apparatus or part with non-infringing apparatus or part; or (3) the Company may procure for the Purchaser the right to continue using said apparatus or part; or (4) the Company may remove said apparatus or part and refund to the Purchaser the purchase price less thirty-three and one-third percent (33.3%) thereof for each year or fraction of a year since the date the same was purchased by the Purchaser.

12. Remedies

If the Purchaser defaults in paying or performing any of its obligations hereunder, or becomes subject to insolvency, receivership or bankruptcy proceedings, or makes an assignment for the benefit of creditors, or any of the equipment is misused or substantially damaged, or the Purchaser, without the prior written consent of the Company, sells, transfers, leases or mortgages the same or moves it to another site, or any lien is placed thereon, or other persons have or acquire an interest therein, or it is seized or attached by process of law, then in any such event the Company, with or without notice, may treat all amounts owing hereunder by the Purchaser, regardless of maturity date, to be immediately due and payable (subject to such creditors as are required by law in order to enforce this contract), and when the Purchaser is in default herein, the Company may repossess the equipment, and the Purchaser agrees that it will permit the Company so to do, and in that case (a) the Company, upon such notice, if any, as required by law, may keep the equipment as its own, free from any claim on the part of the Purchaser, retaining as compensation for the use or decrease in value of the equipment all payments made thereon by the Purchaser, or (b) (except in such states as not allowed by law) the Company, within four (4) months from such repossession, upon giving to the Purchaser not less than fifteen (15) days advance written notice of the Company's intention in that regard, may sell the same for the account of the Purchaser either at public sale (at which the Company may bid) or at private sale, whereupon the net proceeds of sale, after paying the Company's costs and expense in repossessing, transporting, reconditioning, storing, and selling the equipment, shall be applied on the unpaid balance of the obligations of the Purchaser hereunder and the surplus, if any, shall be returned to the Purchaser, but if a deficiency remains, the Purchaser shall continue liable to the Company therefor. In exercising any of the remedies aforesaid, the Company shall give such other and additional notices as are required by law.

In any proceedings or action relating to a default by the Purchaser, the Company shall be reimbursed (if permitted by law) for attorneys' fees and costs incurred by it in respect thereof.

No remedy provided for herein shall be applicable to the extent that it is not permitted by law.

When requested by the Company, the Purchaser shall duly acknowledge the sale contract, and execute, acknowledge and deliver to the Company, in the Company's usual form, any supplement thereto, chattel mortgage, security agreement financing statement, or other appropriate instrument to constitute the equipment as the unencumbered security for the obligations of the Purchaser hereunder, or to enable the Company to comply with all applicable filing or recording laws.

If in the unrestricted judgment of the Company, either before or after manufacture or shipment of the equipment, the financial responsibility of the Purchaser is such as to indicate inability to pay its obligations, including those hereunder, as they mature, the Company upon giving written notice to the Purchaser may require price within the (10) days after the giving of such notice, irrespective of the terms of payment stated herein.

13. Limitations of Actions

Any action resulting from any breach on the part of the Company as to the equipment or parts thereof delivered hereunder must be commenced within two (2) years after the cause of action accrues.

14. Forum

It is further agreed that any action to enforce this Agreement or any portion hereof shall be commenced and prosecuted in the Court of Common Pleas of Cuyahoga County, Ohio or in the United States Federal District Court for the Northern District of Ohio, Eastern Division. The parties specifically waive and disclaim any objections as to the jurisdiction of said courts over this Agreement and venue of any action on this Agreement in said courts.

THESE STANDARD CONDITIONS OF SALE ARE A MATERIAL AND INTEGRAL PART OF ANY PURCHASE CONTRACT BETWEEN KIFFER INDUSTRIES, INC. AND ITS CUSTOMER. THE TERMS OF THIS DOCUMENT GOVERN AND CONTROL THIS TRANSACTION NOTWITHSTANDING THE USE OF PURCHASER'S PURCHASE ORDER NUMBER AS AN ACCOMMODATION.

FLASHCUT CNC

CONTROL MADE SIMPLE

Completely Integrated CAD >> CAM >> CNC

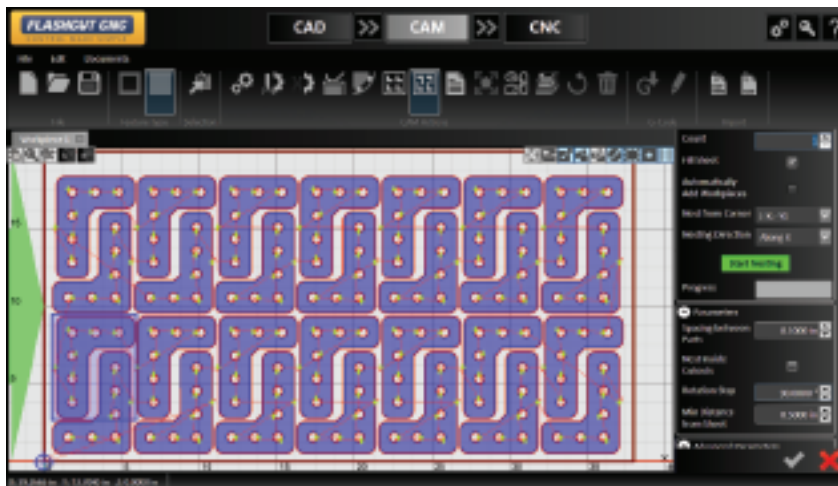
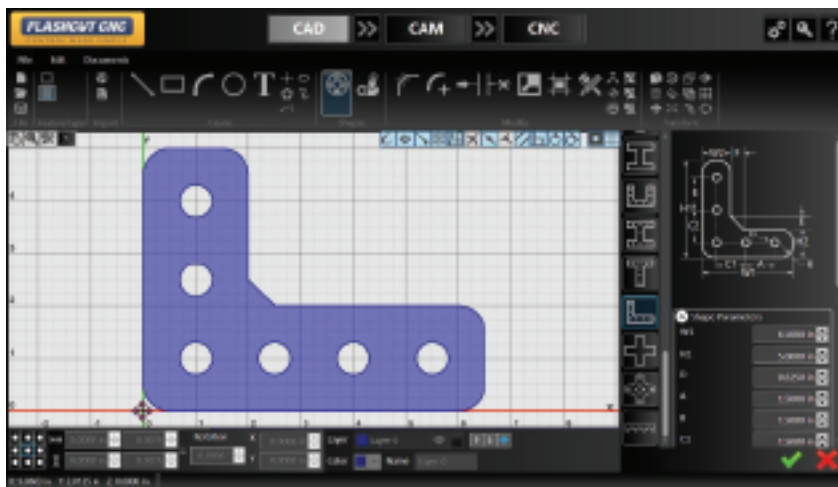
Draw



Nest



Cut



Plasma



Laser



Oxy Fuel



Mill/Router



Knife



Waterjet

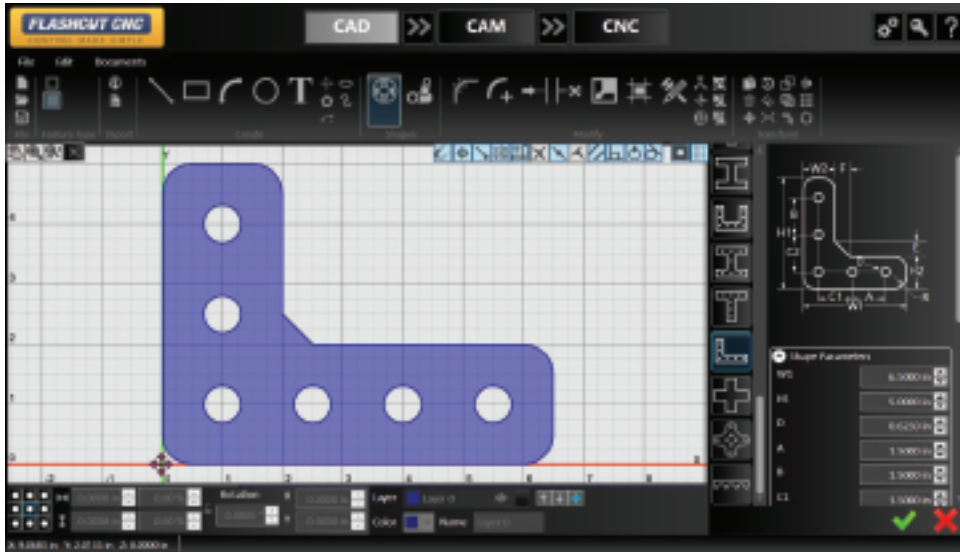


Automation

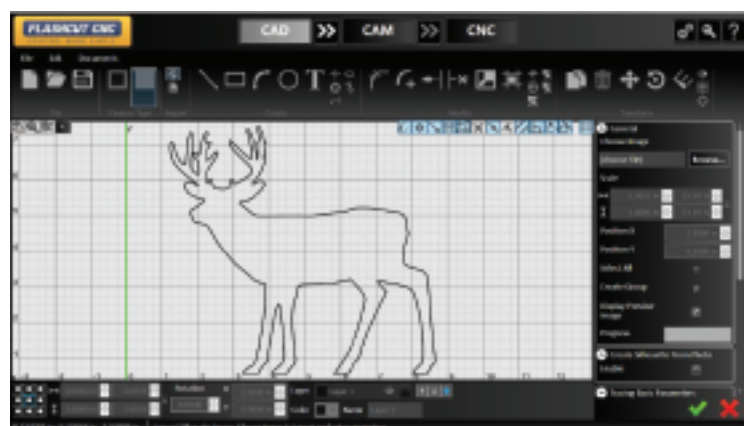
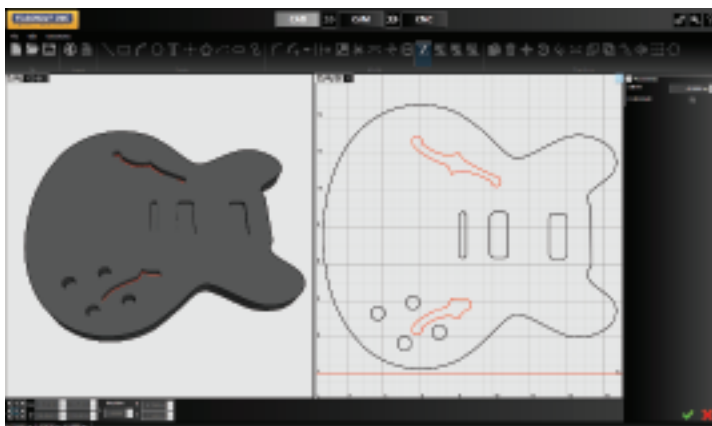
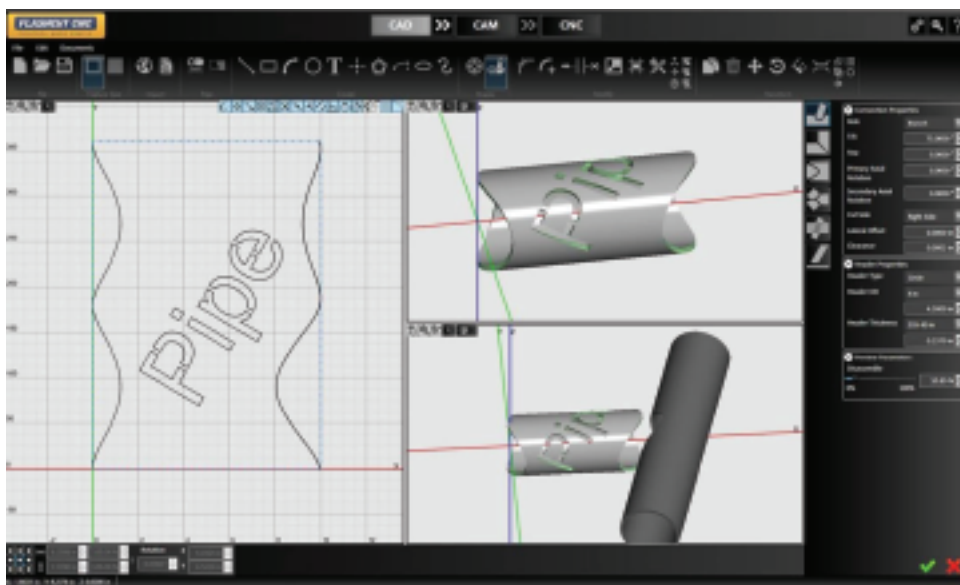


3D Printing

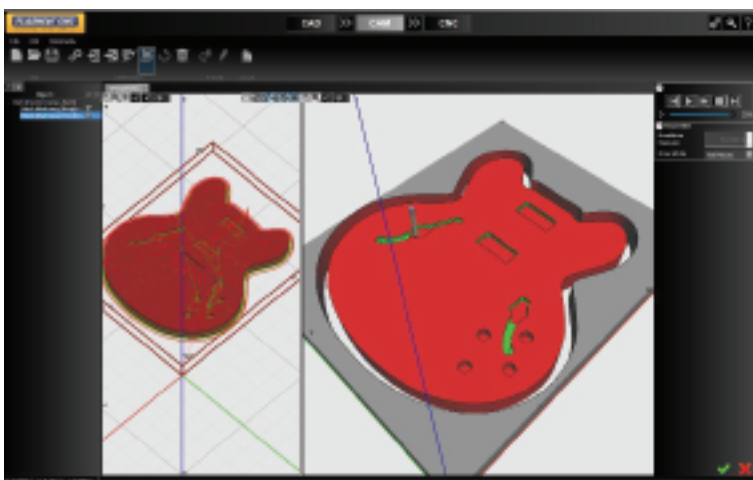
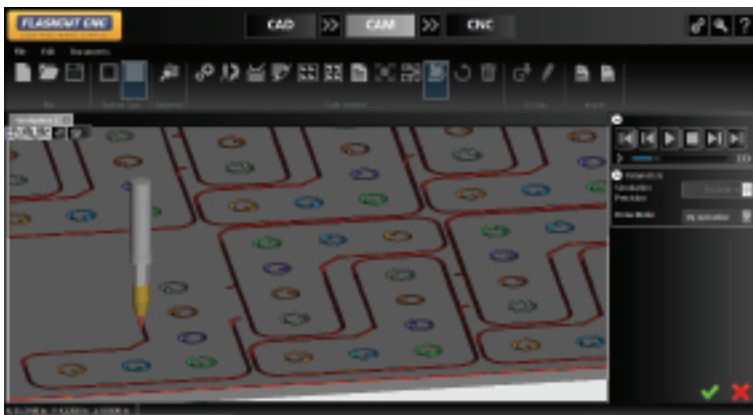
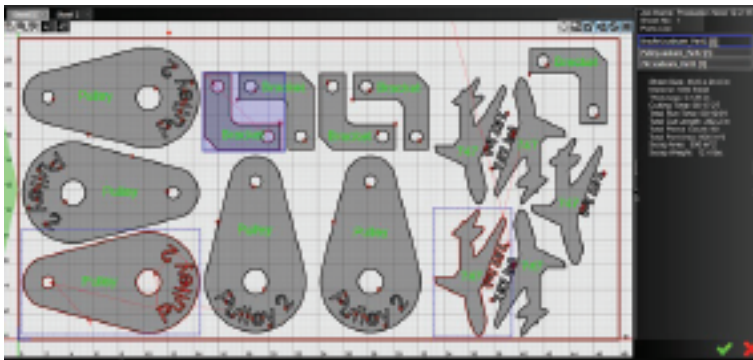
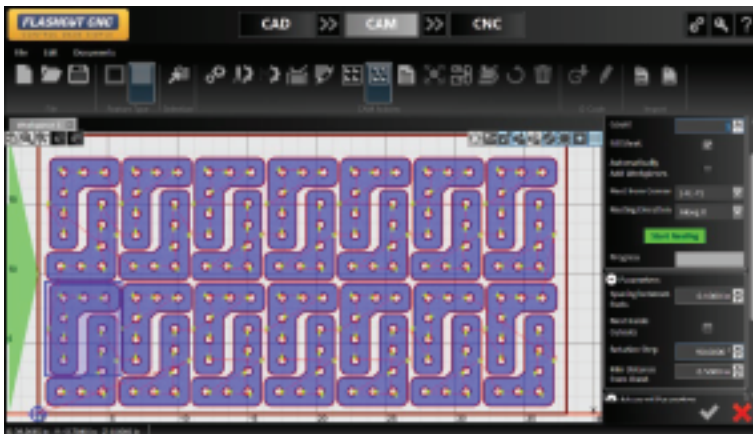
Intuitive, Powerful Drawing in FlashCut CAD



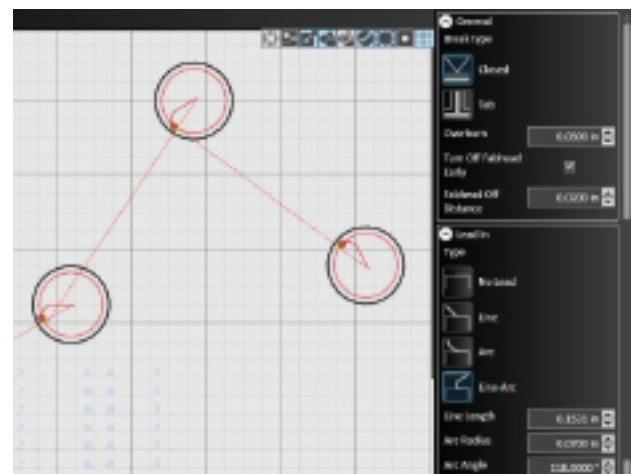
- FlashCut CAD's intuitive user interface makes it simple to draw any 2D or 2.5D shape with our Mill/Router Package or 3D Pipe or Tube with our Pipe/Tube Package.
- Shape library allows you to instantly draw and customize common shapes
- Simple import of any 2D DXF or DWG drawing
- Easily convert any bitmap image to a toolpath (outline or centerline)
- DXF export for sharing drawings with other CAD programs
- Fix tool finds and corrects CAD and DXF mistakes instantly
- Advanced layering support with color shading to easily distinguish part and cutout features
- Automatically separate bitmap colors into CAD layers for creating layered signs or artwork
- Bridge, weld or use other Boolean operations to streamline part creation
- Embed text with any true type font for cutting or engraving
- Easily curve text around any shape
- Arc Fitting accurately simplifies complex drawings with many line segments
- Foreign language support including Spanish, French, and Portuguese.



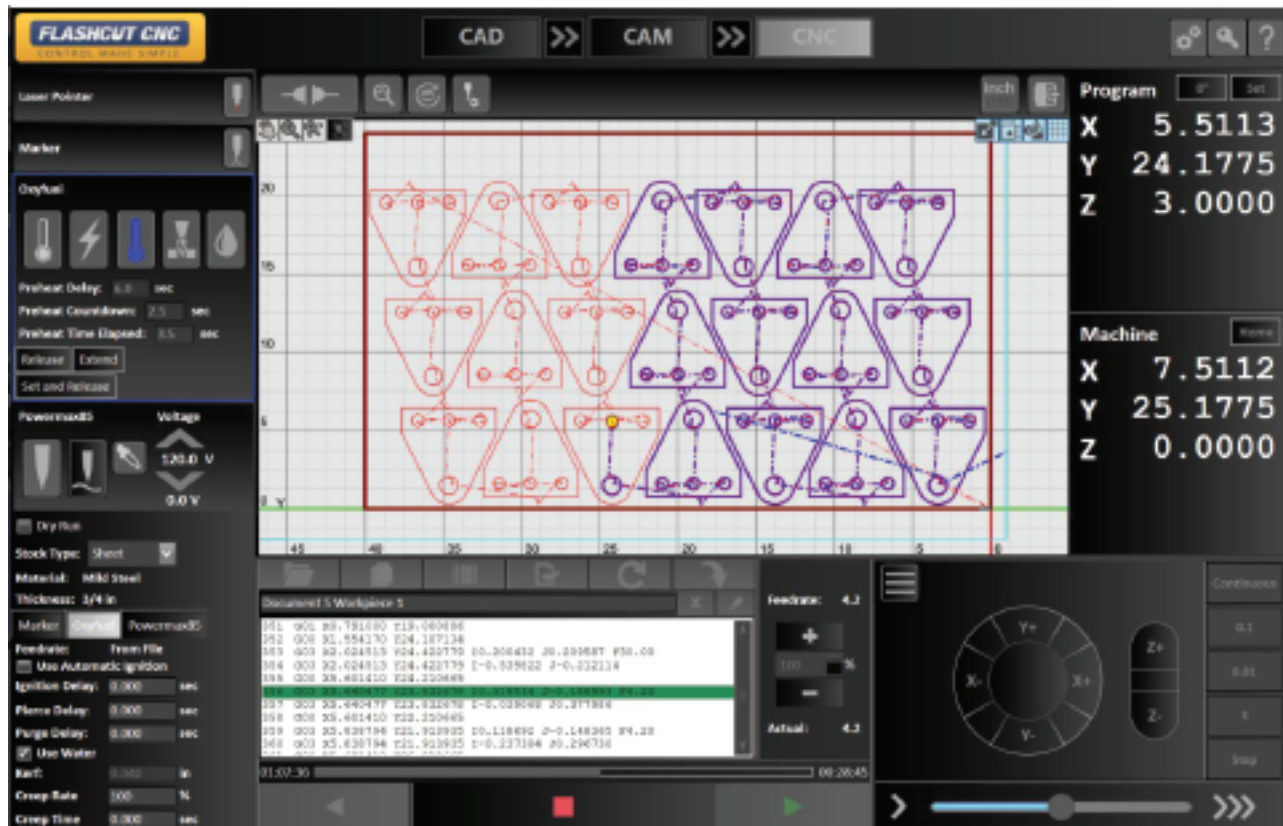
FlashCut CAM Creates Toolpaths Instantly



- Generate perfect toolpath with kerf compensation, lead ins, lead outs and feedrates
- Integrated cut charts and formulas for plasma, oxy-fuel, laser or waterjet
- Graphically manipulate lead-ins and lead-outs for perfect size, shape and placement
- True shape nesting across one or multiple sheets saves you time and money
- Corner looping to eliminate dross at sharp corners
- Add tabs to hold on to parts
- Marker support for text, bend-lines and artistic marking
- Easily change the cutting order between parts
- Support for multiple cutting and marking heads
- 3D Simulation tool dynamically illustrates the entire cutting process with the correct kerf, in the exact order of operations.
- Full support for Hi-Definition plasmas such as Hypertherm HPR and Kjellberg Smart Focus.
- Optional collision avoidance routine
- Optional drilling support added to any machine
- Optional nesting report shows quantity, size, cost and legend of any nested sheet
- Optional Smart360™ creates bolt hole quality cutting small holes with any plasma
- Optional remnant support
- Optional pipe cutting CAD/CAM for round pipe and rectangular tube
- Optional bevel support for round pipe
- Optional waterjet with abrasive support, advanced cornering and pierce options
- Optional Laser support w/ capacitive height sensing, advanced cornering with power management
- Optional mill/router support with automatically generated 3D toolpaths with tool changing support



Cut with the World Leader in Windows Software and Dedicated CNC Controls



- Seamless plug-n-play operation from any laptop or PC running 64-bit Windows 7, 8 or 10
- Dedicated controller orchestrates precision timing to each axis for smooth, uninterrupted motion
- Integrated Stingray® plasma torch height control follows the sheet surface at the precise height
- Real time visualization of toolpath and torch voltage settings
- Enhanced oxyfuel support includes release and extend of preheat time, creep rate and real-time Z adjustments
- Advanced control of G-Code program including reverse and jump to line
- Automatic kerf crossing detection in THC algorithm prevents unwanted diving
- Bar code scanning and auto run of G-code files for streamlined production on a shop floor
- Laser pointer support for precisely setting program zero by sight, visual dry run of program and plate alignment
- Support for joystick control including simultaneous jogging of X and Y axes
- Integrated RS422/RS485 communication with plasma machines
- Advanced flow control of program including reverse, momentary run and jump to line
- Easily Rip Cut any size sheet at any angle
- Enhanced accuracy of machining time and progress meter
- Support for multiple fabrication heads including mill/router, plasma, oxyfuel, waterjet, laser and marker
- Dynamic control of ventilation zones
- Rotary axis support for precision pipe and tube cutting
- Up to 5 axes of simultaneous motion
- Digital Servo or Microstepping Controls
- Made in the USA



www.flashcutcnc.com
sales@flashcutcnc.com
 847-940-9305





New Powermax SYNC™ series

Professional air plasma systems from 65–105 amps

A dramatically simplified consumable platform combined with advanced torch communication for automated setup makes Hypertherm's new Powermax65/85/105 SYNC™ plasma systems the smarter choice for any cutting or gouging application.



Cartridge

- Single-piece
- Easy to identify
- RFID communicates amperage and type

SmartSYNC torch

- Simple, twist-on consumable installation
- Convenient power and amperage adjustment controls

Auto-set power supply

- Automatic process and amperage setting
- Data display

Easy to use

- Easy to identify single-piece cartridge consumables are color coded by process to eliminate parts mix-up and simplify consumable inventory management.
- New SmartSYNC™ torches with the Hypertherm cartridge automatically set the correct amperage and operating mode, eliminating setup errors.
- End of life detection lets the operator know when it's time to change the cartridge.

Minimizes operating costs

- Simplified operation minimizes downtime, troubleshooting, waste and training time.
- Advanced cartridge consumable design provides up to twice the life for hand cutting and improved quality over life in mechanized setups compared to standard consumables.
- Access cartridge data for performance tracking, analyzing usage patterns.

	Powermax65 SYNC		Powermax85 SYNC		Powermax105 SYNC	
Capacity	Thickness	Cut speed	Thickness	Cut speed	Thickness	Cut speed
Cutting						
Recommended	20 mm (3/4")	500 mm/min (20 ipm)	25 mm (1")	500 mm/min (20 ipm)	32 mm (1-1/4")	500 mm/min (20 ipm)
	25 mm (1")	250 mm/min (10 ipm)	32 mm (1-1/4")	250 mm/min (10 ipm)	38 mm (1-1/2")	250 mm/min (10 ipm)
Severance	32 mm (1-1/4")	125 mm/min (5 ipm)	38 mm (1-1/2")	125 mm/min (5 ipm)	50 mm (2")	125 mm/min (5 ipm)
Pierce*	16 mm (5/8")		20 mm (3/4")		22 mm (7/8")	
*Pierce rating for handheld use or with automatic height control						
Capacity	Metal removal rate	Groove profile	Metal removal rate	Gouge profile	Metal removal rate	Gouge profile
Maximum removal gouging						
Typical gouge	4 kg (8.8 lbs.) per hour	2.9 mm D x 6.4 mm W (.11" D x .25" W)	8.2 kg (18.2 lbs.) per hour	3.5 mm D x 6.6 mm W (.14 D x .26 W)	8.6 kg (19.1 lbs.) per hour	6.6 mm D x 6.2 mm W (.26 D x .24 W)

Maximize performance

- Tackle a wide range of jobs with easily interchangeable torch styles and application-specific Hypertherm cartridge consumables for various types of cutting and gouging.
- Reduce training time with simplified set up and consistent performance.
- Time-saving torch controls allow the operator to adjust the amperage on the fly and change consumables and applications without returning to the power supply.

Industry-leading reliability

- SmartSYNC™ torches are engineered for rugged, industrial environments.
- SpringStart™ technology ensures consistent starting and a more reliable torch.
- Industry-leading reliability reduces production downtime.

Torches and cartridges



New color-coded, quarter-turn cartridges can be changed out in about 10 seconds!



Mechanized torch

Specifications

	Powermax65 SYNC™	Powermax85 SYNC™	Powermax105 SYNC™
Input voltages	200–480 V, 1-PH, 50/60 Hz 200–600 V, 3-PH, 50/60 Hz	200–480 V, 1-PH, 50/60 Hz 200–600 V, 3-PH, 50/60 Hz	200–600 V, 3-PH, 50/60 Hz
Kilowatt output	9 kW	12.2 kW	16.8 kW
Input current	200/208/240/480 V, 1-PH 52/50/44/22 A @ 9 kW 200/208/240/480/600 V, 3-PH 32/31/27/13/13 A @ 9 kW	200/208/240/480, 1-PH 70/68/58/29 A @ 12.2 kW 200/208/240/480/600 V, 3-PH 42/40/35/18/17 A @ 12.2 kW	200/208/240/480/600 V, 3-PH 58/56/49/25/22 A @ 16.8 kW
Output current	20–65 A	25–85 A	30–105 A
Rated output voltage	139 VDC	143 VDC	160 VDC
Duty cycle @ 40° C (104° F)	50% @ 65 A, 230–600 V, 1/3-PH 40% @ 65 A, 200–208 V, 1/3-PH 100% @ 46 A, 230–600 V, 1/3-PH	60% @ 85 A, 230–600 V, 3-PH 60% @ 85 A, 480 V, 1-PH 50% @ 85 A, 240 V, 1-PH 50% @ 85 A, 200–208 V, 3-PH 40% @ 85 A, 200–208 V, 1-PH 100% @ 66 A, 230–600 V, 1/3-PH	70% @ 105 A, 240 V, 3-PH 80% @ 105 A, 480–600 V, 3-PH 100% @ 94 A, 480–600 V, 3-PH 100% @ 88 A, 240 V, 3-PH
Open circuit voltage (OCV)	295 VDC	305 VDC	300 VDC
Dimensions with handles	483 mm D; 233 mm W; 430 mm H (19" D; 9.2" W; 17" H)	483 mm D; 233 mm W; 430 mm H (19" D; 9.2" W; 17" H)	592 mm D; 274 mm W; 508 mm H (23.3" D; 10.8" W; 20.0" H)
Weight w/7.6 m (25') torch	29 kg (61 lbs.)	32 kg (67 lbs.)	45.3 kg (95 lbs.)
Gas supply	Clean, dry, oil-free air or nitrogen	Clean, dry, oil-free air or nitrogen	Clean, dry, oil-free air or nitrogen
Optimum inlet gas pressure	7.6–8.3 bar (110–120 psi)	7.6–8.3 bar (110–120 psi)	7.6–8.3 bar (110–120 psi)
Minimum inlet gas pressure	5.2 bar (75 psi)	5.2 bar (75 psi)	5.5 bar (80 psi)
Recommended inlet gas flow rate	Cutting: 210 l/min @ 5.9 bar (450 scfh, 7.5 scfm @ 85 psi) Gouging: 210 l/min @ 4.8 bar (450 scfh, 7.5 scfm @ 70 psi)	Cutting: 210 l/min @ 5.9 bar (450 scfh, 7.5 scfm @ 85 psi) Gouging: 210 l/min @ 4.8 bar (450 scfh, 7.5 scfm @ 70 psi)	Cutting: 260 l/min @ 5.9 bar (550 scfh, 9.2 scfm @ 90 psi) Gouging: 260 l/min @ 4.8 bar (550 scfh, 9.2 scfm @ 70 psi)
Input power cable length	3 m (10')	3 m (10')	3 m (10')
Power supply type	Inverter – IGBT	Inverter – IGBT	Inverter – IGBT
Engine drive requirement	15 kW for full 65 A output	20 kW for full 85 A output	30 kW for full 105 A output
Certifications	CSA-certified for use in the Americas and Asia, except China	CSA-certified for use in the Americas and Asia, except China	CSA-certified for use in the Americas and Asia, except China
Warranty	Power supplies have a 3-year warranty and torches a 1-year warranty	Power supplies have a 3-year warranty and torches a 1-year warranty	Power supplies have a 3-year warranty and torches a 1-year warranty

For more information, visit:
www.hypertherm.com

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Environmental stewardship is one of Hypertherm's core values, and it is critical to our success and our customers' success. We are striving to reduce the environmental impact of everything we do. For more information: www.hypertherm.com/environment.

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Hypertherm®

Powermax125®

Professional-grade plasma metal cutting and gouging system for handheld cutting 1½" and mechanized piercing 1".



Capacity	Thickness	Cut speed
	Cutting	
Recommended	1-1/2"	18 ipm
	1-3/4"	10 ipm
Severance (hand cutting)	2-1/4"	5 ipm
Pierce*	1"	

* Pierce rating for handheld use or with automatic torch height control

Capacity	Metal removal rate	Groove profile*
	Gouging	
Typical gouge	27.6 lbs/hr	0.17-0.31" D x 0.24-0.39" W

* Actual groove profile varies with torch angle, arc stretch, and technique

Maximum productivity

- Finish jobs faster with cut speeds 5 times greater than oxyfuel on 1/2" mild steel.
- Spend less time on grinding and edge preparation due to superior cut and gouge quality.
- Maximize your cutting time with 100% duty cycle.

Low operating costs

- Reduce costs with consumable life up to four times longer than other systems in this amperage range.
- Electrode end-of-life detection protects the torch and workpiece from damage by automatically stopping power when the electrode is overused.

Easy-to-use for cutting and gouging

- No need to change the air pressure. Smart Sense™ technology ensures that it is always correctly set.
- Tackle different jobs with multiple, easy-to-use torch styles.

Built and tested to withstand the harshest conditions

- Duramax® Hyamp™ torches are designed for high-impact and heat resistance.
- SpringStart™ technology ensures consistent starting and a more reliable torch.
- Low maintenance maximizes uptime.

Duramax® Hyamp™ standard torch styles
(for more torch options, see www.hypertherm.com)



85° hand torch



15° hand torch

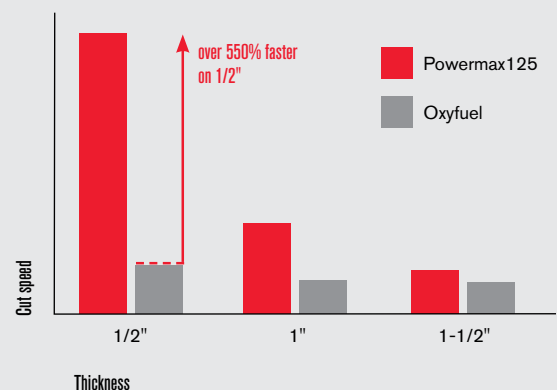


180° mini machine torch



180° full-length machine torch

Relative cut performance on mild steel



Specifications

Input voltages	480/600 V, 3-PH, 50/60 Hz
Kilowatt output	21.9 kW
Input current @ 21.9 kW	480/600 V, 31/24 A
Output current	30-125 A
Rated output voltage	175 VDC
Duty cycle @ 104° F	100% @ 125 A, 480/600 V, 3-PH
Open circuit voltage (OCV)	320 VDC
Dimensions with handles	23.3" D; 10.8" W; 20.0" H
Weight w/25' torch	480 V 105.7 lbs 600 V 104.7 lbs
Gas supply	Clean, dry, oil-free air or nitrogen
Recommended gas inlet flow rate/pressure	Cutting: 260 l/min (550 scfh) @ 5.9 bar (85 psi) Gouging: 212 l/min (450 scfh) @ 4.1 bar (60 psi)
Input power cable length	10'
Power supply type	Inverter – IGBT
Engine drive requirement	40 kW for full 125 A output
Certifications	CSA-certified for use in the Americas and Asia, except China.
Warranty	Power supplies have a 3-year warranty and torches a 1-year warranty.



Engineered and assembled in the USA

ISO 9001:2008

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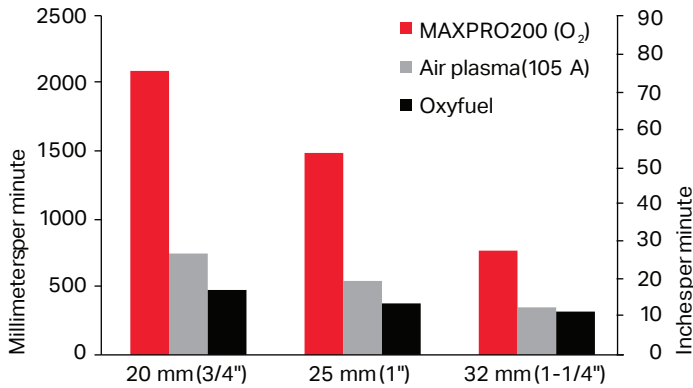
MAXPRO200[®]

LongLife[®] air and oxygen plasma cutting system



Maximized productivity, easy operation, reliable performance

Fast cutting speeds = maximum productivity



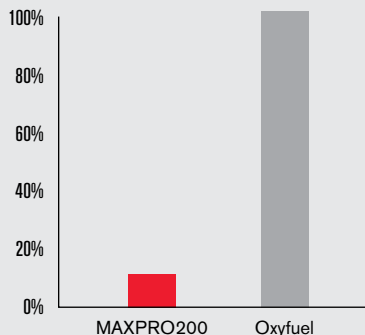
Step up to a superior technology

MAXPRO200 vs. oxyfuel

Cut speeds and pierce times are as much as 7 times faster for maximized productivity.

- Significantly lowers operating cost per part up to 50 mm (2").
- Less dross, less warping, and a smaller heat-affected zone to minimize high-cost secondary operations.
- Increases flexibility to cut and gouge mild steel, stainless steel, aluminum, and stacked, painted or rusted metal.
- Improves mild steel cutting safety over the use of acetylene, a highly flammable gas used for oxyfuel cutting.

Ten times lower cost per meter (foot)



Low operating cost

Exceptional consumable life and consistent performance deliver more cost-effective results.

- Do more with less power: patented consumable designs enable best in class cut speeds and robust production piercing using lower amperage levels.
- Superior cut quality and consistency minimize high cost secondary operations.
- Advanced consumable technologies including LongLife[®], CoolFlow[™] and TrueFlow[™] significantly increase consumable life to reduce cost per part.



Reliable performance

Engineered and tested using the same proven design process as the HyPerformance[®] HPRXD[®] product family for superior reliability in the most demanding cutting environments.

- During development, Hypertherm systems endure rigorous reliability testing procedures equivalent to years of use in extreme operating environments.
- The MAXPRO200 is built with less than half the number of internal parts compared to other systems on the market. Fewer parts provide greater reliability and serviceability.
- Self-diagnostics are performed automatically at startup and continually throughout the cutting process.

Specifications

Input voltages	200/208 VAC, 3-PH, 50 Hz, 108/104 A 220 VAC, 3-PH, 50-60 Hz, 98 A 240 VAC, 3-PH, 60 Hz, 90 A 380 VAC, 3-PH, 50 Hz, 57 A 400 VAC, CE, 3-PH, 50-60 Hz, 54 A 415 VAC, CE, 3-PH, 50 Hz, 52 A 440 VAC, 3-PH, 50-60 Hz, 49 A 480 VAC, 3-PH, 60 Hz, 45 A 600 VAC, 3-PH, 60 Hz, 36 A
Output voltage	50-165 VDC
Maximum output current	200 A
Duty cycle rating	100% @ 33 kW, at 40° C (104° F)
Operating temperature	-10° C to 40° C (+14° F to +104° F)
Power factor	0.98 @ 33 kW output
Maximum OCV	360 VDC
Dimensions	102 cm (40.14") H, 69 cm (27.12") W, 105 cm (41.23") L
Weight	335 kg (740 lbs)
Gas supply	Air, O ₂ , N ₂
Plasma gas	Air, N ₂
Shield gas	Air, N ₂
Supply gas pressure	6.2 +/- 0.7 bar (90 +/- 10 psig)



MAXPRO200 straight machine torch

MAXPRO200 quick-disconnect machine torch



For more information, visit:
www.hypertherm.com

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Operating data

Virtually dross-free cutting capacity - mild steel

20 mm (3/4")

Production pierce capacity - mild steel

32 mm (1-1/4")

Severance* - mild steel

75 mm (3")

Bevel - 200 amp consumables support 45° bevel capability

Material	Current (amps)	Thickness (mm)	Approximate cutting speed (mm/min)	Thickness (inches)	Approximate cutting speed (ipm)
Mild steel					
Air plasma	50	1	8050	20 ga	325
Air shield		3	3760	0.135	110
Air plasma	130	6	3865	1/4	150
Air shield		12	2045	1/2	75
Air plasma	200	6	4885	1/4	190
Air shield		12	2794	1/2	110
		20	1415	3/4	60
		25	940	1	35
		32	630	1-1/4	25
		50	215	2	8
O ₂ plasma	50	1	6775	20 ga	270
Air shield		3	3650	0.135	130
O ₂ plasma	130	6	3925	1/4	150
Air shield		12	2200	1/2	80
O ₂ plasma	200	6	6210	1/4	235
Air shield		12	3415	1/2	130
		20	1920	3/4	80
		25	1430	1	55
		32	805	1-1/4	32
		50	270	2	10
Stainless steel					
N ₂ plasma	200	12	2260	1/2	80
N ₂ shield		20	1190	3/4	50
Air plasma	200	12	3320	1/2	120
Air shield		20	1440	3/4	60
Aluminum					
N ₂ plasma	200	12	3370	1/2	125
N ₂ shield		20	1630	3/4	70
Air plasma	200	12	3370	1/2	125
Air shield		20	1625	3/4	70

* The thickness that can be severed at approximately 125 mm/min (5 ipm) with reduced cut quality. Cutting at severance thickness should be infrequent.

Cut with confidence

- Hypertherm is ISO 9001: 2000 registered.
- Hypertherm's full-system warranty provides complete coverage for one year on the torch and leads and two years on all other system components.
- Hypertherm's plasma power supplies are engineered to deliver industry leading energy efficiency and productivity with power efficiency ratings of 90% or greater and power factors up to 0.98. Extreme energy efficiency, long consumable life, and lean manufacturing lead to the use of fewer natural resources and a reduced environmental impact.

