tru-kut

The **AKS Cutting Systems "tru-kut"** is a 5' x 10' platform CNC Plasma Cutting System that includes many of the preferred features of the **AKS "accu-kut"**.

The **AKS "tru-kut"** is a CNC x-y programmable plasma cutting system that can incorporate either traditional non-HyDefinition® "air" plasma power supply unit, or upgraded to the **AKS "tru-kut" X** to include **Hypertherm** "HyDefinition®" plasma cutting.



MADE IN THE U.S.A.

Whether integrated with a HyDefinition® plasma torch, or with a traditional "air" plasma torch, the **AKS "tru-kut"** is designed and built to the same performance and durability standards as all **AKS Cutting Systems**. The **AKS "tru-kut"** unitized machine frame is machined in one single set-up, resulting in the highest achievable accuracies of motion of any plasma cutting system on the market. The **AKS "tru-kut"** uses the same controls, motors, drives and controller as the **AKS "accu-kut"** achieving superior motion accuracy and precision.

The **AKS "tru-kut"** uses **standard** all **Hypertherm** technology including:

- **Hypertherm** Plasma Power Supply Unit
- **Hypertherm** Edge Connect™ CNC Controller
- **Hypertherm** Phoenix Operating Software
- **Hypertherm** ProNest LT Programming Software
- **Hypertherm** Sensor™ Advanced Torch Height Control (THC)
- **Hypertherm** Torch Head and Consumables

tru-kut X

The **AKS "tru-kut"** is also available in the **AKS "tru-kut" X** model which is for premium HyDefinition® plasma cutting.
The **AKS "tru-kut" X** includes integration of the **Hypertherm** HyDefinition® plasma power supply unit, the upgrade to the **Hypertherm** full ProNest Software, and the Down Draft Air Table.

aks CUTTING SYSTEMS

AKS tru-kut 510

The AKS tru-kut 510 is perfect for shops that need a heavy duty, unitized plasma cutting table, capable of cutting up to 5'X10'. The "tru-kut" comes standard with Hypertherm Powermax or MaxPro plasma power supply for traditional plasma cutting performance. The AKS tru-kut X is upgraded to the HyDefinition® capability and utilizes the HPR or XPR family of cutting power supplies and provides SureCut™ technology included.

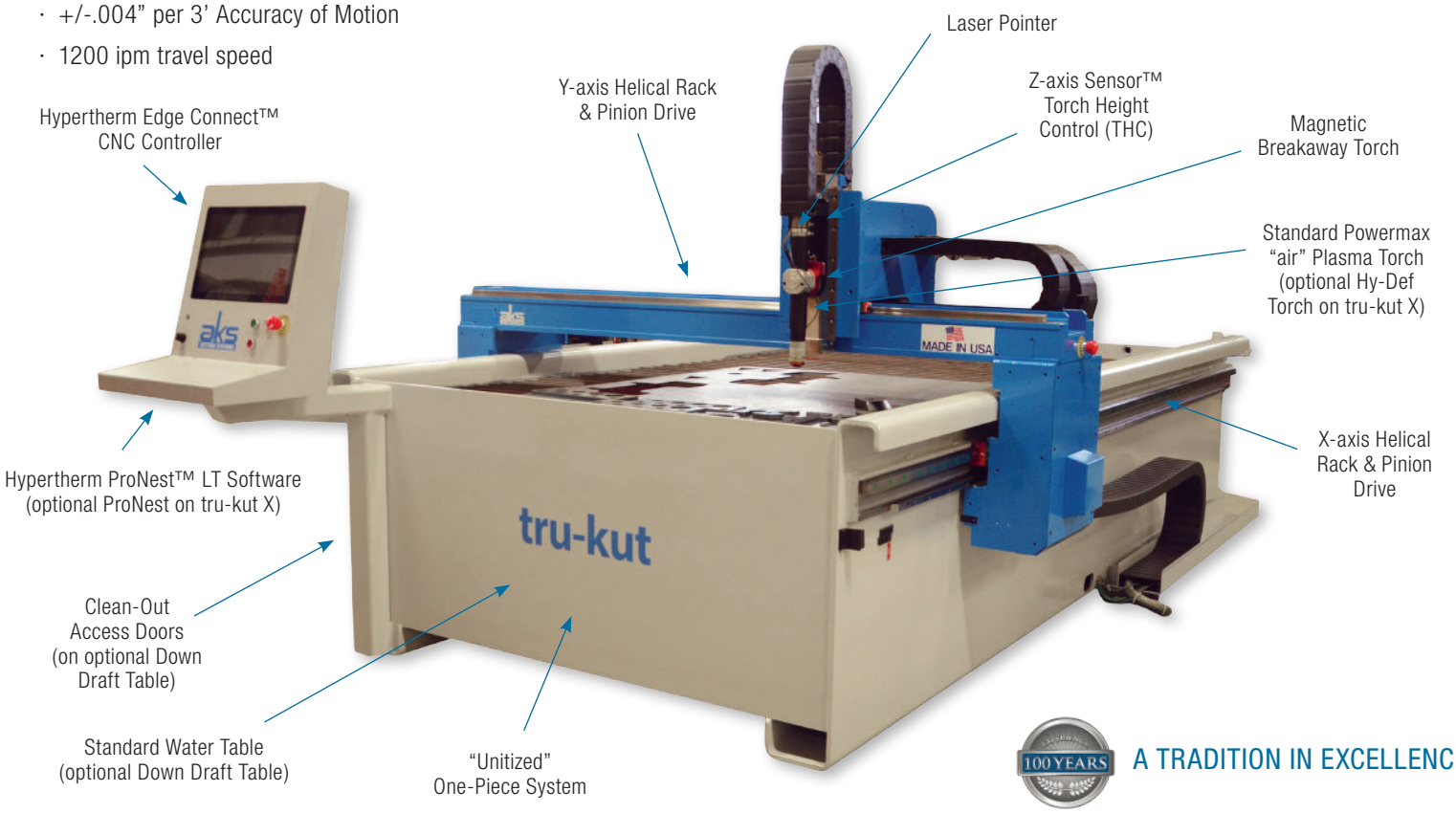
Hypertherm SureCut™

AKS Cutting Systems is a genuine **Hypertherm SureCut™ Technology Integrator** which enables users to fully optimize their plasma cutting process with exclusive features like:

- **True Hole®**
- **True Bevel™**
- **Rapid Part™**
- **Power Pierce™**
- **Optimized Process Parameters**
- **Optimized Consumable Life**

The AKS "tru-kut" 510 offers these unique features & benefits:

- Heavy-Duty "Unitized" One-Piece Frame Machine Tool
- Removable/Replaceable Slat Table System
- Cutting Table 2" Thick Full Plate Load Capacity
- Standard Water Table (optional Down Draft Air Table)
- X-axis Dual Synchronized Helical Rack & Pinion Drives on both sides
- Bridge Single Y-axis Helical Rack & Pinion Drive
- Z-axis Hypertherm Sensor™ Advanced Torch Height Control (THC)
- Hypertherm Powermax "air" Plasma Power Unit & Torch (optional Hy-Def Unit)
- Side Clean-Out Doors for Manual Scrap/Slag Removal
- Magnetic Breakaway Torch
- Laser Pointer for Plate Alignment and Location Finding
- Hypertherm Edge Connect™ CNC Controller
- 19" Color Touch Screen Operator Control Console
- Hypertherm ProNest™ LT Programming Software (optional ProNest™)
- +/-.004" per 3' Accuracy of Motion
- 1200 ipm travel speed



100 YEARS A TRADITION IN EXCELLENCE

The AKS “tru-kut” offers these optional upgrade items:



Upgrade to “tru-kut” X – upgrade the standard “tru-kut” into the premium “tru-kut” X, including:

- Upgrading the plasma power supply from the traditional “air” plasma to the Hypertherm HyDefinition® Plasma Power Supply
- Upgrading the software from Hypertherm ProNest LT (light) to full version Hypertherm ProNest including the Advanced Post Processor and the Automatic Nesting Module

By upgrading to the superior HyDefinition® cutting process, the “tru-kut” X 510, which is a True Hole® enabled cutting system, is part of the Hypertherm SureCut™ Technology product, and achieves premium plasma cutting performance including Hypertherm advanced cutting features like:

- True Hole®
- Power Pierce™
- Rapid Part™
- True Bevel™
- Optimized Process Parameters
- Maximized Consumable Component Life

The AKS “tru-kut” X still utilizes all the same exclusive features and benefits of the ‘tru-kut”, but now, the cutting performance of the “tru-kut” X is improved to the level of similar performance of the industry-leading AKS “accu-kut”. The AKS “tru-kut” X is the highest value small platform machine available on the market, with superior performance and capability over similar competitive machines.

Down Draft Table – commonly on the “tru-kut” X, this enhancement offers improved HyDefinition® cutting and improved smoke collection (smoke collector filtration unit or blower fan unit must also be purchased.) Unlike water tables, which sometimes interfere with the HyDefinition® cutting process, the Down Draft table provides a simpler, smoother and cleaner cutting operation, which eliminates the environmental concern to discharge waste water. The AKS “tru-kut” includes single 5’x10’ zone with optimized air draw, and includes access doors on both sides of the tank for easy cleanout and maintenance.





AKS robo-kut – is the most powerful plasma cutting 5-axis bevel head in the industry and is protected by several U.S. Patents. The AKS “robo-kut” is capable of +/-45 degrees for A,V,K, X, top-Y and bottom-Y style bevel cuts for weld prep applications, countersinks, and chamfers, and also is capable of precision taper compensation or “back-beveling”. Most importantly, the AKS “robo-kut” can produce a ½” dia “bolt ready hole” in 1” thick steel plate, for a ½ : 1 ratio for hole diameter: thickness in many applications, which is superior over competitive machines which are limited to traditional 1 : 1 ratio only. The AKS plasma “robo-kut” incorporates robotic style precision gearing and planetary gearboxes that can be incremented in arc-seconds, or fractions of degrees, for tightest precision and accuracy. The "robo-kut" performs continuous unlimited rotation without interruption, for cutting of the most complex 5-axis parts without having to stop and unwind; and includes a magnetic breakaway head to prevent damage upon a crash.

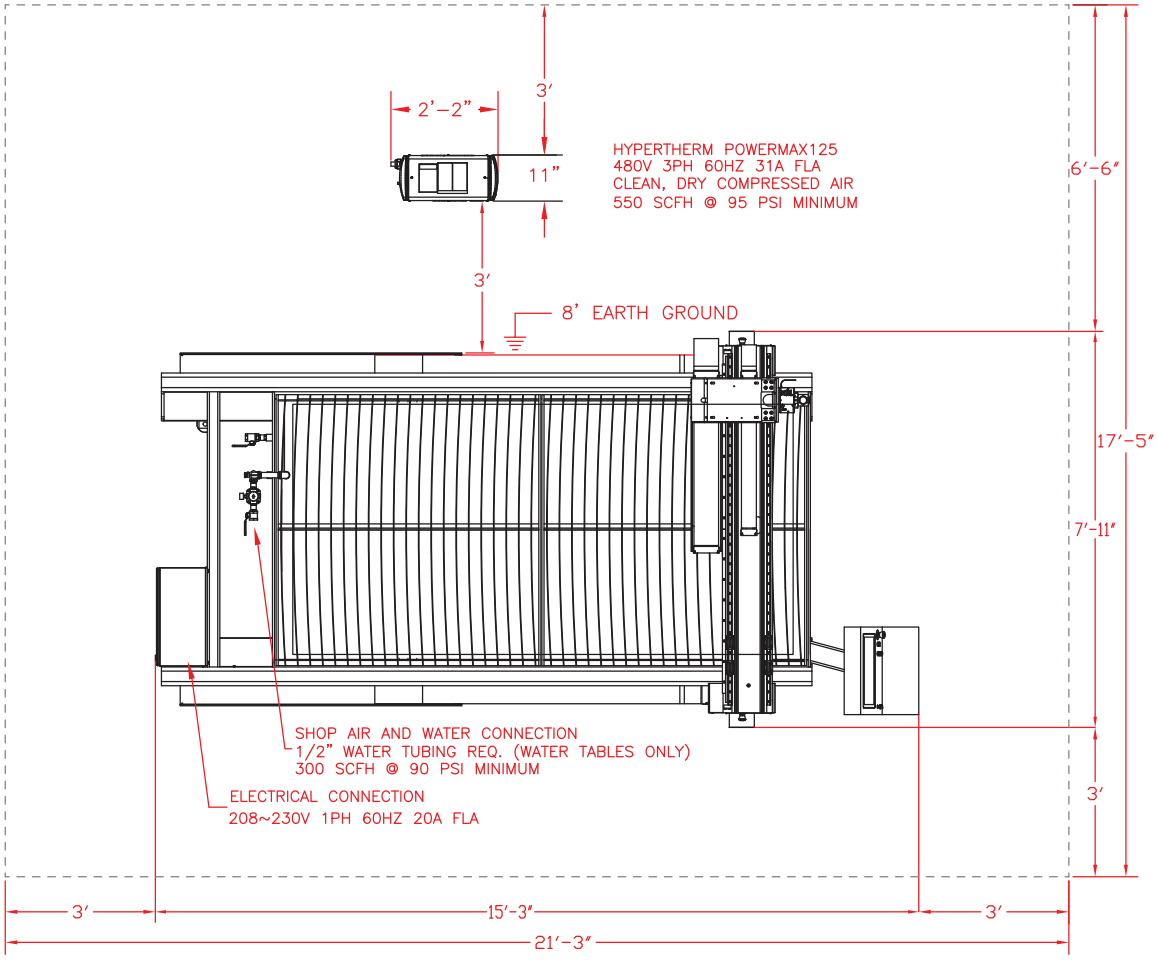
Smoke Collector Filtration Unit – coupled with the Down Draft Table, the Smoke/Dust Collector Filtration Unit provides suction air capable of both removing and filtering the plasma cutting process smoke. It is a stand-alone unit either installed indoors, near the plasma cutting machine, or outdoors for quieter operation. The Smoke Collector unit contains a series of high capacity HEPA filters which efficiently re-circulate clean air back into your plant.





Oxy-Fuel Torch – *complimentary* technology cutting torch on a separate carriage, but on the same bridge, next to the plasma torch. The Oxy-Fuel torch is powered by either independent servo control, or mechanical slave linkage. Also included standard are auto gas control and remote ignition. The Oxy-Fuel torch is for cutting 2”-6” thick carbon steel and cannot cut stainless steel and aluminum. The AKS Oxy-Fuel torch is a premium design, able to withstand the harsh, ultra-hot, cutting process.

RECOMMENDED MACHINE LAYOUT



HYPERTHERM EDGE CONNECT™ CONTROLLER

The **AKS "tru-kut"** utilizes the **Hypertherm EDGE Connect™ CNC Controller**, the leading plasma cutting controls package in the industry. The **EDGE Connect™** combines Hypertherm's embedded expertise foundation with AKS Cutting Systems customization.

- Utilizes **Hypertherm Phoenix™** Operating Software
- **19" Color Projected Capacitive Touch Screen**
- One touch access for support documentation including cutting optimization tips, consumable change instructions and diagnostic tools
- Configurable **Watch Windows™** enable on-screen real time monitoring of key process performance parameters while cutting
- **Two Year Warranty**
- **Remote Help™** over the internet reduces down time and the need for on-site visits

HYPERTHERM PRONEST LT PROGRAMMING SOFTWARE

Hypertherm ProNest® 2017 CAD/CAM Nesting Software

- **Powerful single solution** CAD/CAM nesting software designed for light industrial production
- Increases material savings, boosts productivity, reduces operating costs and improves part quality
- Compatible with most drawing formats with **direct import** of **.dxf**, **.dwg**, and **CNC simple shapes**
- Uses the patented **CutPro® Wizard**, with database cut charts, so even new operators can be ready to cut production parts in minutes
- Enables users to obtain optimal part cut quality with ***automatic* nesting** and ***automatic* process optimization**
- Backed by **Hypertherm's global network** of professionals for service, support and troubleshooting

HyDefinition® is a registered trademark of the Hypertherm Corporation.