

# KOMATSU

ALL YOUR METALWORKING NEEDS



Plasma  
cutting

TFP

TFPL

TOMORROW'S TECHNOLOGY TODAY

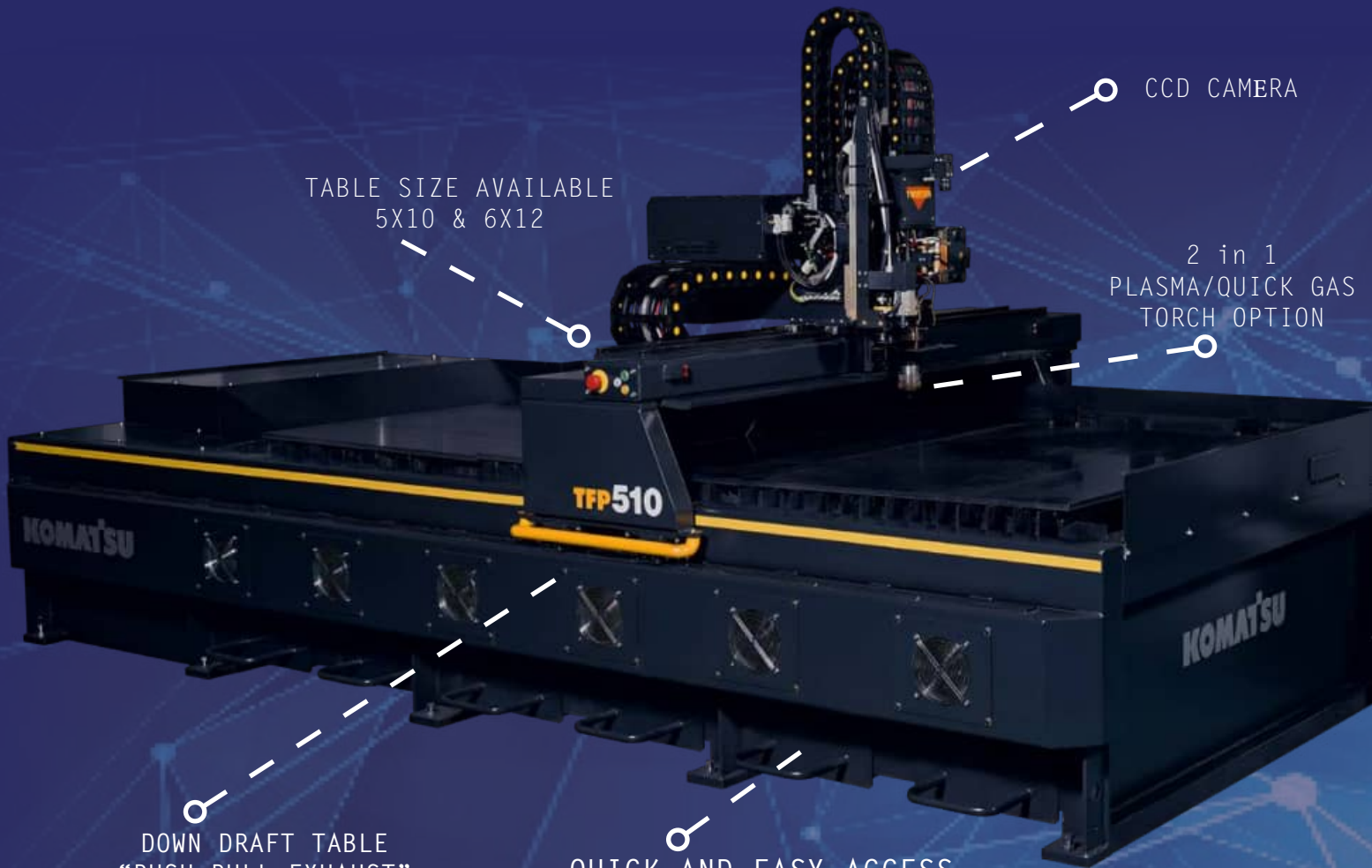


TABLE SIZE AVAILABLE  
5X10 & 6X12

CCD CAMERA

2 in 1  
PLASMA/QUICK GAS  
TORCH OPTION

TFP510

KOMATSU

KOMATSU


DOWN DRAFT TABLE  
"PUSH PULL EXHAUST"

QUICK AND EASY ACCESS  
TO WASTE CARTS

SAFE WORK ENVIRONMENT.  
7 KEY SAFETY FEATURES INCLUDED.

# TFPL series

# TFP series



FANUC Oi-MF CNC CONTROL



FANUC Oi-MF CNC Control



HEAVY DUTY GANTRY &  
LINEAR GUIDE RAIL SYSTEM



OMATIC TORCH CLEANER

MACHINE AVAILABLE WITH OR  
WITHOUT CUTTING TABLE.

# TFP SERIES

## FEATURES:

- Lower running cost thanks to improved consumable life with the NEW "Single Cartridge" type consumable, exclusive from KOMATSU.
- Easy operation with our completely automated gas change system.
- 2 in 1 option, Plasma & Quick Gas (flame cutting) on the same torch.
- 2 yr. Warranty on all components (mechanical, electrical, software).
- KOMATSU Nesting Software included.
  - "Quick Silver" cutting technology, enables you to cut non-ferrous materials.
  - NEW Fanuc 15" touchscreen HMI, Oi-MF Series 2MB NC Memory, 4GB HD, 64 GB SSD (External Device).
  - NEW CCD Camera allows cut position to be easily seen with new integrated camera.
  - NEW Single & Multiple part nesting option directly on the CNC.



## CONSTRUCTION

- Unitized frame

## TABLE SIZE:

- 5'x10'
- 6'x12'

## CUTTING SPEEDS:

- 0 to 200" (process and plasma power source may affect speeds)

## MAXIMUM TRAVERSE SPEEDS:

- 1000 IPM.

## TABLE TYPE:

Zoned down draft table with **KOMATSU "Push Pull"** design.

## RAILS:

- X & Y axis are Rack & Pinion + THK, heavy duty linear guide bearings.
- Z axis is a Ball Screw & THK, heavy duty linear guide bearings.

## MOTORS / GEARBOXES:

- FANUC AC Servo motors and Gearboxes on all drives (0% Backlash).

## CNC CONTROLLER:

- Fanuc 15" touchscreen HMI, Oi-MF Series
- 2MB NC Memory
- 4GB HD, 64 GB SSD (external device)

## CUTTING CAPABILITY:

- 200-amp Plasma Unit- 16 Gauge to 1.25" Mild Steel.
- 300-amp Plasma Unit- 16 Gauge to 1.5" Mild Steel.

## QUICK GAS (FLAME CUTTING):

- 2" piercing, 3" edge start from the side of the plate.

## NESTING SOFTWARE:

- Striker CAD/CAM Smart Nesting Software, Model SS-NEST

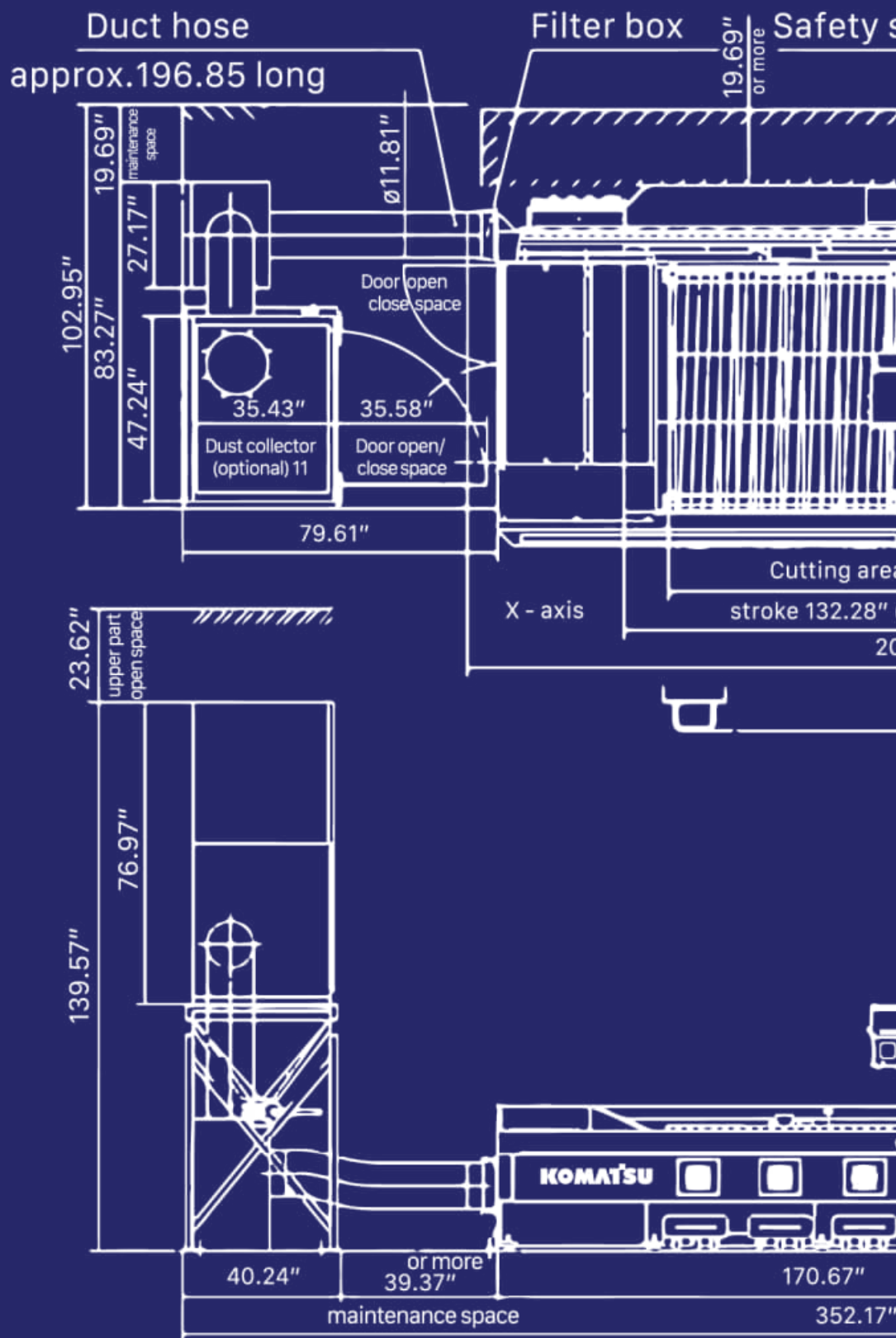
*NOTE: Original KOMATSU Nesting Software included with the equipment, as well as permanent license key.*

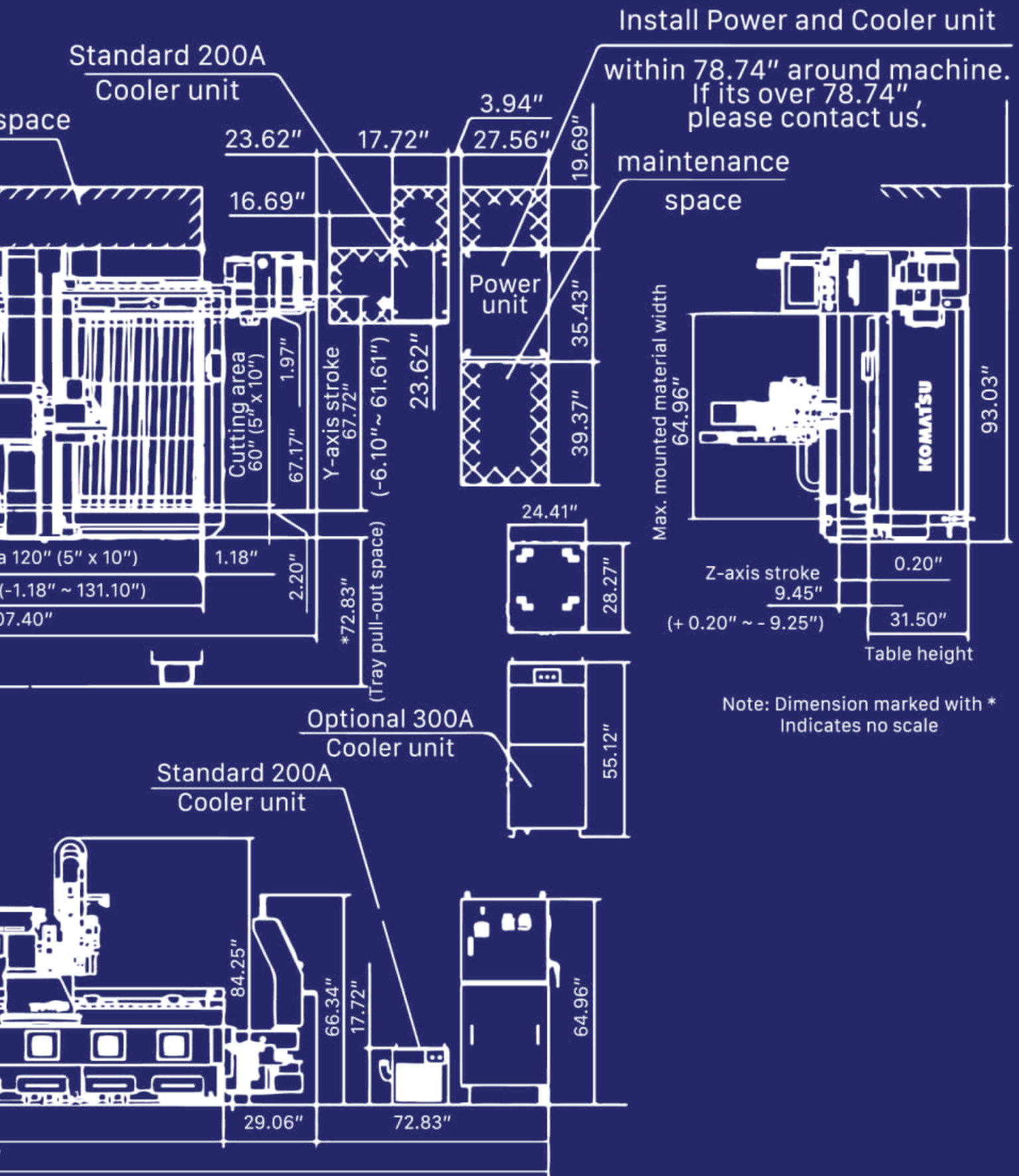
## AVAILABLE UPGRADES:

- Quick gas (flame cutting) is optional on all KOMATSU models, increasing cutting capabilities on mild steel to 2"
- Plasma unit upgrade to 300 amp. Increases your cutting capabilities to 1.5" on mild steel.

# blue print TFP

## General drawing TFP510-3





# TFPL SERIES

## FEATURES:

- NEW 100kW TWISTER torch & modular power unit.
- Safe work environment. 7 key safety features implemented, making it one of the safest machines on the market.
- Automatic torch cleaner. Cleans spatter and dust off the torch head for a cleaner cut and higher consumable life.
- Easy operation with our completely automated gas change system.
- 2 in 1 option, Plasma & Quick Gas (flame cutting) on the same torch.
- 2 yr. Warranty on all components (Mechanical, electrical, software).
- KOMATSU Nesting Software included.
- "Quick Silver" cutting technology, enables you to cut nonferrous materials.
- NEW Fanuc 15" touchscreen HMI, Oi-MF Series 2MB NC Memory, 4GB HD, 64 GB SSD (External Device)
- NEW CCD Camera allows cut position to be easily seen with new integrated camera.
- NEW Single & Multiple part nesting option directly on the CNC.

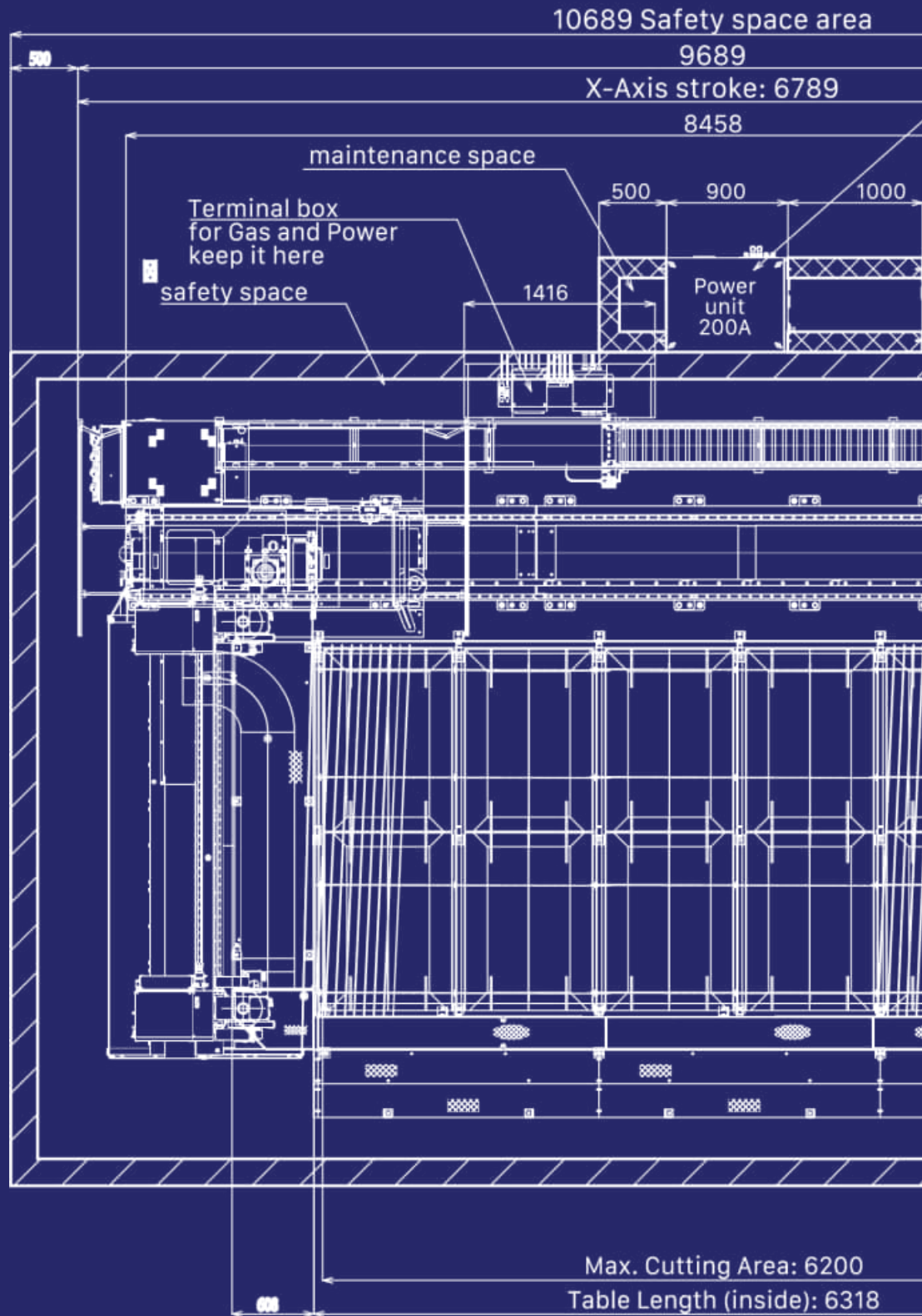




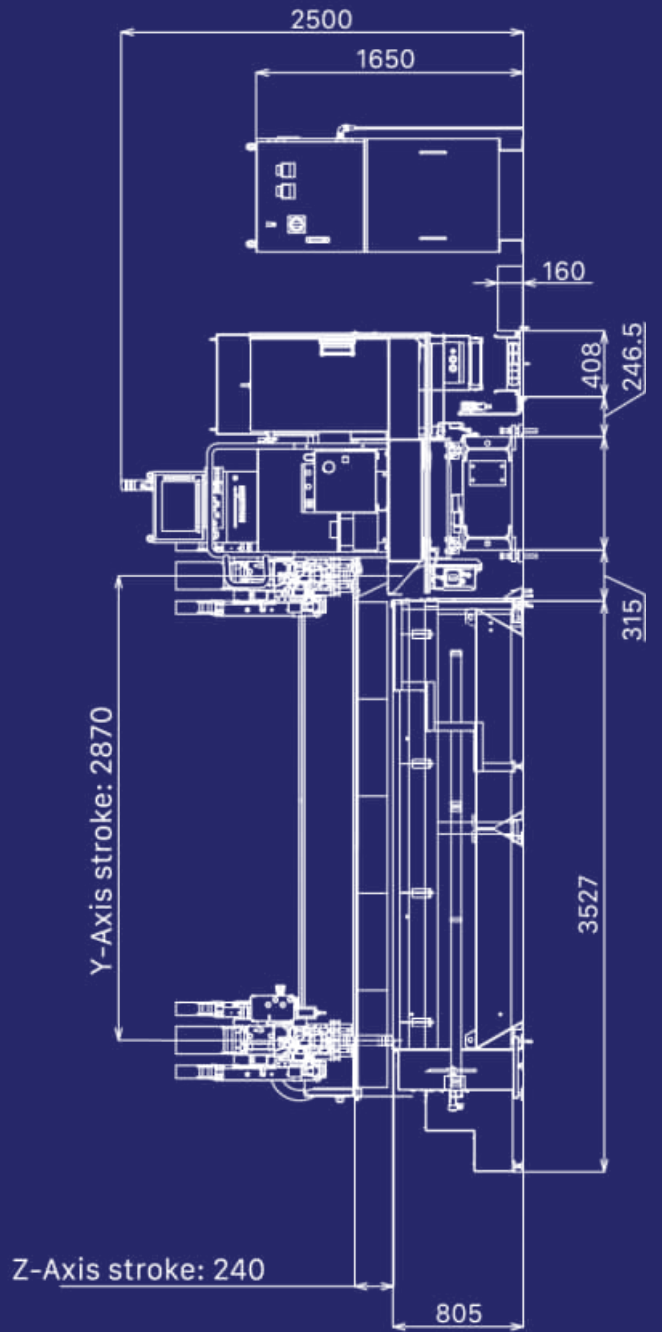
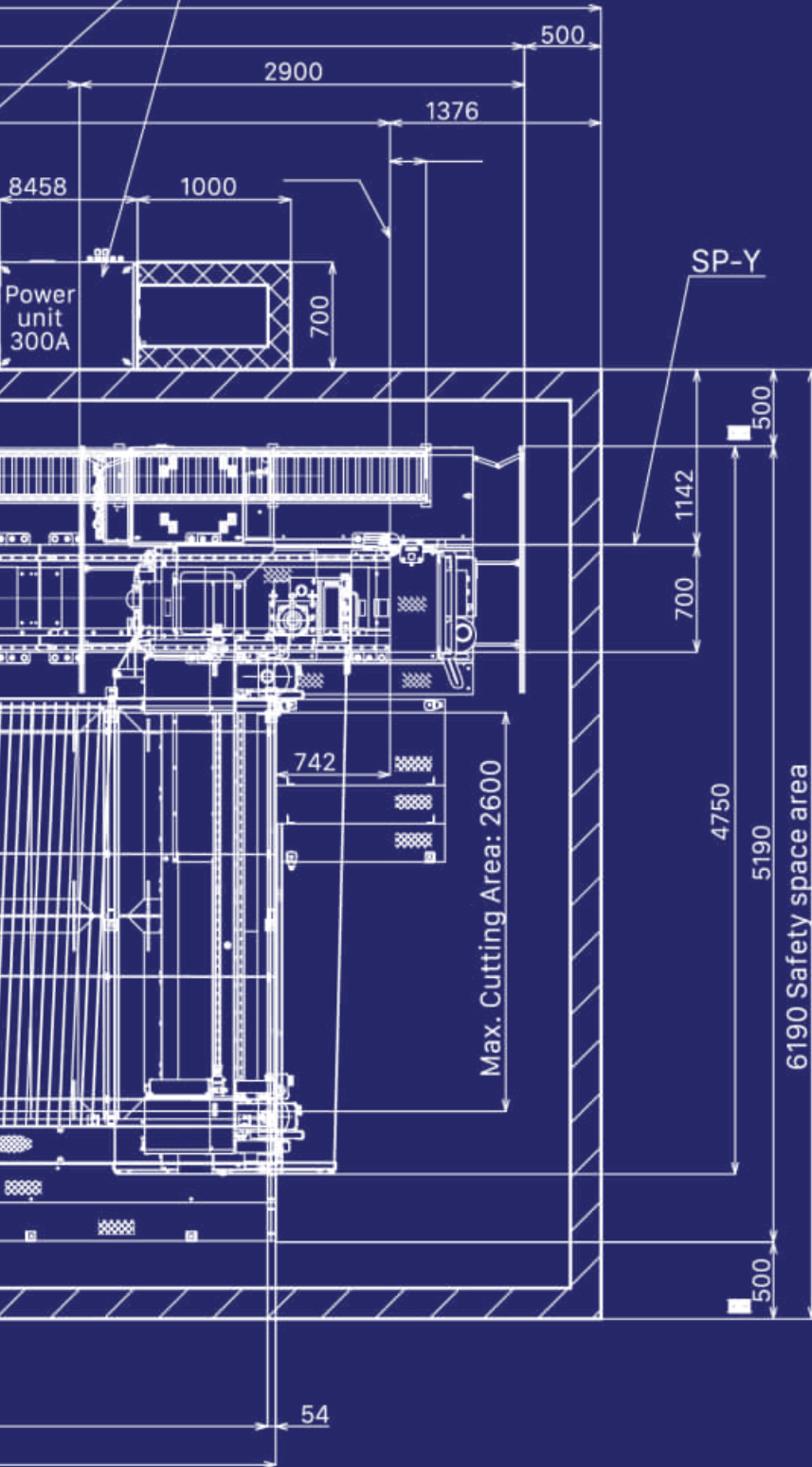
<b>CONSTRUCTION</b>
<ul style="list-style-type: none"> <li>• Modular design, bridge and rails.</li> </ul>
<b>TABLE SIZE:</b>
<ul style="list-style-type: none"> <li>• 8'x20'</li> <li>• 8'x40'</li> <li>• 10'x20'</li> <li>• 10'x40'</li> </ul>
<b>CUTTING SPEEDS:</b>
<ul style="list-style-type: none"> <li>• 0" to 200" (Process and plasma power source may affect speeds)</li> </ul>
<b>CUTTING CAPABILITY:</b>
<ul style="list-style-type: none"> <li>• 200-amp Plasma Unit- 16 Gauge to 1.25" Mild Steel.</li> <li>• 300-amp Plasma Unit- 16 Gauge to 1.5" Mild Steel.</li> <li>• 525-amp Plasma Unit- 16 Gauge to 2" Mild Steel.</li> </ul>
<b>TRAVERSE SPEEDS:</b>
<ul style="list-style-type: none"> <li>• X axis, 787 IPM.</li> <li>• Y axis, 1575 IPM.</li> <li>• Z axis, 7871 IPM.</li> </ul>
<b>TABLE TYPE:</b>
Zoned down draft table with <b>KOMATSU "Push Pull"</b> design.(Table not included)
<b>RAILS:</b>
<ul style="list-style-type: none"> <li>• X &amp; Y, RACK &amp; PINION + THC Linear guide heavy duty bearings.</li> <li>• Z axis, ball screw + THC Linear guide heavy duty bearings.</li> </ul>
<b>MOTORS / GEARBOXES:</b>
<ul style="list-style-type: none"> <li>• FANUC AC Servo motors and Gearboxes on all drives (0% Backlash).</li> </ul>
<b>CNC CONTROLLER:</b>
<ul style="list-style-type: none"> <li>• FANUC, Oi-MF CNC Control.</li> <li>• USB memory</li> <li>• FANUC transfer tool via server.</li> <li>• CF card</li> </ul>
<b>QUICK GAS (FLAME CUTTING):</b>
<ul style="list-style-type: none"> <li>• 3" piercing, 4" edge start from the side of the plate.</li> </ul>
<b>NESTING SOFTWARE:</b>
<ul style="list-style-type: none"> <li>• Striker CAD/CAM Smart Nesting Software, Model SS-NEST</li> </ul> <p><i>NOTE: Original KOMATSU Nesting Software included with the equipment, as well as permanent license key.</i></p>
<b>AVAILABLE UPGRADES:</b>
<ul style="list-style-type: none"> <li>• Quick gas (flame cutting) is optional on all KOMATSU models, increasing cutting capabilities on mild steel to 3"</li> <li>• "Power up" upgrade. Converts you 200A plasma unit in too a 300A unit. Increases your cutting capabilities to 1.5" on mild steel. <b>NOTE:</b> Power Up upgrade only applies on 200A plasma units.</li> </ul>

# blue print TFPL

## General drawing TFP5L08 - 6 20 feet



Quantity to depend on options  
Install each units within 2.5m



# TFPL SERIES

## PLASMA & OXY PROPANE CUTTING SPEEDS (MILD STEEL)

THICKNESS	NOZZLE SIZE	CUT SPEED	OUTPUT CURRENT
16Ga	.7	100-300	40
13Ga	.7	70-200	40
11Ga	.7	65-130	40
7Ga	.7	60-80	40
1/4	1.1	140-180 NA NA	NA NA
3/8	1.1 1.3	80-100 120-140 NA	NA NA
1/2	1.1 1.3 1.7	75-90 100-120 150-170	NA NA
.625	1.3 1.7	NA 80-90 115-130	NA NA
.750	1.3 1.7	NA 70-80 100-120	NA NA
.875	1.7 2.2	NA NA 75	90-100 NA
1.00	1.7 2.2 2.8 3.2	NA NA 65	70 85 100
1.250	2.2 2.8 3.2	NA NA NA	50 60 70
1.50	2.2 2.8 3.2	NA NA NA	40 50 60
2.0	3.2	NA NA NA	45
1.25 Flame cut	#5 #6	Pre heat time 2.5 min.	13 inches/ min
1.50 Flame cut	#5 #6	Pre heat time 3.5 min.	10 inches/ min
2.0 Flame cut	#5 #6	Pre heat time 4.0 min.	8 inches/ min
3.0 Flame cut	#5 #6	Pre heat time 5.0 min.	8 inches/ min

# TFP SERIES

## PLASMA & OXY PROPANE CUTTING SPEEDS (MILD STEEL)

THICKNESS	NOZZLE SIZE	CUT SPEED	OUTPUT CURRENT
16Ga	.7	100-300	40
13Ga	.7	70-200	40
11Ga	.7	65-130	40
7Ga	.7	60-80	40
.250	1.1	170	90
.312	1.1	160	90
.375	1.1	80	90
.500	1.1	65	90
.250	1.6	200	150
.375	1.6	150	150
.500	1.6	110	150
.750	1.6	70	150
.875	1.6	50	150
1.0	1.6	45	150
.625	2.2	125	300
.750	2.2	110	300
1.0	2.2	80	300
1.125	2.2	80	300
1.250	2,2	75	300
1.50	2.2	70	300
1.25 Flame cut	#5 #6	Preheat time 2.5 min.	13 inches/ min
1.50 Flame cut	#5 #6	Preheat time 3.5 min.	10 inches/ min
2.0 Flame cut	#5 #6	Preheat time 4.0 min.	8 inches/ min



## TFPL Series

# H I G H l i g h t s

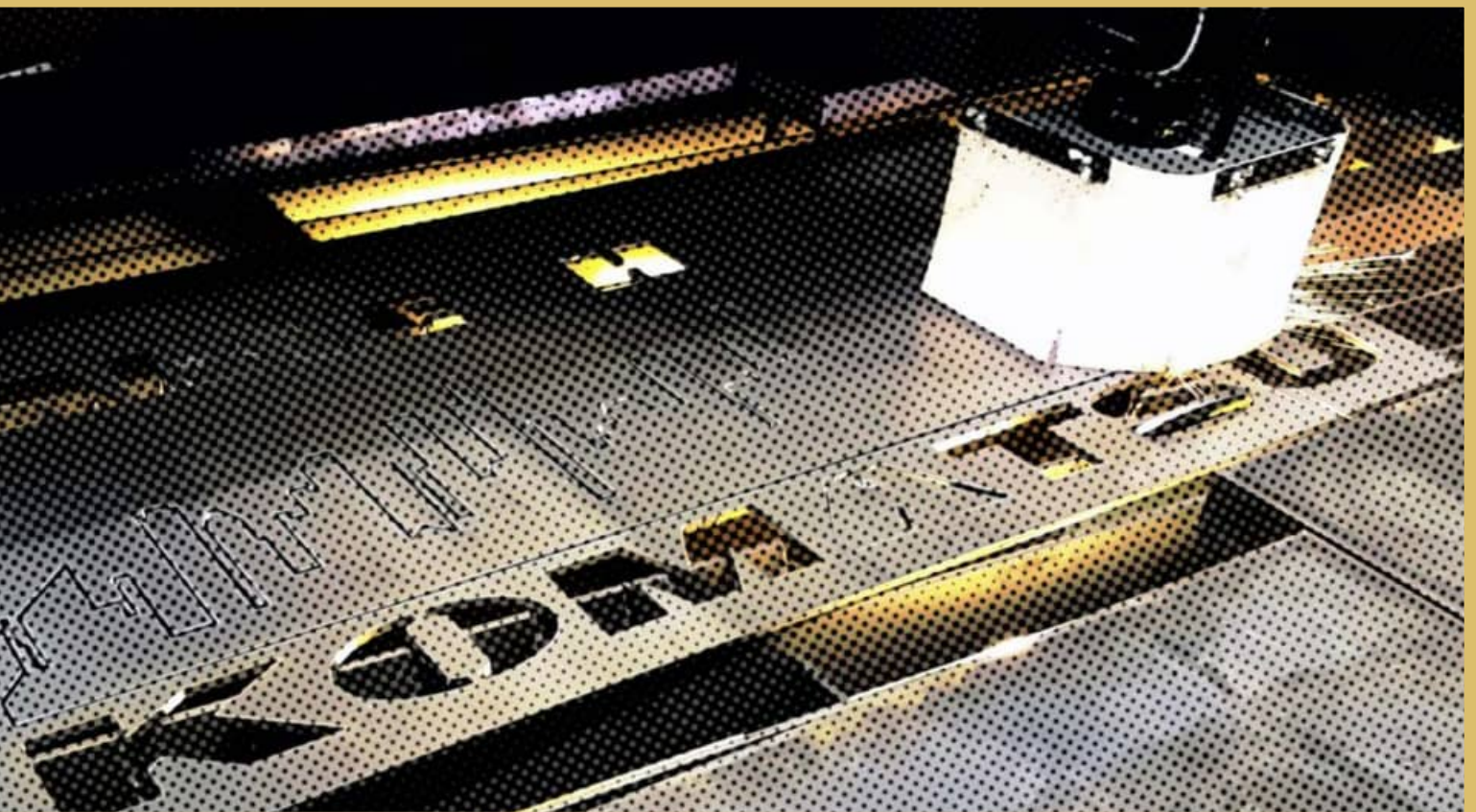


In today's fast pace metal Industry, **High Productivity** is a must. Keeping up with your plasma cutting needs requires a machine that can produce high quality, low cost, precision parts, at fast speeds.

KOMATSU has succeeded in creating a machine that can keep up with the industry's demands regardless of metal type or thickness, without having to sacrifice quality. KOMATSU'S TFP SERIES is an innovative plasma cutter that makes KOMATSU your best option.

Our TFP SERIES **Improved Cutting Quality** exceeds today's industries standards. The exclusive "TWISTER gas flow control" (Patent Pending) technology allows the disparity between upper- and lower-hole size to reduce substantially, creating a cleaner and closer tolerance on every hole. Our patented TWISTER gas technology (No.2689310, No.2997224) pushes a powerful downward spiral flow around the arc, reducing the amount of dross produced on every part

regardless of the thickness. **KOMATSU is constantly coming up with new & innovative ideas** that help reduce steps in our machines processes. Our machines make the cutting process a very smooth and **Easy Operation**, by reducing the amount of consumable parts, automatically creating optimal work conditions and fully automated cutting options that can start work with a press of a button. The TFP Series **Low Cost**



**Performance** makes *KOMATSU* a leader in the industry.

From its patent:

*“Low Flow Pattern Gas Control”*; which allows you to extend the life of your consumables, to reducing consumable use from 6 individual parts to 1. With our exclusive *“Single Cartridge”* technology, you can rest assured that you will be saving money & time every day.

## TFP Series

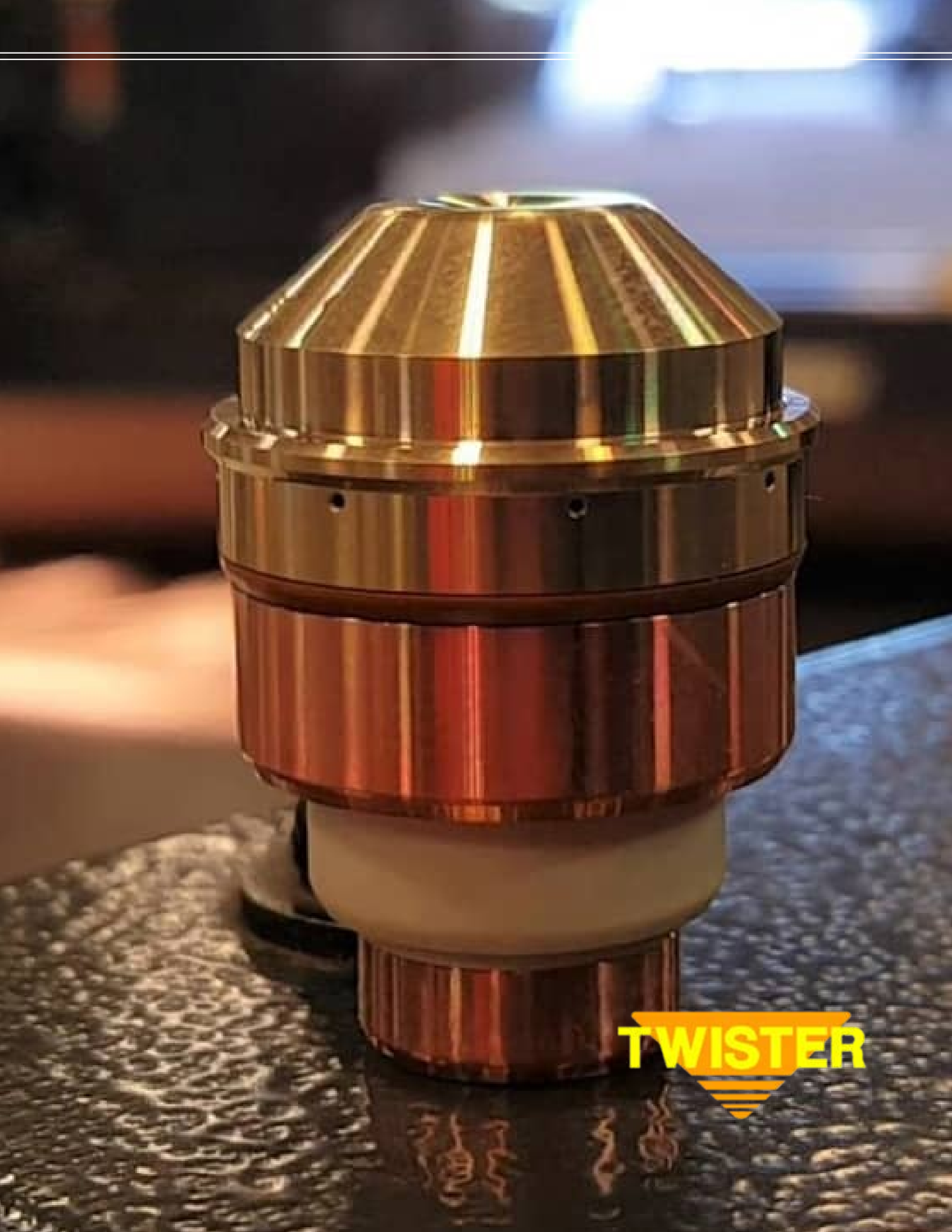


# “The **NEW** Single Cartridge Type Consumable”

Thanks to KOMATSU'S redesigned plasma torch, we have created a significant advance in plasma cutting technology.

Our unique “*Single Cartridge*” consumable has an increased cut quality and accuracy that has been obtained thanks to its exclusive nozzle design and new cutting process. The 1 piece set up reduces time and inventory from 6 individual parts to 1. It offers a 60% increase in consumable life when compared with our old style, that’s more than double the productivity, with increased performance and less operator intervention.





**TWISTER**

# NEW

# CCD CAMERA

*New HMI equipped CCD camera.*

*Easy to set the right position.*

Getting an accurate position at an awkward location on the table has always been a challenge, even with the laser pointer. With the new CCD camera option, we have improved location accuracy & positioning.



# NEW SCANNER



With the *new scanner* option operation time has been significantly reduced. The new CNC generates a printable pdf file for every job loaded that includes a barcode. *Simply scan and press start.*



# HIGH PRODUCTIVITY

**C**utting speeds have been increased dramatically thanks to our 40kW Plasma Power Unit and high speed TWISTER gas flow.

Our patent :  
(No.2689310, No.2997224),  
TWISTER Gas Flow Design  
pushes a powerful downward  
spiral flow around the arc,  
reducing the amount of dross  
produced on every part  
regardless of the thickness.  
Thanks to our new twin power  
supplies upgrade,

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**Our TWISTER  
series machines  
can be upgraded  
from 40kW  
to 60kW,  
increasing the  
cutting capacity  
and speed.**

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Example: The 30 kW plasma  
unit torch uses a 1.6 nozzle to  
cut 1" thick plate (mild steel), at  
approximately 45 ipm.

The 60 kW modular plasma  
unit torch uses a 2.2  
nozzle to cut 1" thick plate  
at approximately 75 ipm.  
Increasing speeds by 120%.  
Another great feature is the  
modular plasma unit can  
continue working if one of the  
modules goes down.  
Meaning, production never  
stops, until you are ready to  
replace the damaged module.  
Also, when cutting thick plate  
(.750" and up), our new process  
leaves very little dross which  
is easily removed, leaving 0 to  
minimal secondary operations,  
saving you time and money.



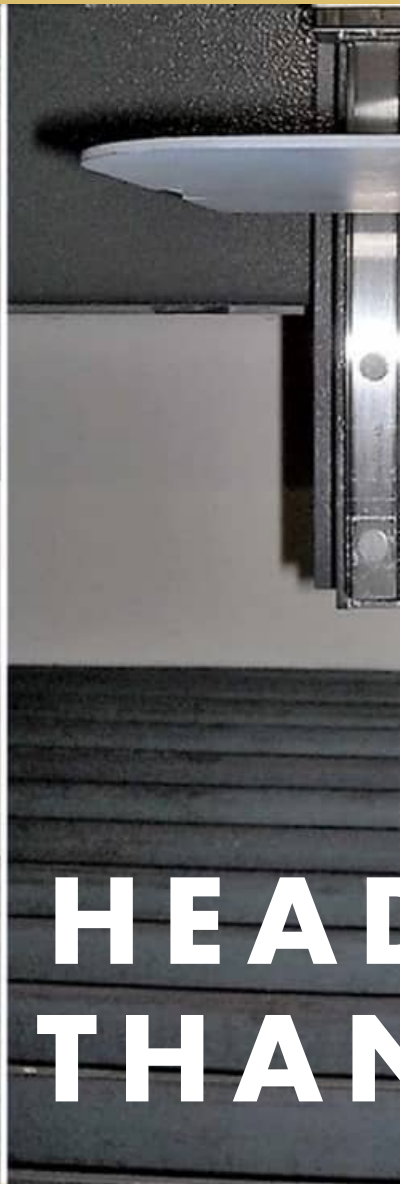
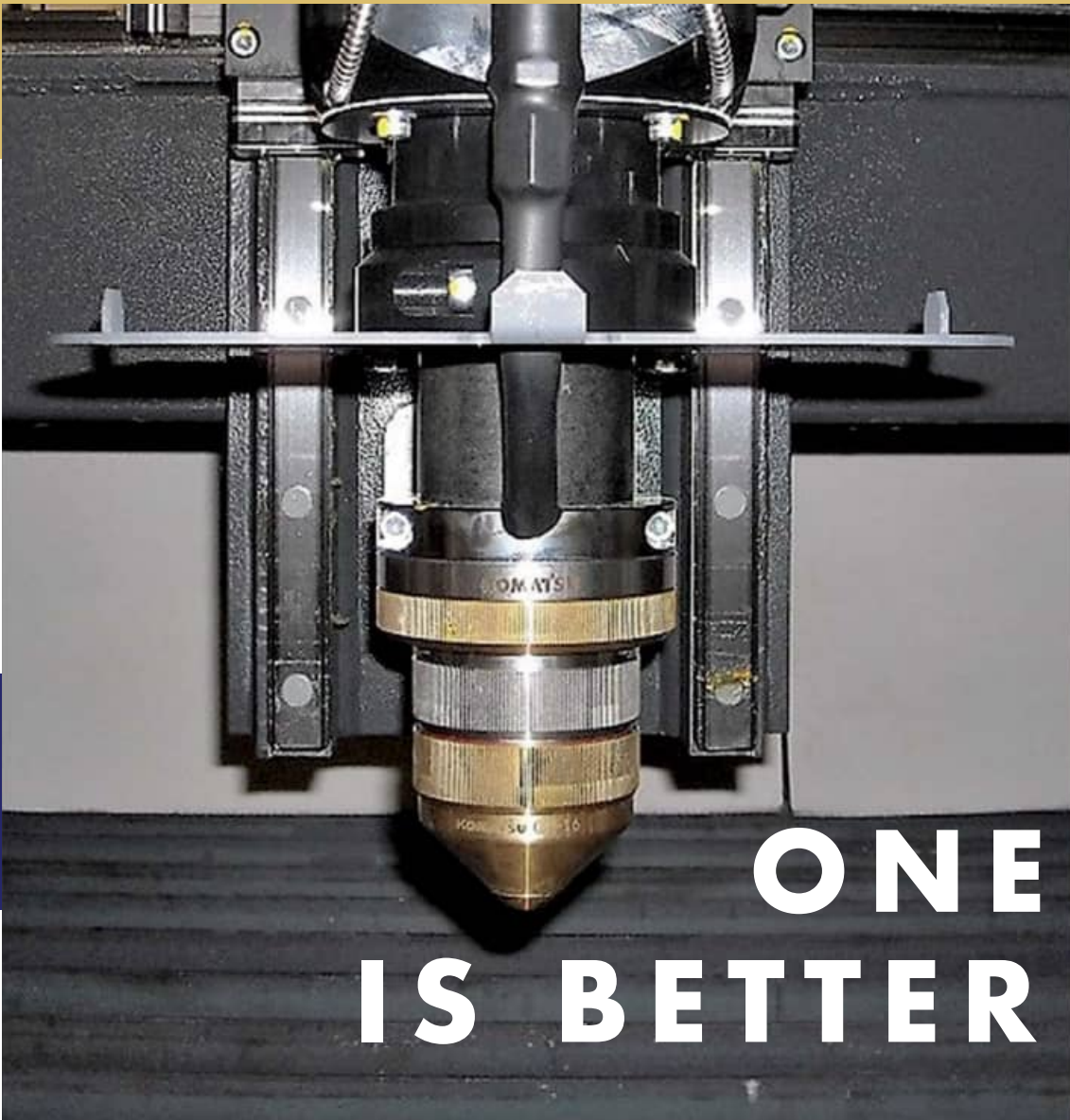
# MODULAR POWER SUPPLIES

With our new MODULAR POWER SUPPLIES upgrade, cutting capacity is increased from 200A(40kW) to 300A(60kW). Increasing capacity from 1.25" to 1.5" on mild steel.

AVAILABLE IN 200A & 300A

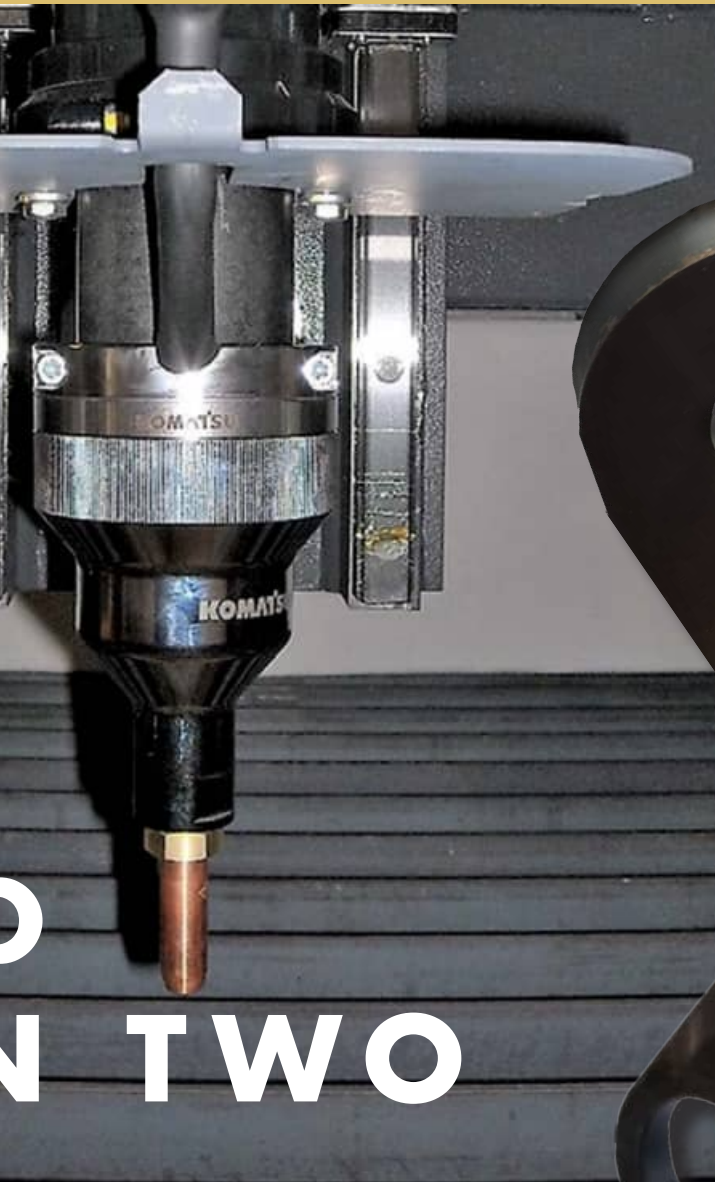


NEW MODULAR  
DESIGN

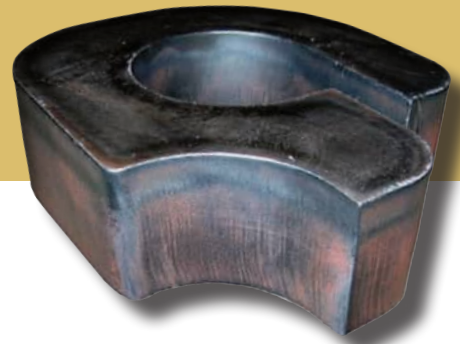


**ONE HEAD  
IS BETTER THAN**

**PLASMA +  
QUICK GAS**  
*on the same torch.*



ON TWO



**Our TFP & TFPL series machines come with an innovative torch design that allows you to go from *Plasma* to *Oxy-fuel* cutting on the same torch in a matter of minutes.**

**T**he Oxy - fuel option increases cutting capacity by up to two inches on our TFP & TFPL models. Switching between processes (PLASMA and OXY-FUEL) is accomplished simply by swapping caps on the same torch.

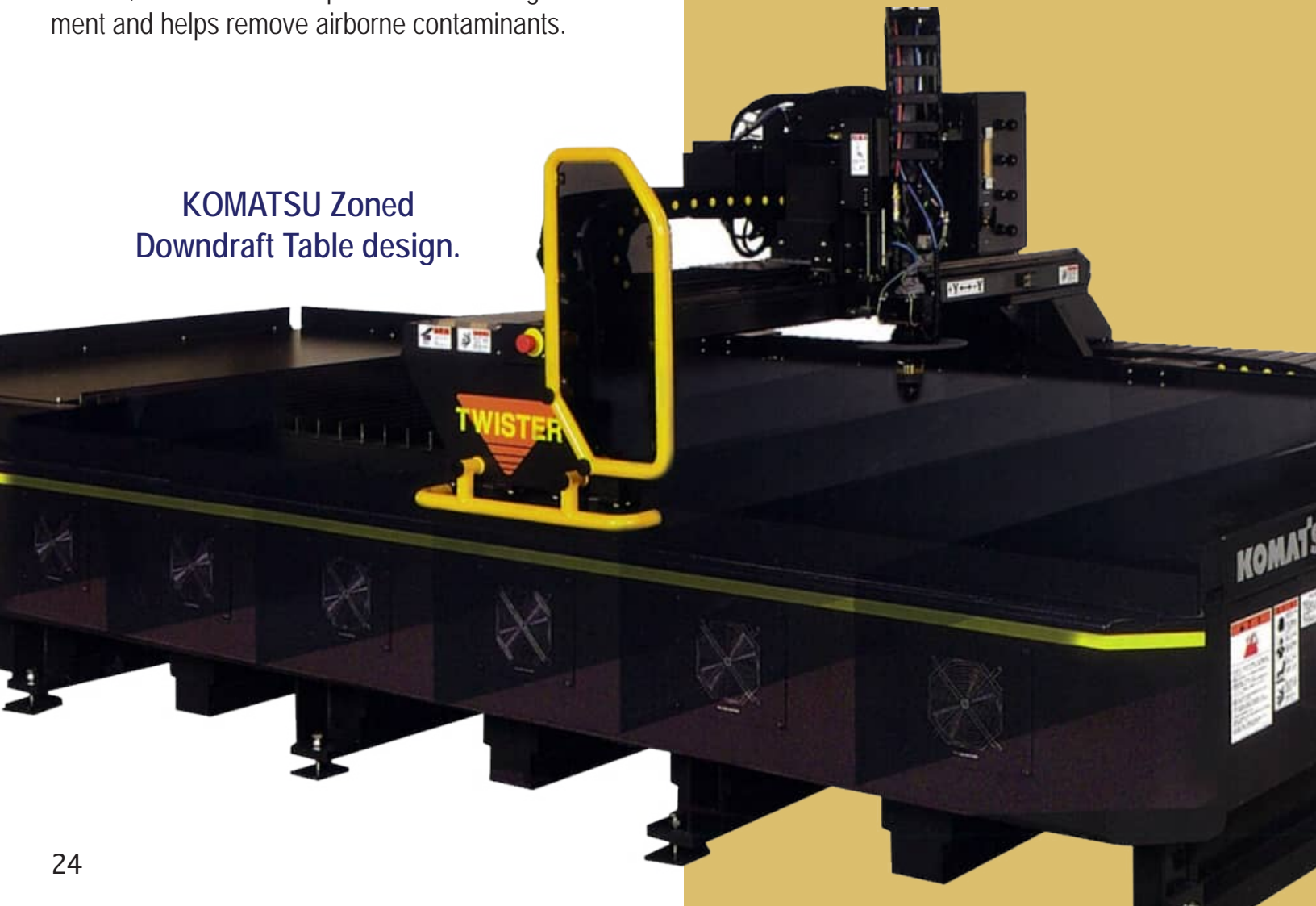
# PUSH PULL TECHNOLOGY

**O**ur exclusive KOMATSU *"Push Pull"* exhaust system (Patent Pending) greatly reduces the up-flow of fumes generated by the cutting process.

The *"Push Pull"* design is an effective fume collection system that works by creating a zoned process that greatly limits the amount of fumes that escape from the table. This achieves a stronger more complete suction, which in turn improves the working environment and helps remove airborne contaminants.



**KOMATSU Zoned  
Downdraft Table design.**





# DOWN DRAFT PUSH PULL

(US Patent No. 6665595)



KOMATSU has partnered with RoboVent to offer you the most ideal dust collector system on the market today.

## Dust Collection System for Plasma Cutting & Thermal Process



The Senturion is a powerful, flexible and modular dust collector that can be adapted to practically any application. It is the most versatile dust collector in our entire equipment lineup and thus the entire industry.

### Brief Profile:

- Airflow 3,300 cfm @ 15" of S.P.
- Plug-and-Play System
- 14D52-A15-SF MERV 15 Filter Cartridge.
- 107 °C Max Operating Temperature
- Integrated fan with low noise
- Integrated electrical control
- Programable for control at the machine/laser
- Ability for facility air recirculation
- Low operating cost
- SafeSensor Clean Air Monitor Protection

*For more information or a personalized quote,  
contact your local KOMATSU CTD representative.*



# Sheet Metal CAD/CAM & Nesting Software

## **SS-NEST TRUE SHAPE NESTING SOFTWARE**

*In today's competitive market manufacturers must operate as lean as possible. With material costs being one of the biggest expenses incurred, many organizations are turning to nesting to reduce waste. SS-Nest is automatic, true-shape nesting software that readily adapts to the most demanding sheet metal job shop and production environments.*

## **PRODUCT KEY FEATURES**

*Here are just a few of the powerful features of SS-Nest:*

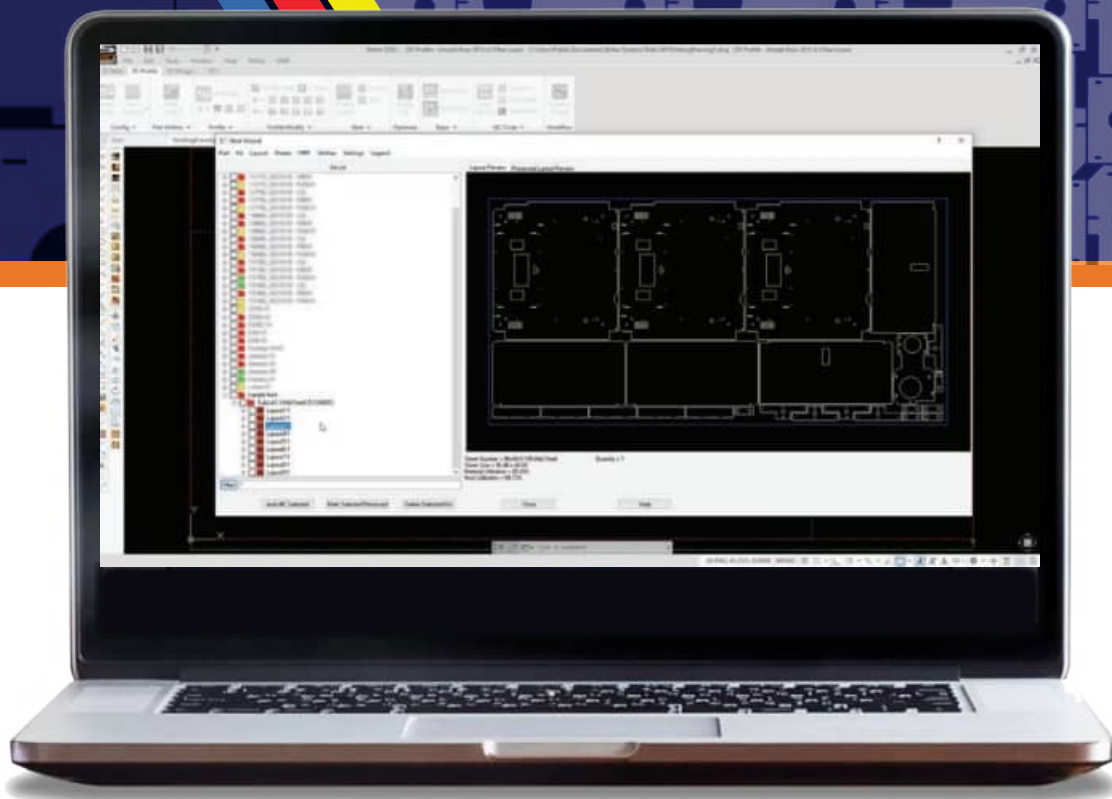
- True Shape and Rectangular Nesting – Provides automatic true shape and rectangular nesting to accommodate a variety of nesting needs.
- CNC Machine Specific Nests – Integrates with SS-Punch and SS-Profile to provide a comprehensive CAD/CAM and Nesting solution. Nests are created using specific CNC machine rules.
- Automatic Part Sorting – SS-Nest automatically sorts parts based on material type, material thickness, and assigned CNC machine.
  - Automatic Sheet Selection – Automatically selects the optimum sheet size or sizes to minimize material scrap.
  - Part In Part Nesting – Nests parts inside of larger cutouts improving material utilization.
- Advanced Options – SS-Nest offers advanced (optional) capability including MRP/ERP interface, guillotine shear nesting, and multiple torch nesting.
  - Direct Interface to SOLIDWORKS, Autodesk Inventor, and Solid Edge – PARTshare is included providing automatic extraction of part and assembly data. As soon as parts are released from the modeling software they are immediately available for nesting.
- Industry Standard File Format – The native file format of SS-Nest is the industry standard DWG file. DXF files are also automatically created. This makes SS-Nest ideal for interfacing with third-party CAD/CAM solutions.

## **PRODUCT KEY FEATURES**

SS-Nest offers numerous options to accommodate your specific nesting requirements.

Manufacturing Software Extension (MSE) – Expands the capability of SS-Nest to interface with ERP, MRP, and other production scheduling systems

Shear Extension - Extends the functionality of SS-Nest software for guillotine shearing operations.



Shear cuts are highlighted and ordered to minimize scrap and reduce process time.

Multiple Torch Extension - Extends the functionality of SS-Nest software to optimize the use of multiple torches for CNC machines with multiple torch configuration.

## **STRIKER** CAD/CAM 2020 System Requirements:

### *Supported operating systems (64bit only)*

Microsoft Windows 10 (version 1803 or higher)

Microsoft Windows 8.1 with Update KB2919355

Microsoft Windows 7 SP1 with Update KB4019990

Supported CPU type

2.50 - 2.90 GHz processor

(3.0+ GHz recommended)

Memory

8 GB of RAM (16 GB or more recommended)

Display Adapter 1

1 GB GPU with 29 GB/s Bandwidth and

DirectX 11 compliant

4 GB GPU with 106 GB/s Bandwidth and

DirectX 11 compliant (recommended)

### *Display Resolution*

Conventional: 1920 x 1080 with True Color

High Resolution & 4K Displays: Up to 3840 x 2160

supported on Windows 10 (with capable display card)

### *Hard disk space*

6GB of free hard disk space (for installation)

### *Browser*

Google Chrome

### *Pointing device*

MS-Mouse compliant device

### *Media (DVD)*

Download or installation from DVD

### *.NET Framework*

.NET Framework Version 4.7 or later

*1- Since STRIKER CAD/CAM incorporates an underlying AutoCAD OEM platform, using graphics hardware that has been certified for AutoCAD is recommended.*

# RASORNEST

INCLUDED ON ALL MACHINE MODELS.

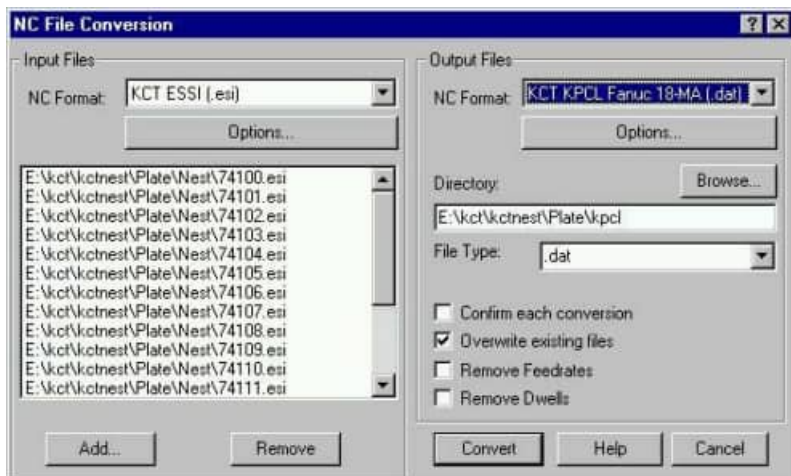
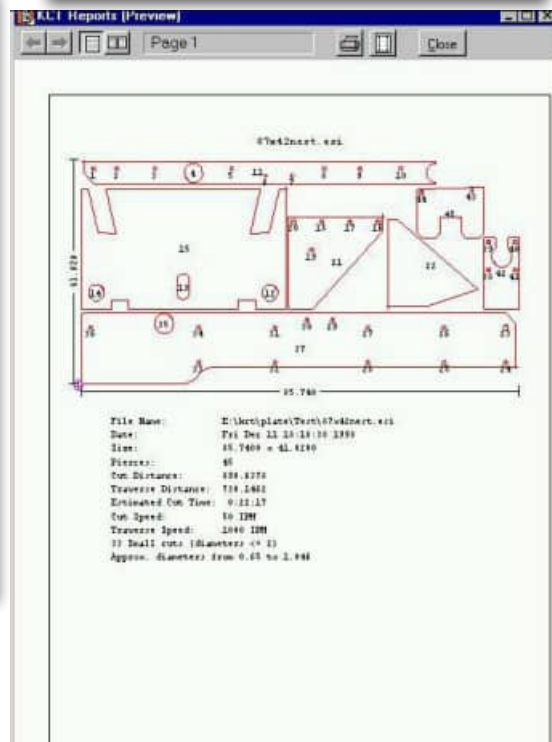
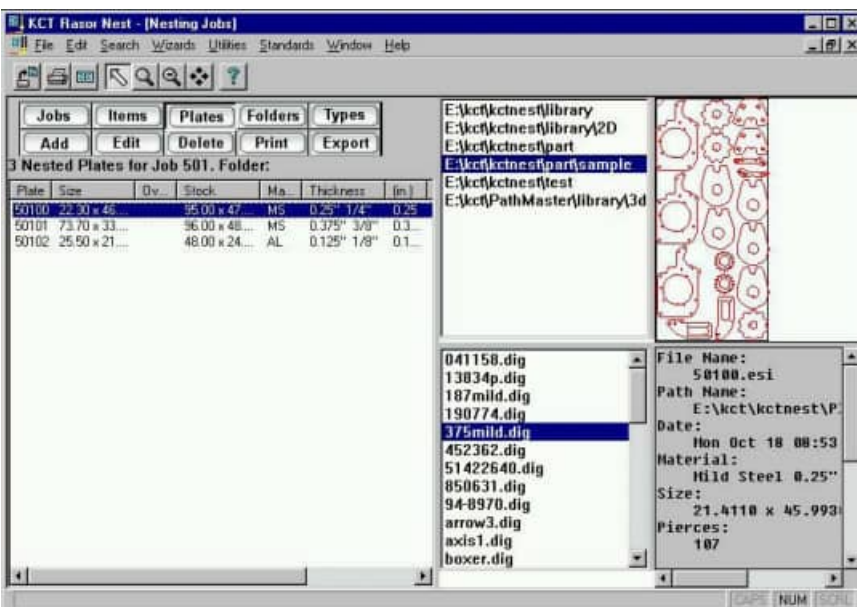
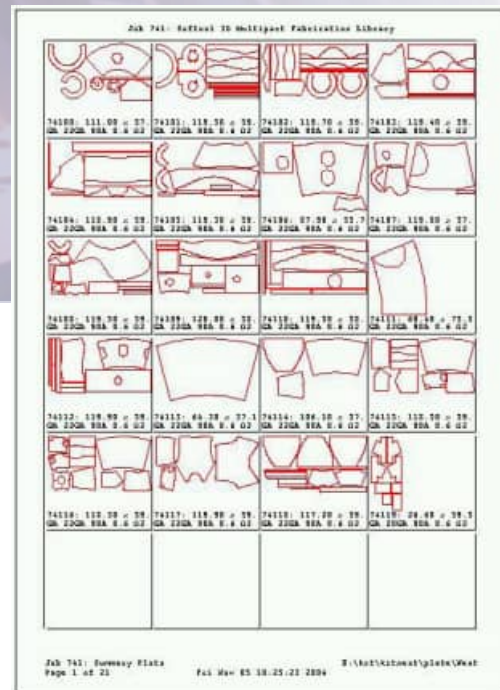
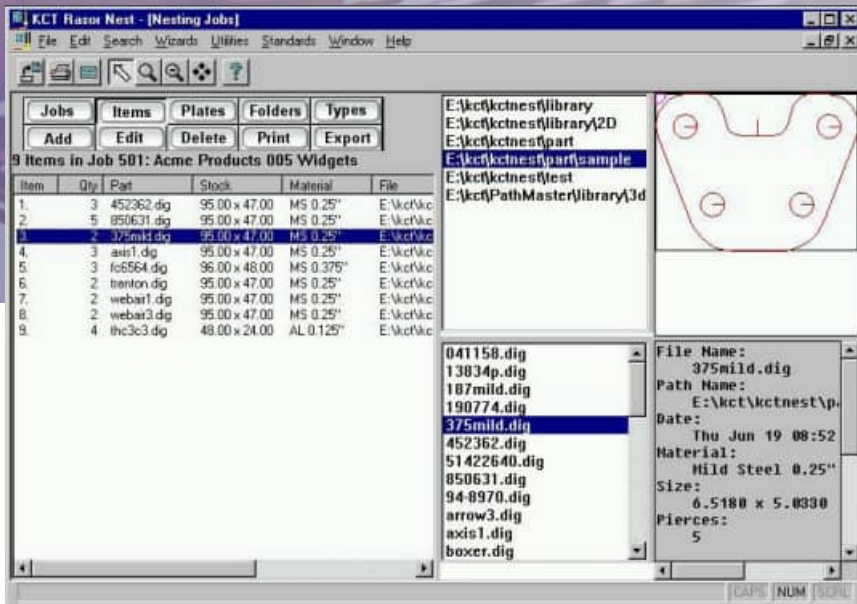


*This software package is available for Windows computers. The Rasor™ Nest Application V4.0 automatically groups NC **part files together (nest) into one or more files to more efficiently use material.** It can be used with the Rasor Rev controller files, the original Rasor NC files, PathMaster files, Twister NC Files, or KPCL NC Files.*

*Also included are a Nest Editor and an NC Converter. The Nest Editor allows manual **modification of nested plate files.** The NC Converter converts between some NC and CAD file formats and can be used as a post processor for TWISTER and Rasor products.*

## FEATURES:

- Improved nesting efficiency. More efficient use of material.
- Install on your own Windows computer.
- Combine KCT ESSI, KCT EIA, DXF, IGES, PathMaster, SofTool2D, and SofTool3D parts into one or more nested plate files that can be loaded into the Rasor controller to be cut.
- Use the Nest Editor to improve material usage by manually modifying the plate files.
- Use the NC File Converter to convert between some NC and CAD file formats.
- Automatically post process the nested plate files for the Twister TFP Series.
- Automatically post process the nested plate files for the Twister TFPL Series.
- Print a data sheet for an NC file showing the dimensions, tool path lengths, and estimated cutting time.
- Print a set of summary sheets for all NC files in a folder. The summary sheets show a small plot of the NC file, its name and overall dimensions.
- Export all of the tool path lengths, and estimated cut times for all NC part files in a folder. The file with is exported as a Comma Separated Values (.CSV) file that can be used by many spreadsheet applications.



# KOMATSU

## TECH SUPPORT & SERVICE



### **NO MATTER WHERE YOU ARE KOMATSU IS HERE FOR YOU**

■ With Komatsu service technicians using the most up-to-date product knowledge and technology, – along with Genuine Komatsu parts, you can be sure you're getting exactly the service you and your machine deserve.

■ Komatsu works closely with its customers to understand their needs, providing high quality service. Our goal is to keep your equipment up and running in the most critical times, and at the same time keeping our customers happy, becoming their partners for years to come.

■ Our Service Technicians offer both operation and technical training, complimented by extensive training materials for machine operation & maintenance.

### **AT KOMATSU,**

### **YOU CAN ACQUIRE A MAINTENANCE PROGRAM THAT FITS YOUR NEEDS , AND HAVE:**

- Scheduled maintenance performed on time and as specified in your Operation & Maintenance manual.
- Better plan and control maintenance.
- Know cost up front.
- Plan your work schedule more effectively.
- Utilize your personnel for the jobs they were hired to do.
- Take care of your equipment with high quality Komatsu parts and Komatsu trained experts.

# KOMATSU OFFERS

## 2 LOW COST MAINTENANCE PROGRAMS

Choose the one that fits you best:

- Planned Service Program - PSPBX
- Planned Service Program - PSCPX

*Say goodbye to Down time by signing up today. Call us now for more information on our KOMATSU Preventative maintenance plans.*

## PLANNED MAINTENANCE

## MAXIMIZE UP-TIME WHILE SAVING MONEY

A well-planned maintenance program can save you significant money over the life of your machine by keeping it operational and extending its life. Consider what a single failure, due to improper maintenance, can cost in terms of:

- Increased repair costs
- Loss of production
- Rental or backup machine
- Idle personnel and equipment
- Disruption of schedules

With so much at risk, today's most successful companies understand that a planned maintenance program is not a luxury, it's a necessity. That's why so many customers depend on Komatsu to keep their equipment running smooth, always at peak performance.



Komatsu Genuine Parts are manufactured to the highest quality as defined by the Komatsu Standards. They are made in-house or by carefully selected suppliers that meet our highest quality demands. Always buy KOMATSU Genuine parts to get the best performance and longest life possible on your Komatsu Plasma machine.

# KOMATSU

w w w . k o m a t s u p r e s s . c o m

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