

## **SteelPro 600 - 3D Robotic Plasma Cutting System**

Without succession for my business, I decided to scale down and sell my SP600 it works very well saves me a lot of time and error

SP600 will be available on agreement or mid-November to end-November

Serial # IEA33600P300SP600

Installed new in February 2018

About 440 Hours on July-2019

Price on request USD

### **Summary of stock include**

6 Axis Fanuc Industrial Robot.

XPR 300 Plasma System with automatic gas console.

Profile table to cut beam, channel, hss, angle and flat bar up to 65 feet long profiles.

4th face cutting and marking for beams, hss, channels, angle and flat bars.

2 Operator Control Station with SteelPro Software Series.

Consumable start up kit with spare parts kit (fuse, torch and gas lead, consumable parts).

SteelPRO instruction manual and Hypertherm instruction manual. (on pc)

3 Phase Isolation Transformer

2 Pressure Booster /Airpack

Fume Extraction with Installation Kit

Cross Feed Transfer (infeed,4 strand)

Cross Feed Transfer (outfeed,4 strand)

Profil Table 16' (infeed, 4 / outfeed, 4)

high capacity flow regulator at the machine to maintain the required

flow rated at 400 SCFH with an output pressure of 120 psi.

air dryer/filter and pressure booster at the machine itself to help

protect the Hypertherm equipment

CSA approved

Camera Hardware

### **FOB Bisco Warwick at our facility's**

### **Customer to Supply**

- Clean dry compressed air is required for the cutting machine. The required flow rate to the machine is 400 SCFH and the pressure must be a constant 120 psi.

- An Air Dryer/Filter is recommended at the air source to eliminate any moisture or oil that comes from your compressor. Oil and moisture will cause the plasma arc consumables to fail prematurely and cause the system to experience unwanted downtime.

- Electric power to supply the new equipment. 600 VAC or 480 V- 3 ph - 60 Hz. System load: 100 Amps (600V), 125 Amps (480V)

- A ground rod that meets all applicable local and national electrical codes must be installed

within 6 m (20 ft) of the machine. This is the safety (PE) or service ground and should be connected to the ground bus on the cutting machine with 6 AWG cable.

- Cutting process requires a High Pressure Oxygen cylinder with flow regulator
- The high quality marking process requires a High Pressure Argon cylinder.
- Have an operating temperature in the shop: 15 to 40 °C

<https://inovatechengineering.com/>

<https://inovatechengineering.com/smaller-robotic-beam-line/>

**Disassembly, transport, installation is extra.**

For installation by professionals contact Inovatech Engineering directly.

During the disassembly We will provide you with 2 people during the 2 to 3 days necessary.

Assistance from us is possible during installation and training with compensation for certain expenses.

SteelPro 600 is most efficient robot plasma cutting system designed for structural, marine

and general metal fabricators.

It provides the capability to cut and transform structural profiles

such as beam, angle, channel, square tube, rectangular tube, flat bars, bulb flats.

This very easy to use machine works very efficiently on 4 faces (cut and layout)

The SP600 allows the production and execution of entire project on a single machine.

Operator do not have to program the cutting paths and positions of holes and other cut outs.

Software use files from all major steel detailing programs and files.

All part drawings are automatically converted into cutting program by SteelPro software.

With SteelPro you will experience flexible and fast file imports of your 3D and 2D CAD files.

Increases productivity, with improved and consistent output quality.

Very quick "Return on Investment" due to their high output & productivity.

The Fanuc Robotics system cuts copes, holes, slots, compound miter cuts and marks beams in a few minutes compared to manually doing it in close to an hour per beam.

## System Capabilities and features

- Reads all DSTV file formats and any standard 3D model for complex shape cutting
- 4th sided cuts and marking
- Servo motor driven pinch mechanism with secondary aux. index wheel for redundancy
- Hypertherm Plasma System XPR300 with Optimix Automatic Gas Console
- Pierce capacity in mild steel of 2" (50mm) and Edge start 3.15" (80mm).
- Automatic gas console of the system adjusts all the gas settings for the plasma unit.
- Utilizes a precise detection visible laser beam sensor to quickly scan the profiles on Cell entry.
- Touch height sensing ensures accurate initial piercing height settings.
- Machine will compensate height of torch while cutting for better cut and consumable life
- Collision guard is designed to eliminate damage to the torch.
- Miter cuts compound angle.
- Slots for knife connections and bracing in HSS
- Produce stair stringers including layout for treads.
- User controlled depth of marking for galvanized job
- HSS tubing bevel weld preparation for full moment connections.
- Full length beam splitting producing T-beams.
- Part stitching, can be added when the part length or part drop is inappropriate.
- Up to 65' (19812mm) long profile cutting capability.
- Industrial control computer with Windows based operator interface, ethernet ready.
- Easy to understand HMI (Human Machine Interface), load part within 10 seconds
- Interface access to all machine input/output data for easy troubleshooting
- Important machine parameter logging for easy troubleshooting
- Conveyors designed with solid rollers for durability
- extremely space efficient plasma cutting system
- Torch Height Control system
- Plasma **MARKING** process can produce marked lines, letters, numbers and "pop marks" by making marks to identify profiles, clips and stiffener locations along the profile. Any of the consumable sets can also be used for marking.
- Nozzle Calibration Tool

## Robot and Machine Capacity

### FANUC Industrial 6 Axis M-20 series Robot

3 additional axes are used to move the robot gantry within the cell and the material through the work cell.

Robot collision guard to eliminate damage to the torch due to accidental Collisions, for extremely high-speed application, flexibility and reliability to delivers repeatable precision with unparalleled performance. SYSTEM R-30iB Controller is used in conjunction with M-20 for proven, efficient and reliable performance.

XPR300™ Plasma power unit cut quality on mild steel, stainless steel and aluminum, XPR300 increases cut speed, ease-of-use with minimal operator intervention,

### Mild steel cut capacity

O2 Pierce	45 mm (1-3/4")
Argon Assist Pierce	50 mm (2")
Maximum cutting capacity	80 mm (3.15")

**Stainless steel cut capacity**

Production pierce 38 mm (1-1/2")  
 Maximum cutting capacity 75 mm (3")

**Aluminum cut capacity**

Production pierce 38 mm (1-1/2")  
 Maximum cutting capacity 50 mm (2")

Speed (Mild steel) Book specification at highest output current 12 mm (1/2") 3937 mm/m (155 ipm)

**Material Process Capacity**

Structural profiles (Beams, Angle, HSS, Channel, Flat bar, Bulb Flat and Plate).  
 Minimum stock length: 7'6" (2286 mm) (can cut parts less than 1 inch long)  
 Maximum length: 65' (19812 mm).  
 Maximum member weight: 750 lbs /ft (1125 Kg/m).

**Profile Capacity**

Profile	Minimum	Maximum
Beam (Web Height)	4" (100mm)	44" (1016mm)
Beam (Flange Height)	4" (100mm)	17" (430mm)
HSS	2"x2" (50.8mm x 50.8mm)	24"x20" (609mm x 508mm)
Channel (Width)	3" (76mm)	36" (914mm)
Channel (Height)	1 1/4" (31.75mm)	5" (127mm)
Angle**	2"x2" (50.8mm x 50.8mm)	8"x8" (203mm x 203mm)
Flat bar**	3"x3/8" thick (76mm x 9.5mm)	13.780" (350mm)*
Bulb Flat	6.3"x0.275" (160mm X 7mm)	13.4"x0.47" (340mm x 12mm)

\* Refers to the XPR system selected for thickness data.

\*\* Straightness tolerance of the stock must be acceptable for processing of smaller size.

Robot enclosure protects workers from the flying particles that are produced during the plasma cutting process.

Robot enclosure is a limiting device that restricts the spaces to restrain the motion of the robot arm.

System includes safety doors to prevent employees from entering the robot work cell while in operation.

The system is equipped with emergency stop push buttons. Each device causes the robot to stop and cuts power to the actuators.

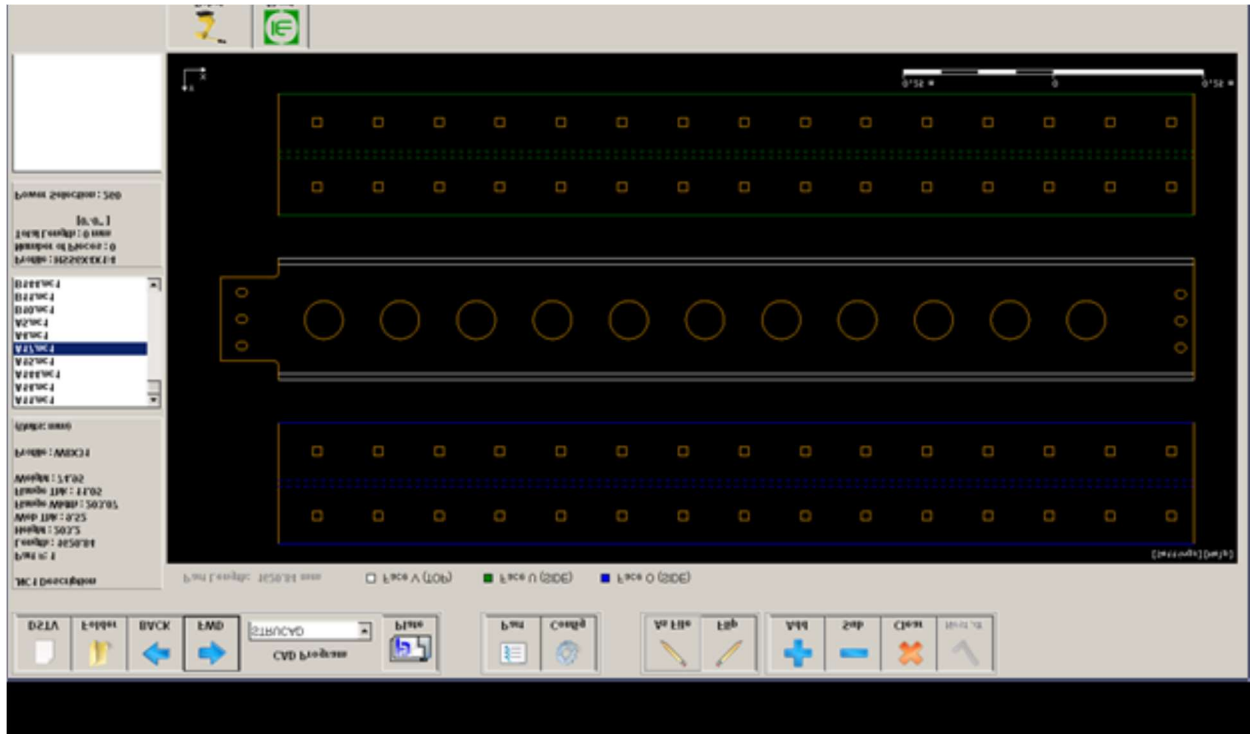
All points of access are equipped with safety-interlock switches.

The system is equipped with a safety control system.

Lockout capability will be provided for the robotics.

will label new energy sources.

SteelPRO software allows to use files from all major steel detailing programs and files produced by ProNest 3D structural detailing software :  
Tekla XSteel, SDS/2, StruCAD, Advance Steel and others DSTV standard



All part drawings are automatically converted into the cutting program by the *SteelPRO* software. With *SteelPRO* you will experience flexible and fast file imports of your 3D and 2D CAD files.

The transfer of the cutting path with several other parameters is done automatically to make the processing of profiles without operator intervention. There is no programming required from the operator.

The software includes structural profiles part nesting, operator interface (HMI), file downloading to robot controller, plasma parameter setup from cutting chart to obtain the best cut quality

### **SteelPro Builder**

This software included with the machine will let you create parts at the machine interface in the shop or in the office. Parts can then be saved for modifications at a later date.

### **InovaNester**

This software included with the machine will let you create nestings from stock length directly from a job directory at the machine interface in the shop or in the office. This program will enable the user to minimise waste and increase profit.