

PL & PL-C SERIES PLASMA

BETTER PARTS **>>>** BETTER PROFITS

USA
DURMA

PL SERIES PLASMA



PL-C



PL

STANDARD EQUIPMENT

- Independent Zoned & Partitioned Table
- Hypertherm Automatic Gas Console
- Siemens AC Digital Servo Motors
- Rack & Pinion/Linear Drive System
- + - .004 Positioning Accuracy
- 1,389 IPM Positioning
- Laser Locator (auto plate position locator)
- Remote Diagnostics via Ethernet Connection
- HPR 130xd
- Break Away Torch Head
- Stress Relieved Frame
- Marking System
- AC Digital Servomotors
- Speed Control Device
- Plasma Ignition Console

PL CAPACITIES

- 5' - 20' widths
- 10' - 125' lengths
- Custom sizes upon request

PL-C CAPACITIES

- 5' and 6' Widths
- 10' - 13' - 20' Lengths



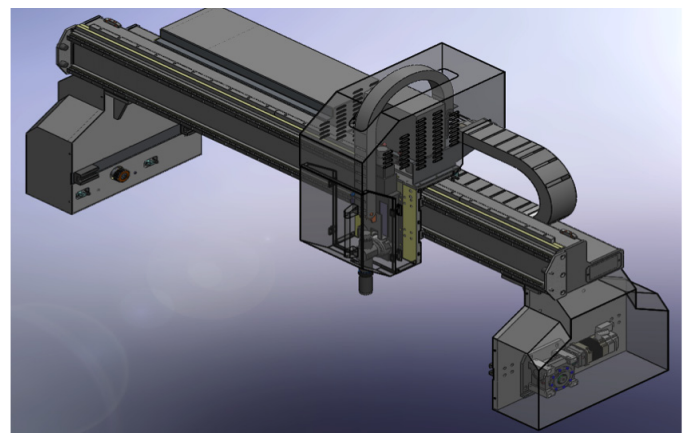
PLASMA PRODUCTION FACILITY

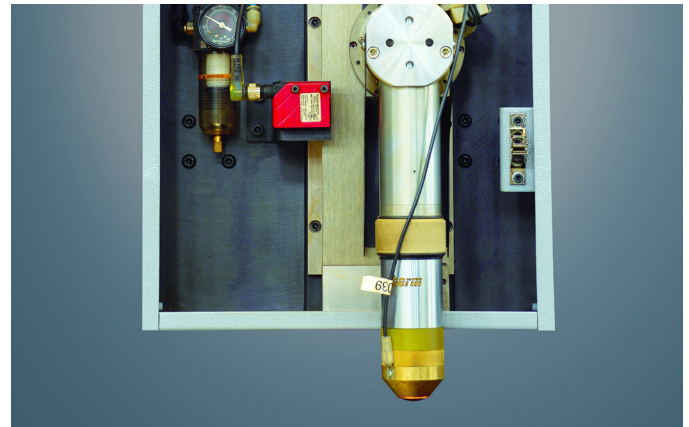
Manufactured in Durma's 1,350,000-square-foot laser factory, the PL Series is built as a true precision machine tool. These high performance plasma cutting machines are designed to cut a wide range of mild steel, stainless steel and aluminum. The PL is equipped with well known, reliable, and readily available components. High positioning speeds, accelerations and automatic torch height control provide the best in high quality efficient cutting. The PL Series 2D system is currently available in 5' x 10', or 6'6" x 13', and 6'6" x 20' models. Custom sizes are available on request. The system has dual precision rack/pinion and guiding both in the Y1, Y2 axis and the gantry bridge in the X concept housing the cutting torch. The heavy duty machine frame is welded and stress relieved. A synchronized dual side backlash free drive system with high accuracy planetary gears provides for high quality and accurate cutting. The tables include a dust evacuation system for connection to optional filter system.

GANTRY & GUIDING SYSTEM

All three axes are well guided to assure fast and accurate acceleration, deceleration and positioning. A combination of rack and pinion, linear guides, and planetary gears provide for fast acceleration and deceleration speeds as well as quick and accurate positioning.

- Siemens Dual Side Motion Control
- Oversized Linear Guides
- Rack & Pinion with Planetary Gear
- Fast Positioning





HYPERTHERM SOURCE

DURMA uses the highly-reputed HPR Hypertherm high performance source. The HPR 130 is included in the pricing and can be upgraded the HPR 260 or 400xd Series. The HPR contains circuitry to ignite a torch and heat exchanger as well as a pump to cool the torch. The power supply has a serial interface to provide communication with the CNC controller. The system also provides high quality cutting for stainless steel and aluminum. The modern torch design, which incorporates programmable torch height suitable gas parameters, increases the cut quality.

Material Type	Mild Steel	Stainless	Aluminum
XPR 130 Dross Free	5/8		
XPR 130 Piercing	1.25	0.75	0.75
XPR 130 Severance (edge start)	1.5	1	1
XPR 260 Dross Free	1.25		
XPR 260 Piercing	1.5	1.25	1.25
XPR 260 Severance	2.5	2	2
XPR 400 Dross Free	1.5		
XPR 400 Piercing	2	1.75	1.75
XPR 400 Severance	3.2	3.2	3.2

AUTOMATIC PLATE POSITION LOCATOR

The PL Series is equipped with a laser device for automatically locating the exact position of the plate on the table. This allows fast, accurate and easy location of the plate with respect to the programs and parts to be cut.

COMMAND TORCH HEIGHT CONTROL

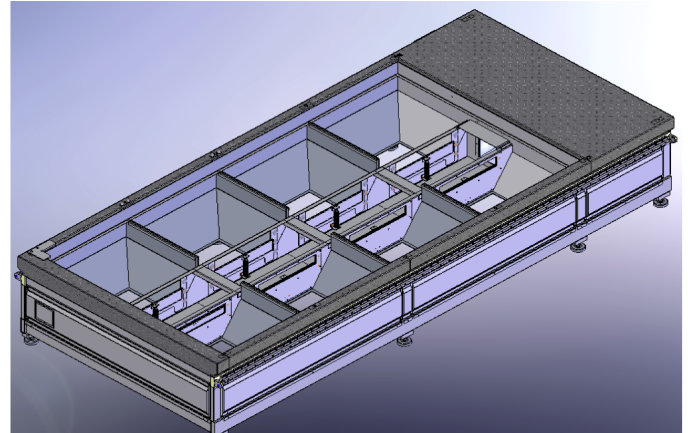
Hypertherm's X-Y Command THC is a microprocessor-based torch height control system which accurately sets the initial piercing height and controls the "torch to work" distance of the torch during cutting operations. The system uses the plasma arc voltage to control the physical stand-off (distance) between the torch and work piece during plasma arc cutting. Initial height sensing (IHS) is accomplished by ohmic contact sensing or by a limited force stall detection method. In effect the THC along with the Siemens CNC Control provide for automatic height adjustment of the cutting head according to the sheet thickness. This increases the cut quality by keeping the distance between the nozzle and the plate at the optimum position for high quality cutting. Durma also includes as standard equipment a water-cooled break away head for crash protection.

AUTOMATIC GAS CONSOLE

- Controls all of the plasma system settings from the CNC. Coupled with an intuitive CNC interface it reduces the time it takes to train new operators and set up new jobs.
- Automatically changes processes on the fly to enable rapid switching between cutting and marking.
- Automatically adjusts for variations in incoming gas pressure to produce the most consistent cutting performance.
- The auto gas console is required to enable "True Hole" technology.

ZONED & PARTITIONED TABLE

In the fume extraction process the control is automatically signaled as to which zone it is cutting over, instead of having to extract over the full area of the table at once. The system efficiency reduces capacity requirements of the fume extraction unit, reducing costs.



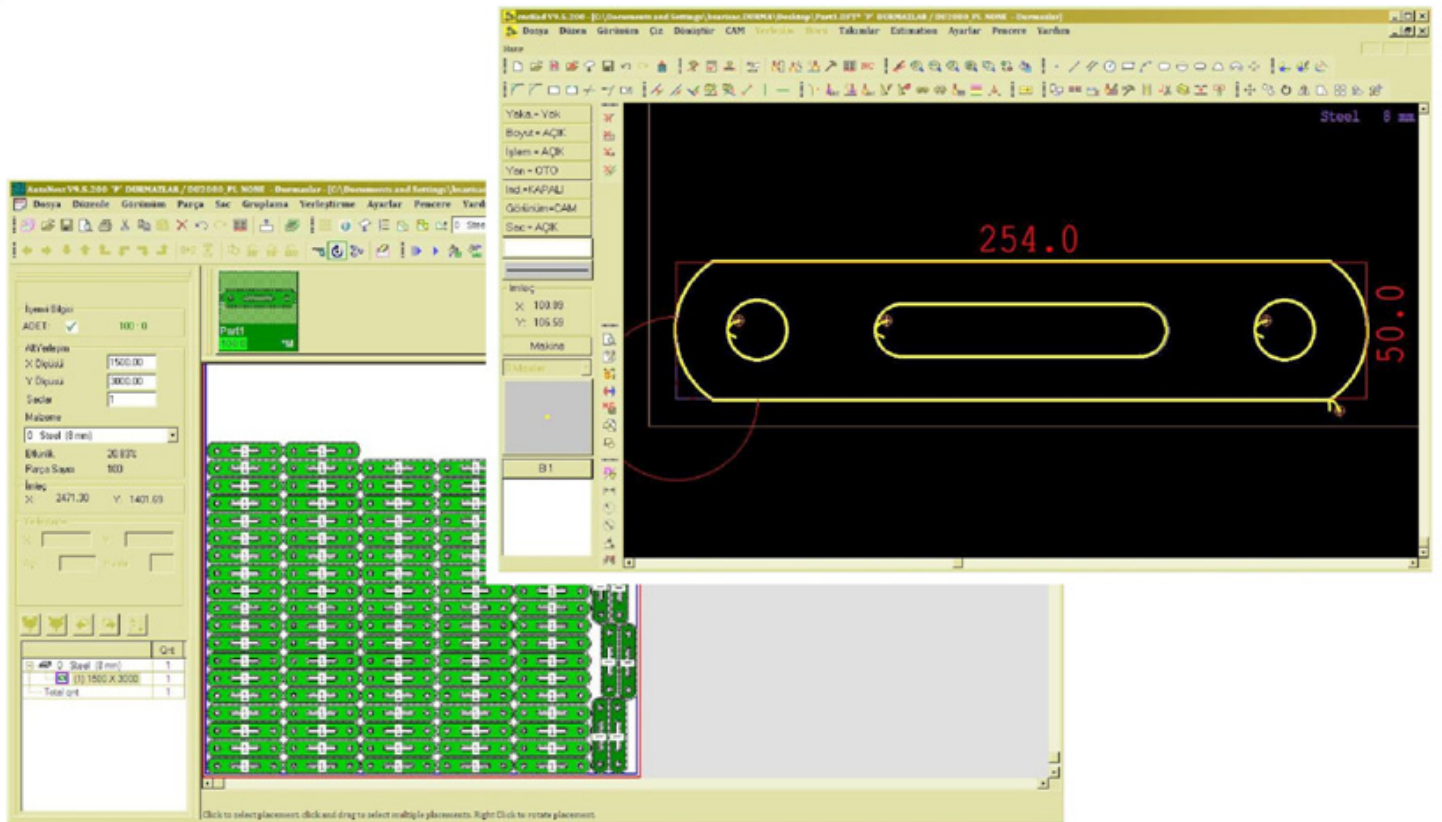
SIEMENS 840D SERIES CONTROL

The Siemens 840D control is an open architecture design allowing for the integration of all types of sheet metal processes.

Several additional features are:

- 15" color display
- 40GB replaceable hard disk and memory stick
- Ethernet port for network connection
- Remote diagnostics
- Cutting library for with parameters for cutting steel, stainless, aluminum and steel
- Direct importation of CAD drawing and files
- Machine can start from cutting interruption point after power loss
- User-friendly operator control on a 15" color display
- Easy operation using an integral keyboard and mouse
- USB stick fully supported
- Ethernet (100 Mbps) allows connections to the corporate network and ease of program loading from offices
- Remote Diagnostic, Remote Service
- 40 GB replaceable hard disk

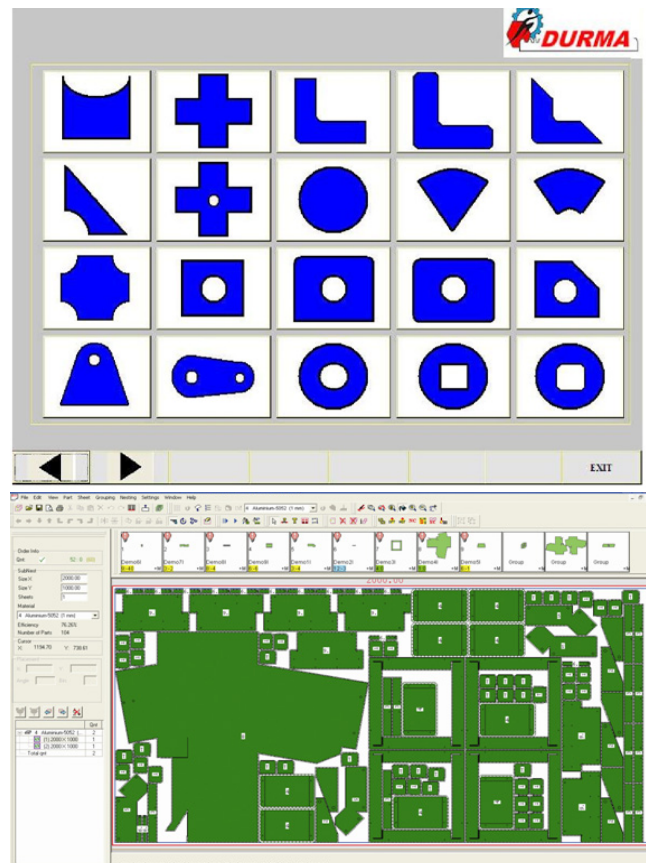


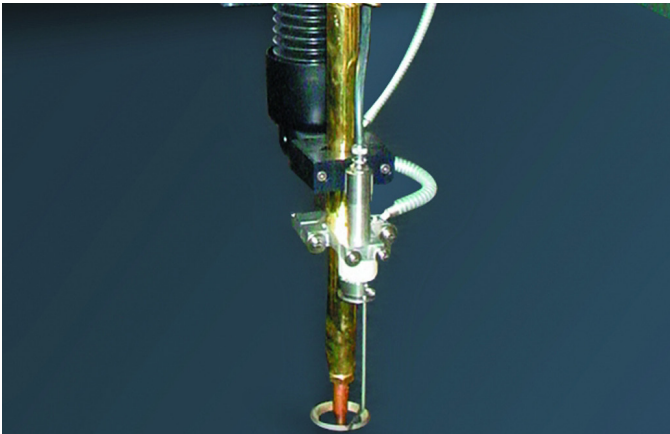


CADCAM NESTING SOFTWARE

Nesting software is available and includes; parametric macro shapes, direct CAD-DXF input, true automatic nesting and re-nesting, remnant tracking bridging and chain, to reduce multiple pierces, real time statistics, remote control. A user-friendly design can be used effectively even with inexperienced operators. Parameter adjustments, programming, and programs are easily stored and ready to be used. The memory capacity is virtually unlimited and popular material types and thicknesses, as well as cutting methods, are loaded by default. Advanced technology combines Design, Nesting, efficient NC Generation, Graphic Simulation, and detailed Data Reports. Laser Cutting Technology supports:

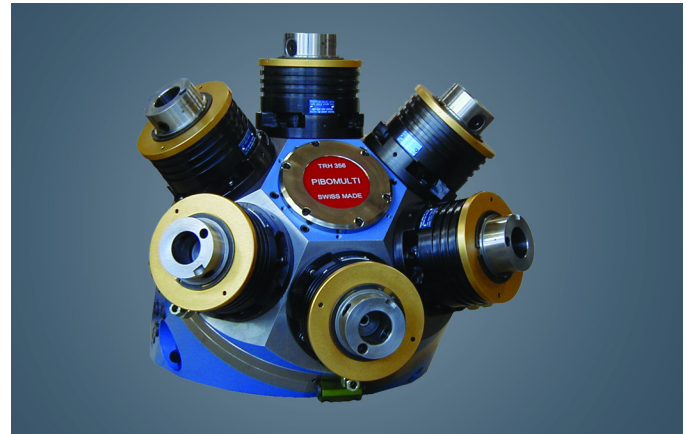
- Part Library for Standard Shapes
- Automatic Cutting with Corner Treatment
- Contour Check and Correction
- Beam Width definition and Auto Compensation
- Corner Loops and Corner Slow Down
- Open Contour Cutting
- Rapid Tool-Path Crash Avoidance
- Tool-Path Optimization with Auto Entry Point
- Marking Before Cutting options
- True-Type Font cutting and engraving
- Common Line cutting
- Automatic Cutting Direction (CW/CCW)





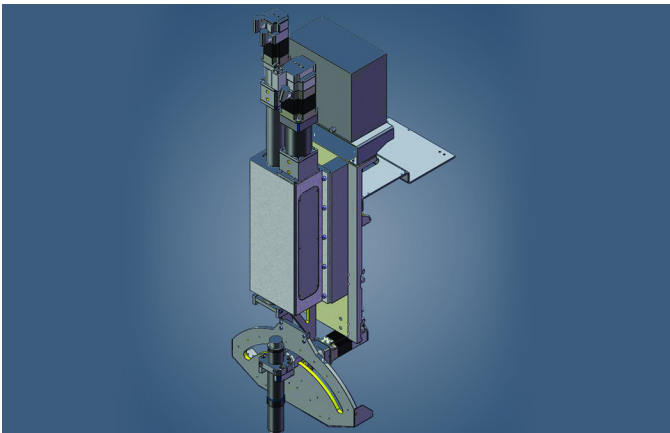
OXY FUEL CUTTING HEAD

For heavier thicker and heavier plate oxy fuel cutting heads are available.



SIX STATION MACHINING HEAD

A programmable machining head is available for drilling of up to six different diameter holes.



PLASMA BEVELING HEAD

A manual or programmable beveling head is available.

AIR DRYER

Plasma technology uses air for cutting and/or as a shield gas. In order to assure that this air is clean, dry and oil free, an air drying device is required.

3D CUTTING & ROTATOR



HYPERTHERM 260 OR 400 AMP

Material Type	Mild Steel	Stainless	Aluminum
XPR 130 Dross Free	5/8		
XPR 130 Piercing	1.25	0.75	0.75
XPR 130 Severance (edge start)	1.5	1	1
XPR 260 Dross Free	1.25		
XPR 260 Piercing	1.5	1.25	1.25
XPR 260 Severance	2.5	2	2
XPR 400 Dross Free	1.5		
XPR 400 Piercing	2	1.75	1.75
XPR 400 Severance	3.2	3.2	3.2



PLASMA AUTOMATION & LARGE FORMAT CUTTING



FUME EXTRACTION

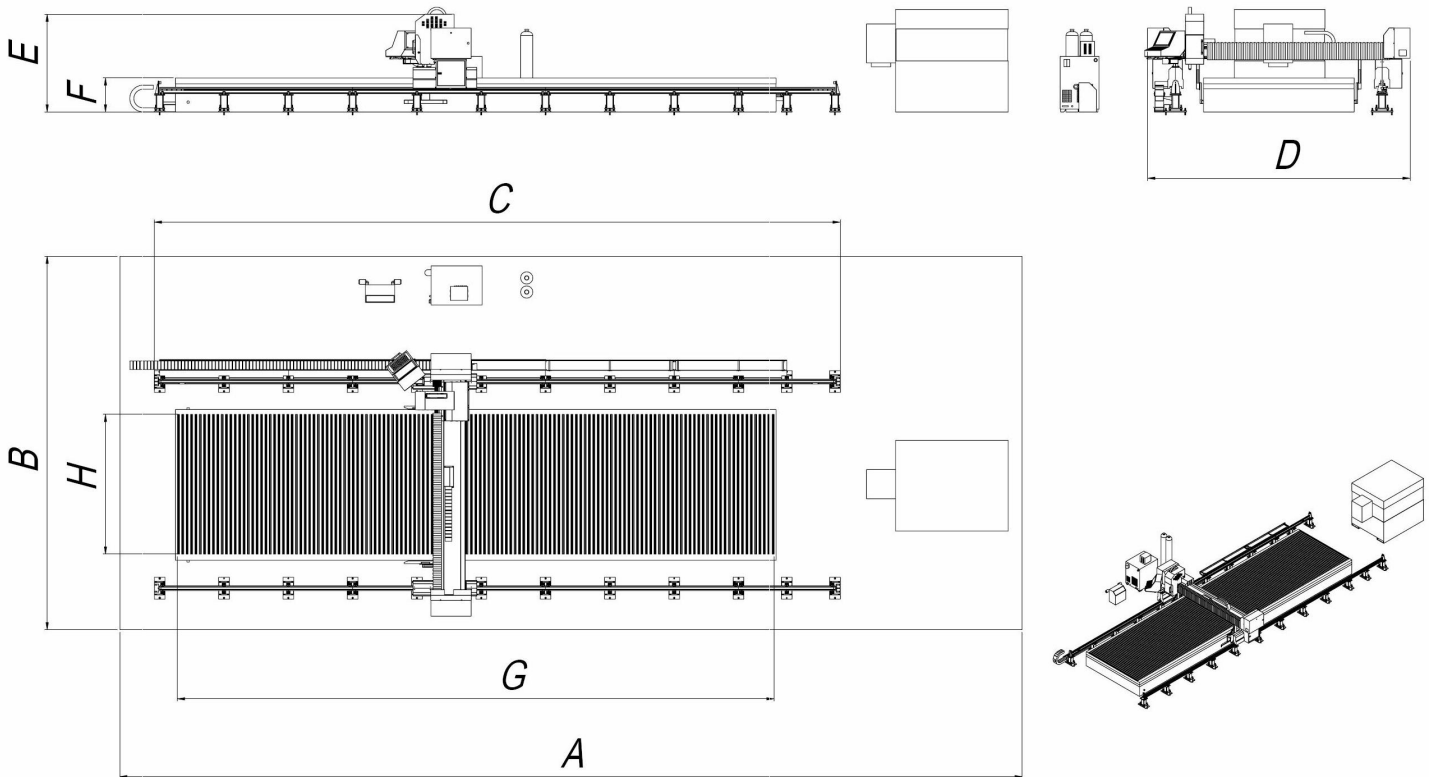
During the thermal cutting process, a large amount of harmful dust particles are created. This dust is harmful to personnel, the environment and the machine itself. Therefore it is important to use a filtration system for optimum extraction of these particles and to provide a clean air environment.

ARCGLIDE THC

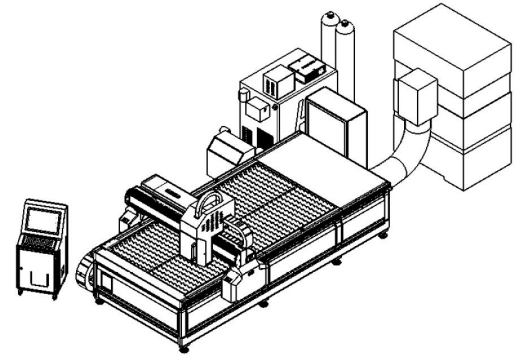
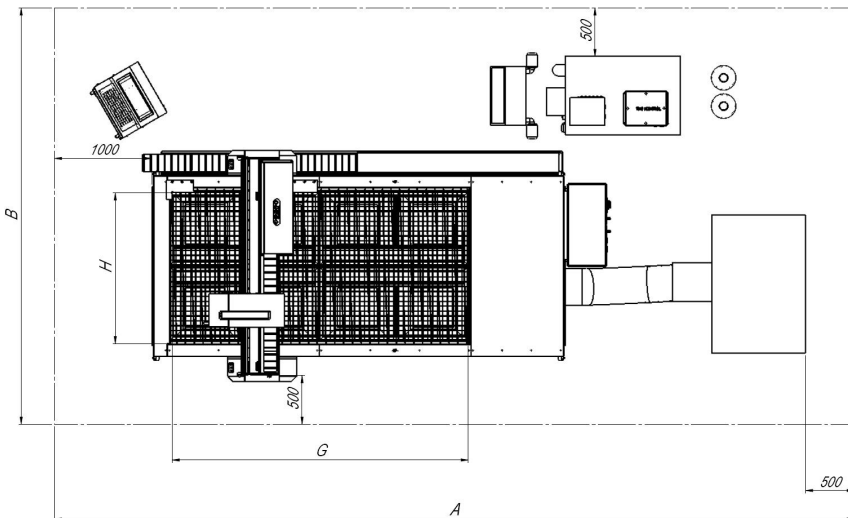
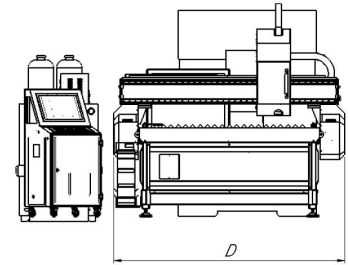
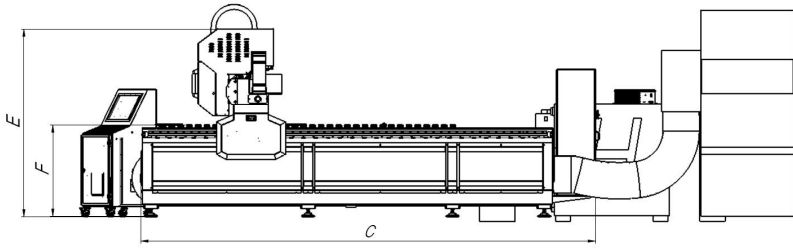
In lieu of the Command Torch Height Control.

REMOTE THC PENDANT

A remote control is available for the Command THC (torch height control) allowing greater flexibility, especially for larger format machines.

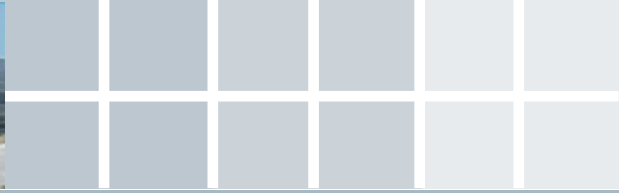


PL Series	A	B	C	D	E	F	G	H	Weight
Unit	inches	inches	inches	inches	inches	inches	inches	inches	pounds
20120	719	256	559	162	87	27 - 29	487	83	28021
2580	561	295	402	201	87	27 - 29	324	102	23612
25120	719	295	559	201	87	27 - 29	487	102	31769
25260	1270	295	1110	201	87	27 - 29	1054	102	49604
3080	561	295	402	201	87	27 - 29	324	122	25375
30120	719	295	559	201	87	27 - 29	487	122	34414
30140	797	295	638	201	87	27 - 29	568	122	38691
3580	561	335	402	241	87	27 - 29	324	142	28021
35100	640	335	480	241	87	27 - 29	409	142	33091
35120	719	335	559	241	87	27 - 29	487	142	38162
35140	797	335	638	241	87	27 - 29	568	142	43233
4080	561	335	402	241	87	27 - 29	324	165	33753
40100	640	335	480	241	87	27 - 29	409	165	40146
40120	719	335	559	241	87	27 - 29	487	165	46540
40140	797	335	638	241	87	27 - 29	568	165	52933
50180	955	374	795	241	87	27 - 29	730	205	66139
60260	1270	413	1110	280	87	27 - 29	1054	244	105822



PL-C Series	A	B	C	D	E	F	G	H	Weight
Unit	inches	inches	inches	inches	inches	inches	inches	inches	pounds
1530	322	169	183	90	75	39	120	62	11244
2040	391	192	222	109	75	36	160	81	13007
2060	460	192	301	109	75	36	240	81	17196

Specifications are approximate and subject to change without notice.



DURMA AIMS FOR CONTINUOUS DEVELOPMENT

DURMA's large investment in machining centers and production equipment, as well as its ISO-certified factories totaling 1,350,000 square feet and 1,000 employees, make one of the world's largest, efficient and most contemporary facilities in the world.

In order to offer customer solutions and further develop patents, the Durma Research and Development center opened in 2010. Fifty engineers were added over the last two years.

Designed and engineered with modern technology, Durma products are equipped with high quality and proven readily available components.

Established in 1956, Durma has vast experience in building and supplying quality products. With over 60,000 machines delivered worldwide, Durma has earned a reputation as a supplier of innovative "value oriented" solutions.

Your partner today, tomorrow, and forever.

