The Laser | 2D line
Next level laser cutting machines
Contents

01  Next level. Next to you
02  Choosing an innovation leader
03  Prima Power product range
04  Think system
06  Laser cutting. The most flexible tool ever
08  The Laser | 2D line
10  Platino Fiber
14  Laser Genius
18  Syncrono
22  Platino
26  Zaphiro
30  Maximo
34  Freedom of choice, without complications
35  Innovation converted in action
36  Software and CNC: user-friendly and efficient
38  Around-the-clock production
40  Prima Power Services: key to better productivity
Today’s volatile market demands that companies be competitive, accurate and reactive. Prima Power products continue to evolve, bringing efficiency to a whole new level. More productive machines, new automation solutions, and easy-to-use option suites are designed to meet the customer’s real needs. To provide the best Prima Power technology, our team of experts will always be available to listen, assist and advise.

Next level. Next to you.

What can be found in this brochure

- **Innovative laser cutting machines** suited for specialized and multi-purpose productions.
- **Suites of options** designed to achieve the best performances depending on the customer’s needs.
- **Wide range of automation solutions** to manage the whole production cycle.
Choosing an innovation leader

Prima Power is a leading specialist in machines and systems for sheet metal working. Our offering in this field is one of the widest and covers all applications: laser processing, punching, shearing, bending and automation. The Group employs over 1,500 people and has manufacturing sites in Italy, Finland, China and the US, as well as a worldwide commercial and after-sales presence.

Experience
Almost 40 years of experience and more than 12,000 installed machines.

Innovation
An expert R&D team committed to research the most competitive technology for our customers.

Modularity
Our machines can also be combined with our automation modules to create a complete system for the whole working process.

Green Means
Sustainability and social responsibility are characteristics of modern companies and add to competitiveness.

Next to you. Beyond slogans
Committing our efforts to meet our customers’ needs.
Designing, developing and customizing products with our customers’ success in mind.
Creating long-term and valuable collaboration supporting customers across product life cycle.
Using modern online communication technology to be with our customers, every time they need us.
Deleting distances, investing in the opening of new subsidiaries or sales and service centres to be where our customers are.
Prima Power product range

Thanks to the modularity of our products, we are able to offer manufacturing solutions ranging from single stand-alone machines up to the complete system for the management of work phases, flow of information and material handling. The integration with other technologies of sheet metal processing included in our product range, allows us to offer our customers the most complete production solutions possible.

THE BEND
Wide range of solutions for bending and automation, such as bending, paneling and bending centres.

THE COMBI
Integrated solutions for punching & shearing and for punching & laser cutting.

THE LASER
Laser machines and systems for 2D and 3D cutting, welding and drilling.

THE PUNCH
State-of-the art, versatile solutions for servo-electric punching.

THE SYSTEM
Full and modular range of solutions for the management of the whole working process.

THE SOFTWARE
Prima Power software solutions to maximize throughput.

The Prima Power range has a long tradition of continuous development, greater flexibility and operating economy through versatility, high automation level and low energy and maintenance cost. Also for a long time, the ecological aspects have been included among design criteria. Green Means® translates into technology and expertise which meet the requirements of both productivity and more sustainable manufacturing.

What does Green mean?
Green means a win-win for you and sustainable development.
Sustainability adds to manufacturing efficiency and productivity.
Your customers, your employees and the community you operate in demand it more and more.
Sustainability & social responsibility are characteristics of a modern company and add to competitiveness.
They make a difference between the best and the rest. And you make better sheet metal components at lower cost.
FROM STAND-ALONE MACHINE TO THE SYSTEM FOR THE WHOLE WORKING PROCESS.
Thanks to the experience with different sheet metal processing technologies, Prima Power is the right choice. Even for the most complex productions, we can offer the most complete solutions possible: integrating top-quality machines leads to top-quality production system.
Laser cutting is an amazingly flexible technology. A wide variety of materials and thicknesses can be processed, with no limit to the shape you can obtain. Its programming is so fast, that any change can be applied in any phase of your production with virtually no extra costs and time. Its precision is the highest, the quality of the cut edge is excellent and there is no part distortion.

The best application for laser technology is the processing of metallic materials (steel, stainless steel, aluminium, copper and brass) with a thickness from 0.8 mm to 25 mm. Our laser product portfolio is extensive and includes 2D and 3D machines for a broad range of applications in cutting, welding and drilling.

Prima Power laser sources are based on both CO₂ and fiber technology and are developed and produced in-house or are the result of a strict collaboration with the most important manufacturers in the field: in this way we can give our customers the most suitable solution for each application.
**CO₂ LASER**

CO₂ laser cutting is the most established technology in the field: the knowledge is widespread, the initial investment lower and it is suitable for any kind of production needs. Prima Power produces a Fast Axial Flow CO₂ laser that use a gas mixture to produce beam characteristics that allow a wide range of industrial material processing applications. The laser beam generated by the source is lead to the cutting head through high-reflective mirrors. The main benefit of this technology is that it can be applied with high quality results to the whole spectrum of processable thicknesses (0.8 to 25 mm). This generator adheres to the highest standards for quality of surface roughness and perpendicularity tolerance.

**FIBER LASER**

In fiber lasers the active gain medium is an optical fiber doped with rare-earth elements such as erbium, ytterbium, thulium, etc. The laser light is transferred via a passive fiber cable to the cutting head: this means no laser gases (like He, CO₂, N₂) and low maintenance requirements. It’s particularly productive for medium-low thickness material and it processes also non-ferrous materials with high quality results. Another major advantage of this technology is its overall efficiency, in terms of energy savings (less energy consumption compared with CO₂ lasers) and cutting speed.

---

**Innovation has a name: Prima Power**

We have always believed in this tool, and we were one of the first manufacturers to develop its earliest industrial applications almost forty years ago.

Our company has grown with the laser and has contributed to its evolution into an innovative but reliable and productive tool, utilized in almost any industrial sector.

An example of Prima Power products excellence is the Olympic torch used in 2012 London games which was manufactured with Prima Power machines by one of our customers.
The Laser | 2D line

**Platino Fiber**
Tailored on your application. Profitable for a production mix including all materials and thicknesses.

- Fiber 2-6 kW
- 1.5x3 m
- Tube cutting

**Laser Genius**
The talent to simplify your work and improve your profit. Highly profitable for a production mix more oriented towards thin-medium gauges.

- Fiber 2-6 kW
- 1.5x3 m
- Linear drive

**Syncrono**
The laser speed. The fastest machine for thin sheets only.

- Fiber 2 kW
- 1.5x3 m
- Linear drive on local axes

**Platino**
The laser for everyone. Flexibility and high quality in all thicknesses.

- CO₂ 2.5-5 kW
- 1.5x3 m
- Tube cutting

**Zaphiro**
The laser quality. High productivity, superior quality and maximum accuracy in all thicknesses.

- CO₂ 4-5 kW
- 1.5x3 m
- Linear drive

**Maximo**
The long and short of laser cutting. Suitable for all sheet formats, up to 36 m.

- CO₂ 4.4-5 kW
- 3x9-36 m

**MULTI-PURPOSE OR SPECIALIZED MACHINES**
Prima Power 2D laser product range covers every production need, ranging from ultra-fast cutting machines for utmost productivity to highly flexible solutions that can be profitably used for any production.
Thicknesses and materials.
The best solutions for your needs

**Materials Note**
- Best application area is represented in full colour

**Fast and efficient also for non-ferrous materials:** particularly productive for medium-low thickness.

**CO₂ High-quality results to the whole spectrum of processable thicknesses (0.8 to 25 mm).**
Platino 2.0 Fiber

PROFITABLE FOR A PRODUCTION MIX INCLUDING ALL MATERIALS AND THICKNESSES

It represents the evolution of the fully-tested Platino platform by combining its reliability and flexibility with the state-of-the-art efficient laser technology. Platino 2.0 Fiber is equipped with the high-brilliance fiber laser. It is available with laser powers ranging from 2 to 6 kW, to meet customers’ specific needs.

FLEXIBLE
Suitable for a wide range of materials, including highly-reflective metals and high thickness mild steel. Ready for round, square and rectangular tubes.

PROFITABLE
Low operating costs thanks to energy efficiency and reduced maintenance.

USER FRIENDLY
Single focusing lens system with automatic nozzle changer. Easy to use programming software and Prima Power operator interface.

RELIABLE
Fully-tested and reliable thanks to the 20 years of experience with the Platino platform.

MODULAR
Suitable for any production need, offering a full range of solutions for automation.
Platino Fiber features an optional rotary axis for the cutting of tubes of all materials.

Platino Fiber features reduce cycle time on all thicknesses and materials.

The machine is suitable for 24/7 production.

User-friendly Prima Power CNC.

Range of processable materials and thicknesses.
MACHINE FEATURES

Unique machine architecture based on a synthetic granite frame and an aluminium cast cantilever structure grants an unparalleled accessibility to the working area.

Lean Cabin design provides minimum footprint and easy installation. Open Cabin with fully opening sliding doors and fiber-safe windows grants excellent visibility of the cutting process and accessibility for the operator.

Cutting head designed by Prima Power: single lens strategy, protective glass, Piercing and Cutting Monitoring. Technological packages, functions and options meets all customer’s demands.

Numerical Control, Operator interface and programming software are user-friendly and smart tools, developed and manufactured by Prima Power.

Thanks to a wide range of automation solutions, Platino Fiber grows with your company: from a stand-alone machine to a 24/7 operating FMS.
Technical specifications

**Platino 2.0**

**WORKING AREA (**)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>3,000 mm</td>
</tr>
<tr>
<td>Y</td>
<td>1,500 mm</td>
</tr>
<tr>
<td>Z</td>
<td>150 mm</td>
</tr>
</tbody>
</table>

**MAXIMUM SPEED**

- Single axis: X,Y = 100 m/min
- Trajectory: X,Y = 140 m/min

**ACCURACY (**)**

- According to VDI/DGQ 3441 standards
- Length of measuring: complete stroke

Positioning accuracy (Pa): 0.03 mm
Repeatability (Ps): 0.03 mm

**TUBE CUTTING (OPTIONAL)**

CNC-controlled rotary axis for the cutting of round and rectangular tubes

**MAXIMUM OVERALL DIMENSIONS**

(automatic pallet and protection cabin included, water chiller, fumes extractor and photocells excluded)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>10,500 mm</td>
</tr>
<tr>
<td>Width</td>
<td>3,400 mm</td>
</tr>
<tr>
<td>Height</td>
<td>2,200 mm</td>
</tr>
</tbody>
</table>

**WEIGHT (BASIC MACHINE)**

10,000 kg

**STANDARD FIBER LASER POWER**

2,000 W - 6,000 W

(****) Dimensions in inches: X = 120, Y = 60
(****) The accuracy of the piece depends on its type, size and pre-treatment, and the conditions of application.
Laser Genius

HIGHLY PROFITABLE FOR A PRODUCTION MIX MORE ORIENTED TOWARDS THIN-MEDIUM GAUGES
It combines the flexibility of the Platino with increased productivity and efficiency, obtained through the innovative use of materials such as the carbon fiber carriage and the synthetic granite frame. The efficiency is further enhanced by our high-dynamic linear drive which contributes increasing its productivity up to +15%, compared with conventional drive systems.

PRODUCTIVE
High dynamic linear drive increases productivity on thin sheets (+15%) compared with conventional drive systems.

ACCURATE
Precise and repeatable in cutting and laser head positioning thanks to the effective CNC management of linear drive.

PROFITABLE
Low operating costs thanks to high energy efficiency and reduced maintenance.

MODULAR
Suitable for any production need, offering a full range of solutions for automation.

USER FRIENDLY
Single focusing lens system with automatic nozzle changer. Easy to use programming software and Prima Power operator interface.
System for efficient sorting and stacking of cut parts.

Laser Genius fiber laser head is suitable also for high reflective materials.

Prima Power CNC and proprietary process sensors for utmost ease of use.

Carbon fiber carriage providing high performance and accuracy.
MACHINE FEATURES

Unique machine architecture based on a **synthetic granite frame** and **carbon fiber** cantilever structure provide fiber laser technology and linear drive at their best.

Cutting head designed by Prima Power: **single lens strategy**, protective glass, Piercing and Cutting Monitoring. Technological packages, functions and options meet all customers’ demands.

**High energy efficiency fiber laser**, low maintenance required and no laser gases reduce the operating cost.

Numerical Control, Operator interface and programming software, developed and manufactured by Prima Power, are **user-friendly and smart tools**.

**Lean Cabin** design provides minimum footprint and easy installation. **Open Cabin** with fully opening sliding doors grants excellent accessibility for the operator.
# Technical specifications

## LaserGenius

<table>
<thead>
<tr>
<th></th>
<th>LGf 1530</th>
<th>LGf 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Working Area (</strong>)**</td>
<td>X = 3,000 mm</td>
<td>X = 4,000 mm</td>
</tr>
<tr>
<td></td>
<td>Y = 1,500 mm</td>
<td>Y = 2,000 mm</td>
</tr>
<tr>
<td></td>
<td>Z = 150 mm</td>
<td>Z = 150 mm</td>
</tr>
</tbody>
</table>

## Maximum Speed

- Single axis
- Trajectory

|                      | X,Y = 170 m/min | X,Y = 240 m/min |

## Accuracy (***)

- X, Y, Z

- According to VDI/DGQ 3441 standards
- Length of measuring: complete stroke

|                      | Positioning accuracy (Pa): 0.03 mm |
|                      | Repeatability (Ps): 0.03 mm |

## Maximum Overall Dimensions

(automatic pallet and protection cabin included, water chiller, fumes extractor and photocells excluded)

<table>
<thead>
<tr>
<th></th>
<th>LGf 1530</th>
<th>LGf 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>10,500 mm</td>
<td>12,600 mm</td>
</tr>
<tr>
<td>Width</td>
<td>3,400 mm</td>
<td>4,080 mm</td>
</tr>
<tr>
<td>Height</td>
<td>2,200 mm</td>
<td>2,200 mm</td>
</tr>
</tbody>
</table>

## Weight (Basic Machine)

<table>
<thead>
<tr>
<th></th>
<th>LGf 1530</th>
<th>LGf 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9,000 kg</td>
<td>11,000 kg</td>
</tr>
</tbody>
</table>

## Standard Fiber Laser Power

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,000 W</td>
<td>6,000 W</td>
</tr>
</tbody>
</table>

(***): The accuracy of the piece depends on its type, size and pre-treatment, and the conditions of application.

(*) Dimensions in inches: 1530 X = 120, Y = 60 | 2040 X = 160, Y = 80

Valid for LGf 1530
Syncrono

**THE FASTEST MACHINE FOR THIN SHEETS ONLY**

Syncrono is the top performance 2D laser machine by Prima Power for high-speed cutting of thin sheet metal. With its unique and revolutionary design and its 6 g acceleration, Syncrono is the best machine on the market to produce the dynamics necessary for fiber laser technology on thin gauge sheets. The energy efficiency of the Syncrono (small masses execute faster movements) is further enhanced with fiber laser. This technology allows a dramatic reduction of the electric consumption, through the use of lower power and the high efficiency and simplicity of the source.

**FAST**

High dynamics and redundant axes allow high productivity on complex profiles cutting on thin materials.

**EFFICIENT**

Low energy consumption and environmental footprint.

**ACCURATE**

Precise and repeatable in cutting and laser head positioning.

**MODULAR**

Suitable for any production need, offering a full range of solutions for automation.

**USER FRIENDLY**

Easy to use programming software and Prima Power operator interface. Fast setup and reduced downtime.
Syncrono features 6 g of acceleration allowing 1,000 holes/minute.

Main and local axes are perfectly synchronized during cutting.

Syncrono is designed for thin, complex parts.

Night Train FMS® lights-out production.
MACHINE FEATURES

Two machines in one: **two additional local axes synchronized with the main machine axes** to obtain the best cycle times and cutting quality.

Focusing head with unique and revolutionary parallel kinematics design allows **6 g acceleration during cutting**.

A **wide and modular range of solutions for the automation** of the sheet metal handling available for all production types and sizes.

Protection cabin with roof, fiber-safe windows and fully opening sliding doors: **total safety**, visibility of the work area and accessibility for the operator.

Laser head equipped with Optical Precision Control for **quick, simple and perfect nozzle alignment**.
## Technical specifications

### LSf 1530

### Working Area (*)
- \( X = 3,000 \text{ mm} \)
- \( Y = 1,500 \text{ mm} \)
- \( Z = 115 \text{ mm} \)

### Strokes of Local Axes
- \( U,V = \pm 50 \text{ mm} \)

### Maximum Speed
- **Main Axes**
  - \( X,Y = 100 \text{ m/min} \)
  - \( X,Y = 140 \text{ m/min} \)
- **Local Axes**
  - \( U,V = 100 \text{ m/min} \)
  - \( X,Y = 200 \text{ m/min} \)

### Acceleration
- **Main Axes**
  - \( X,Y = 0.8 \text{ g (single axis)} \)
- **Local Axes**
  - \( U,V = 6 \text{ g (single axis)} \)

### Accuracy (***)
- Positioning accuracy \((\text{Pa})\)
  - \( 0.03 \text{ mm} \)
- Repeatability \((\text{Ps})\)
  - \( 0.03 \text{ mm} \)

- according to VDI/DGQ 3441 standards
- length of measuring: complete stroke

### Maximum Overall Dimensions
- (automatic pallet and protection cabin included, water chiller, fumes extractor and photocells excluded)
- Length: \( 10,500 \text{ mm} \)
- Width: \( 4,500 \text{ mm} \)
- Height: \( 2,500 \text{ mm} \)

### Weight (Basic Machine)
- \( 12,000 \text{ kg} \)

### Standard Fiber Laser Power
- \( 2,000 \text{ W} \)

---

(*) Dimensions in inches: \( X = 120, \ Y = 60 \)

(***) The accuracy of the piece depends on its type, size and pre-treatment, and the conditions of application.
Platino is the general purpose 2D laser cutting machine by Prima Power utilized around the globe across a multitude of applications, manufacturing demands, and budgets.

Available in two sizes (1530 and 2040) and with laser powers ranging from 2,500 W to 5,000 W, Platino is suitable for every application. Change over to tube processing can be achieved with zero setup time.

Thanks to its wide range of automation modules, Platino is the right solution for both small batches and large-scale production.

**FLEXIBILITY AND HIGH QUALITY IN ALL THICKNESSES**

Platino is suitable for a wide range of materials and thicknesses. Ready for round, square and rectangular tubes.

**ACCESSIBLE**

Excellent visibility and maximum accessibility for the operator.

**RELIABLE**

Fully tested and reliable platform thanks to the 20 years of experience with the Platino platform.

**USER FRIENDLY**

Easy to use programming software and Prima Power operator interface. Fast setup and reduced downtime.

**COST-EFFECTIVE**

Excellent price/performance ratio.
Platino with automatic material handling and storing for intensive production.

Platino easily switches to tube cutting.

Platino equipped with LST for part sorting and stacking.

Synthetic granite frame provides top mechanical rigidity and stability.

Platino cuts any thicknesses with efficiency and quality.
MACHINE FEATURES

Unique machine architecture based on a synthetic granite frame and an aluminium cast cantilever structure grants an unparalleled accessibility to the working area.

Cutting head designed by Prima Power: Piercing and Cutting Monitoring, additional functions and options meet all customers’ demands.

Open Cabin with fully-opening sliding doors and large windows grants excellent visibility of the cutting process and accessibility for the operator.

Numerical Control, Operator interface and programming software are user-friendly and smart tools, developed and manufactured by Prima Power.

A wide range of automation solutions allows Platino to grow with your company: from a stand-alone machine to a 24/7 operating FMS.
## Technical specifications

**platino®**

<table>
<thead>
<tr>
<th>LP 1530</th>
<th>LP 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WORKING AREA (*)</strong></td>
<td></td>
</tr>
<tr>
<td>X = 3,000 mm</td>
<td>X = 4,000 mm</td>
</tr>
<tr>
<td>Y = 1,500 mm</td>
<td>Y = 2,000 mm</td>
</tr>
<tr>
<td>Z = 150 mm</td>
<td>Z = 150 mm</td>
</tr>
<tr>
<td><strong>MAXIMUM SPEED</strong></td>
<td></td>
</tr>
<tr>
<td>Single axis</td>
<td></td>
</tr>
<tr>
<td>X,Y = 100 m/min</td>
<td>X,Y = 80 m/min</td>
</tr>
<tr>
<td>Trajectory</td>
<td>X,Y = 140 m/min</td>
</tr>
<tr>
<td></td>
<td>X,Y = 110 m/min</td>
</tr>
<tr>
<td><strong>ACCURACY (</strong>)**</td>
<td></td>
</tr>
<tr>
<td>X,Y,Z</td>
<td></td>
</tr>
<tr>
<td>- according to VDI/DGQ 3441 standards</td>
<td>Positioning accuracy (Pa): 0.03 mm</td>
</tr>
<tr>
<td>- length of measuring: complete stroke</td>
<td>Repeatability (Ps): 0.03 mm</td>
</tr>
<tr>
<td><strong>TUBE CUTTING (OPTIONAL)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CNC-controlled rotary axis for the cutting of round and rectangular tubes</td>
</tr>
<tr>
<td><strong>MAXIMUM OVERALL DIMENSIONS</strong></td>
<td></td>
</tr>
<tr>
<td>(automatic pallet changer and protection cabin included, water chiller, fumes extractor and photocells excluded)</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>10,600 mm</td>
</tr>
<tr>
<td>Width</td>
<td>3,540 mm</td>
</tr>
<tr>
<td>Height</td>
<td>2,500 mm</td>
</tr>
<tr>
<td><strong>WEIGHT (BASIC MACHINE)</strong></td>
<td>10,000 kg</td>
</tr>
<tr>
<td><strong>STANDARD CO₂ LASER POWER</strong></td>
<td>2,500 W - 5,000 W</td>
</tr>
</tbody>
</table>

(*) Dimensions in inches: LP 1530  X = 120,  Y = 60  |  LP 2040  X = 160,  Y = 80
(**) The accuracy of the piece depends on its type, size and pre-treatment, and the conditions of application.
Zaphiro by Prima Power is the high-end model in the CO₂ laser product range. High productivity is ensured by machine features such as very high dynamic performance and solutions which allow reduced manufacturing time.

**PRODUCTIVE**
High-dynamic linear drive increases productivity compared with conventional drive systems.

**ACCURATE**
Precise and repeatable in cutting and laser head positioning.

**MODULAR**
Suitable for any production need, offering a full range of solutions for automation.

**RELIABLE**
Fully-tested and reliable thanks to the 20 years of experience with the Platino platform.

**USER FRIENDLY**
Easy to use programming software and Prima Power operator interface. Fast setup and reduced downtime.
Zaphiro with Compact Tower for automatic material handling and storing.

Zaphiro is a flexible machine cutting any sheet thickness productively.

Night Train FMS®, factory-wide manufacturing solution by Prima Power.

Zaphiro open cabin for full accessibility and ergonomics.

Automatic nozzle changer for enhanced process reliability.
MACHINE FEATURES

Thanks to the **linear motors** and the advanced CNC, Zaphiro features very high productivity and quality.

**CO₂ laser** allows **wide range of thicknesses** from 0.8 to 25 mm and the best efficiency for a CO₂ laser.

**Synthetic granite frame** for best thermal stability and vibration damping.

**Wide range of modules for the automation** of the material handling and storage.

Numerical Control, Operator interface and programming software are **user-friendly and smart tools**, developed and manufactured by Prima Power.
Technical specifications

**Zaphirio**

**LZ 1530**

**Working Area (*)**

- X = 3,000 mm
- Y = 1,500 mm
- Z = 150 mm

**Maximum Speed**

- Single axis: X, Y = 170 m/min
- Trajectory: X, Y = 240 m/min

**Accuracy (**)**

- X, Y, Z
- Positioning accuracy (Pa): 0.03 mm
- Repeatability (Ps): 0.03 mm
- According to VDI/DGQ 3441 standards
- Length of measuring: complete stroke

**Maximum Overall Dimensions**

- (Automatic pallet and protection cabin included, water chiller, fumes extractor and photocells excluded)
- Length: 9,700 mm
- Width: 3,600 mm
- Height: 2,600 mm

**Weight (Basic Machine)**

- 10,000 kg

**Standard CO₂ Laser Power**

- 4,000 W - 5,000 W

(⁎) Dimensions in inches: X = 120, Y = 60

(**) The accuracy of the piece depends on its type, size and pre-treatment, and the conditions of application.
Maximo

SUITABLE FOR ALL SHEET FORMATS, UP TO 36 m
Maximo boasts all the advantages of the Platino, combined with a very large work area. This result is obtained with a simple but highly effective solution: a complete Platino machine - with its mechanical structure, laser generator, CNC, moving carriages, optical chain and focusing head - travelling on rails over a fixed working table.
In addition to the movement axes of the Platino machine (the Z axis for the vertical movement, the X and \( Y_1 \) axes for the longitudinal and transversal motion), Maximo features a further \( Y_2 \) axis, which allows the machine to move beyond its \( Y_1 \) axis stroke, as far as the sheet metal to be processed requires.

XL
The Platino for extra large formats.

FLEXIBLE
Working area customizable on customer’s requirements from 9 m to 36 m.

RELIABLE
Fully-tested and reliable as a result of 20 years of experience with the Platino platform.

USER FRIENDLY
Easy to use programming software and Prima Power operator interface. Fast setup and reduced downtime.

ACCESSIBLE
Excellent visibility and maximum accessibility for the operator.
Maximo typical applications are naval, heavy transportation, building and construction industries.

Protection cabin with large windows for full visibility.

Optional remote console.

Optional webcam for remote control of the working area.
MACHINE FEATURES

No need of a complete foundation thanks to a patented solution for the main carriage guidance and isostatic support, only two plinths of the same length of the Y2-axis stroke are needed.

Flexible work area gives the system great flexibility to accommodate the sheet metal to be processed.

No idle time for material handling and no need for additional time-consuming and costly devices such as pallet changer.

Piercing device for ferrous material of higher thicknesses.

Protection cabin fully enclosing the working area for safety and visibility.
Technical specifications

**WORKING AREA (**)**

<table>
<thead>
<tr>
<th>Axis</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>3,000 mm</td>
</tr>
<tr>
<td>Y₁</td>
<td>1,500 mm</td>
</tr>
<tr>
<td>Z</td>
<td>150 mm</td>
</tr>
<tr>
<td>Y₂ **</td>
<td>9,000 - 36,000 mm</td>
</tr>
</tbody>
</table>

**MAXIMUM SPEED**

<table>
<thead>
<tr>
<th>Axis</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>X, Y₁</td>
<td>100 m/min</td>
</tr>
<tr>
<td>X, Y₁</td>
<td>140 m/min</td>
</tr>
<tr>
<td>Y₂</td>
<td>15 m/min</td>
</tr>
</tbody>
</table>

**ACCURACY (***)**

Positioning accuracy (Pa): 0.03 mm
Repeatability (Ps): 0.03 mm

- according to VDI/DGQ 3441 standards
- length of measuring: complete stroke

**MAXIMUM OVERALL DIMENSIONS**

(water chiller and fumes extractor excluded)

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>18,200 - 45,700 mm</td>
</tr>
<tr>
<td>Width</td>
<td>5,750 mm</td>
</tr>
<tr>
<td>Height</td>
<td>3,000 mm</td>
</tr>
</tbody>
</table>

**STANDARD CO₂ LASER POWER**

4,000 W

(*) Dimensions in inches: X = 120, Y = 60
(**) Actual Y₂ stroke: from 10,620 mm to 37,980 mm for machine “parking” area.
(***) The accuracy of the piece depends on its type, dimensions and pre-treatment, as well as on the application conditions.
Freedom of choice, without complications

In order to meet our customers’ requests, we have created three suites of options to better fit the different production needs: thin or thick metal sheets working and intensive productions.

**SMART CUT**

< 5 mm

This option suite is the right solution to grant faster processing of thin metal sheets (up to 5 mm) where N₂ technology can be applied: this is possible thanks to technological solutions, like Smart Moves and Grid Cutting, able to reduce the downtime due to head positioning time.

The result is a reduction of cycle time up to 30%.

**MAX CUT**

> 5 mm

This option suite has been designed for thick metal sheets processing: we have been able to give the customers an astonishing cycle time reduction up to 40% due to advanced solutions, like Nitrogen Piercing and Hi.Piercing, that increase piercing quality while lowering the time.

**NIGHT CUT**

For intensive production, Prima Power provides this option suite that maximizes the productivity enhancing the monitoring of the process.

This is possible thanks to advanced monitoring devices able to check the status of the process and intervene in case of errors by restarting the operation or informing you remotely; LPM, monitoring piercing operation, Plasma and Tip-Touch Restart, keeping control of the cutting process, E-mail dispatching, alerting the operator in case of machine failures.

These packages are available on Platino Fiber, Laser Genius, Platino and Zaphiro.
Innovation converted into action

The technological core of Prima Power machines is their laser head. It’s a mix of innovation and technology, designed and developed to provide our customer the highest efficiency, flexibility and reliability.

FIBER HEAD
Prima Power fiber head features safe impact protection system, high dynamic focal axis with 35 mm stroke, lens drawer with quick alignment system (OPC) and protection glass drawer for easy inspection. Nitrogen piercing, laser piercing monitor and automatic plasma restart further enhance the productivity.

CO₂ HEAD
Prima Power CO₂ head features safe impact protection system, process gas pipe, wide range of nozzles, F axis for controlling the focal position independently of the Z axis, lens drawer (for 5” or 7,5” lenses), capacitive sensor for automatically maintaining the preset stand-off from the sheet metal.
Software and CNC: user-friendly and efficient

The Software

We offer our customers advanced software solutions to connect, manage and monitor the whole cycle of operations involved during the production. The software provides the interaction between the various steps of production operation flow.

- Customer ERP connection
  Importing of production list order from customer ERP.

- Cam programming / 2D Cam and Tube Cam
  Efficient programming for a productive fabrication process:
  - Powerful nesting
  - Optimized Post Processor for 2D cut programming and tube cut programming
  - Powerful simulation

- Human Machine Interface
  Interacting in an easy and friendly way, through touch screen, with the machine and relevant automation.

- Monitoring / Production Control
  Monitoring machine statuses and task lists and displaying all the events of all the machines in one view.

- Production and Performance Data Reporting
  Proprietary solution for viewing reports of machine status and analyzing production data.
NUMERICAL CONTROL

Our products take advantage of the latest generation of Prima Electro CNC. It represents the intelligent and user-friendly engine of our machines which provides fundamental features for managing and monitoring the production.

**Laser parameters management**
Technological parameters directly available on CNC.

**Setup Tools**
Laser and machine calibration to speed up maintenance operations.

**Program management**
Quick program selection with exhaustive preview function, available also in real time.

**Program editing**
Easy program changes directly from CNC.

**Restart functions**
Several dedicated solutions to increase productivity and process reliability.

**Other options are:**
- Maintenance manager. Tracking and recording the maintenance history of the equipment. It also allows the service engineer to easily operate on the maintenance counters.
- User’s login level (e.g. administrator, maintenance engineer, machine operator etc.).
- Notification Manager. Automatic sending of email in case of error.
Around-the-clock production

Prima Power machines are highly reliable and are used worldwide in the harshest production environments and for the most demanding manufacturing schedules.

This makes them particularly suitable for 24/7 operation.

**Compact Server**

Loading/unloading device for handling blanks and processed sheets.

Two storage units (one for the blanks and one for the processed sheets).

Single sheet separating and control systems and sheet reference.

Smallest footprint.

**Compact Tower Twin**

Loading/unloading devices for handling blanks and processed sheets.

Two storage towers with 26 or 36 pallets.

Single sheet separating and control systems and sheet reference.

Optimal system capacity/footprint ratio.

**Night Train FMS®**

Loading/unloading unit for handling blanks and processed sheets.

Fully automatic connection for multiple machines possible.

Flexible and modular layout.

In-house developed graphical control system and storage management.

Ideal for fully automated manufacturing and 24/7 operation.
**Compact Tower**

Loading/unloading devices for handling blanks and processed sheets.

Storage tower with 10 or 15 pallets.

Single sheet separating and control systems and sheet reference.

Very limited footprint.

---

**LST (automatic part stacking)**

Automatic sorting and stacking device fully integrated with the laser system.

Cut parts are picked from table after cutting with Robot Assisted Laser Cut (RALC).

Easy management of parts into a fixed table, wagon or Night Train FMS®/Combo FMS® storage cassette.

Fully compatible with all our other automation systems.

---

### Compact Tower

- **LOAD / UNLOAD:**
  - PLATINO 1530
  - PLATINO 2040
  - PLATINO FIBER 1530
  - ZAPHIRO 1530
  - SYNCRONO 1530
  - LASER GENIUS 1530
  - LASER GENIUS 2040
  - MAXIMO

- **LOAD / UNLOAD STORE:**
  - PLATINO 1530
  - PLATINO 2040
  - PLATINO FIBER 1530
  - ZAPHIRO 1530
  - SYNCRONO 1530
  - LASER GENIUS 1530
  - LASER GENIUS 2040
  - MAXIMO

- **LOAD / UNLOAD TWIN:**
  - PLATINO 1530
  - PLATINO 2040
  - PLATINO FIBER 1530
  - ZAPHIRO 1530
  - SYNCRONO 1530
  - LASER GENIUS 1530
  - LASER GENIUS 2040
  - MAXIMO

- **SORT:**
  - PLATINO 1530
  - PLATINO 2040
  - PLATINO FIBER 1530
  - ZAPHIRO 1530
  - SYNCRONO 1530
  - LASER GENIUS 1530
  - LASER GENIUS 2040
  - MAXIMO

- **NIGHT TRAIN CONNECTION:**
  - PLATINO 1530
  - PLATINO 2040
  - PLATINO FIBER 1530
  - ZAPHIRO 1530
  - SYNCRONO 1530
  - LASER GENIUS 1530
  - LASER GENIUS 2040
  - MAXIMO
Prima Power Services: key to better productivity

We believe in long-term relationship with our partners, and we think that the real product we deliver to our customer is not just the machine itself, but the production capacity that our customer can achieve with our products and technology. The heart of Prima Power service is the common goal we share with our customer: start, maintain and develop the plant’s production capacity and maximize it.

Our Service covers the whole life cycle of the system and technology and contributes to reach one goal: maximize the productivity and the profit for our customers.

**TELESERVICE**
It is a service for the remote diagnostic and assistance. Skilled service engineers are available to operate remotely with the customer’s CNC.

**FIELD SERVICE**
In addition to preventive maintenance, we offer high-quality corrective maintenance to guarantee fast recovery when there is a problem. With more than 12,000 machines installed in more than 70 countries, we are able to give our customer the required assistance no matter where they are.

**SERVICE AGREEMENTS**
We continuously develop preventive maintenance plans for Prima Power machines. Maintenance visits are performed according to the task list specified for each machine type.

**UPDATES & UPGRADES**
The modularity of the product range often allows upgrading of a machine or manufacturing system even years after the original delivery.

**SPARE PARTS**
Original Prima Power spare parts to guarantee full performance and prolonged durability.

**CONSULTATION**
Wide range of consultation services on machine operation, programming and maintenance.

**USED MACHINES**
Possibility to purchase second hand machines with Prima Power quality.

**TRAINING**
Training programs and updates for using our machines and software to their best, maximizing manufacturing capacity and quality.
Contacts

Find your local Prima Power representative at primapower.com