



The Bend
The Combi
The Laser
The Press

The Punch The Shear The System

The Software

# The Laser | 3D line

Cutting-edge technology for real-world applications

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3D LASER LINE

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# Next level. Next to you.

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.

#### What can be found in this brochure

The state-of-the-art 3D laser machines to respond to different customer and application needs.

Ideal solutions for massive or specialized automotive productions.

Laser systems designed for a wide range of high precision applications.

Laser machines with high-power source with fiber technology developed and produced by Prima Power.

All Prima Power products are compliant with the Industry 4.0 guidelines, helping the customers turn their production sites into smart factories.

# Laser cutting. The most flexible tool ever

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.

Our laser product portfolio is extensive and includes both CO<sub>2</sub> and fiber 2D and 3D machines for a broad range of applications in cutting, welding and drilling.

3D laser cutting takes advantage of the flexibility of the laser tool and applies it to complex three-dimensional parts that can be processed thanks to highly technological multi-axis machines.



The fiber laser technology, used in the Prima Power 3D laser machines, allows this flexibility while still granting high levels of productivity, quality and efficiency with low maintenance requirements.

The features of the fiber laser source allows Prima Power 3D laser machines to be suited for a wide range of materials, mainly high-strength steels: in fact, to improve vehicle safety and reduce fuel consumption in the automotive industry, the manufacturing of lightweight body parts from high-strength steels (HSS) has rapidly increased and the 3D laser cutting is the ideal solution to respond to this market request.

Several applications are possible thanks to the 3D laser technology such as the cutting of complex shapes, welding and precision drilling





# The Laser | 3D line



#### Laser Next 1530 - Laser Next 2130

Designed, developed, manufactured and tested for the production of automotive components, particularly HSS parts, with first-class performance, to grant lowest cycle times, excellent quality and reliability.



Fiber 3-4 kW



X: 3,050 mm - Y: 1,530 mm - Z: 612 mm X: 3,050 mm - Y: 2,100 mm - Z: 612 mm



#### Laser Next 2141

Designed for large parts processing and job shop applications with flexible configurations, high dynamics, and advanced technology for different applications.



Fiber 3-4 kW



X: 4,140 mm - Y: 2,100 mm - Z: 1,020 mm



#### **Rapido**

Quality, productivity and efficiency for entry-level applications. Ideal for jobshops productions thanks to its top application flexibility and low running costs, particularly suitable for frequent changes of production.



Fiber 2-4 kW



X: 4,080 mm - Y: 1,530 mm - Z: 765 mm



#### **LASERDYNE® 795**

The premier multi-axis laser processing system for drilling, welding and cutting precision components with large z-axis stroke. The most versatile processing platform available today for land based or aerospace turbine components and automotive components.



Fiber QCW: 3-20 kW CW: 1-4 kW CO<sub>2</sub> CW: 2.5-4 kW



X: 1,000 or 2,000 mm - Y: 1,000 mm Z: 1,000 or 1,370 or 1,830 mm



#### LASERDYNE® 811

LASERDYNE® 811 is a flexible platform that can be adapted to suit the needs of different customers in different market segments. It can perform precision 2D and 3D cutting, drilling, welding and DED additive, depending on the configuration



Fiber QCW: 9 kW – 23 kW CW: up to 4 kW



X: 1,100 - Y: 800 mm - Z: 600

# Laser Next 1530 Laser Next 2130



#### THE 3D LASER SYSTEM FOR AUTOMOTIVE PRODUCTION

Laser Next, the world's fastest 3D laser machine, is available in two sizes (1530 and 2130) to meet any automotive production needs. It grants very low cycle times and excellent Overall Equipment Efficiency (OEE).

Laser Next features a highly space efficient layout, both for stand-alone and multi-machine configuration. Given the same area, it is possible to install four Laser Next instead of three units of the previous model. Considering the performance of Laser Next, its productivity per square meter is simply astonishing. You can have up to three machines one next to the other connected to the same magnetic scrap conveyor, with no need of excavation works.

With the new update, Laser Next is now even more reliable and productive, with a cycle time reduction of up to 10% on cutting hot-stamped steel parts cutting.



#### **SPECIALIZATION**

Laser Next is focused on the production of hot stamped steel components. It's designed, developed, manufactured, and tested for this specific application.



#### **PERFORMANCE**

First-class performance to grant lowest cycle times and excellent cutting quality.



#### **MULTI SIZE**

Two working envelope available to process also big automotive parts like door rings.



#### **COMPACTNESS**

Space saver, especially for multi-machine configuration. Easy and fast to install.



#### **EFFICIENCY**

Higher Overall Equipment Efficiency due to reduced downtime and maintenance. Less resources dedicated and no special skills needed for simplified maintenance.



Multi-machine configuration for the best footprint-productivity ratio: single scrap conveyor that can be used up to three machines. Only available for LN 1530.



Connection to automatic loading/unloading system available.



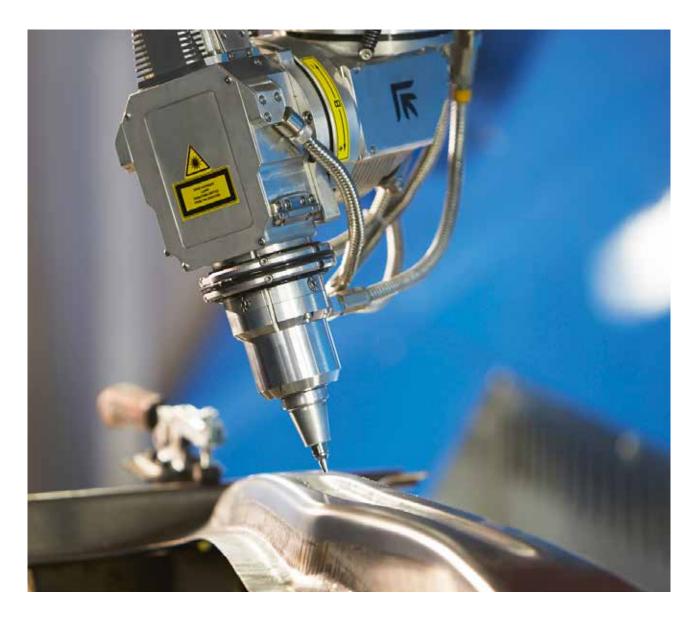
Laser Next 2130 can process bigger components with unmatched productivity.



Linear motors on main axes and direct motors with optical scales and on the focusing head: superior dynamics, accuracy and reliability.



Laser Next 2130 has been designed and developed for large size automotive parts (e.g. door ring).



#### **MACHINE FEATURES**

Linear motors on main axes and direct motors with optical scales and on the focusing head: superior dynamics, accuracy, and reliability.

High precision turntable with servomotor and absolute encoder. Designed to ensure the highest performance reliability and safety. Well-organized spaces for layout optimization and excellent performance in fume exhausting.

Focusing head with FPC (Focus Position Control), sealed and compact. Focus regulation system more stable and robust (in the event of a crash it remains accurate).

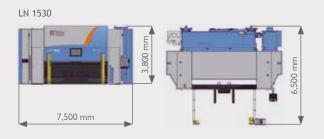
Synthetic granite frame with state-of-the art topology optimization methods for smooth and regular machine movements, even at the highest dynamics.

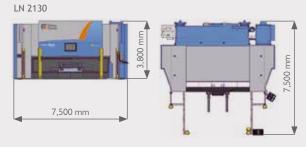
Vision system to check profile cut, providing high process reliability and low cycle time.

# **Technical specifications**

### Laser **Next**

	LN 1530	LN 2130
AXIS STROKES	X = 3,050 mm Y = 1,530 mm Z = 612 mm	X = 3,050 mm Y = 2,100 mm Z = 612 mm
HEAD AXIS STROKES	A = 360° continuous B = $\frac{1}{2}$ 135° C = $\frac{1}{2}$ 12 mm	A = $360^{\circ}$ continuous B = $\frac{1}{2}135^{\circ}$ C = $\frac{1}{2}12$ mm
TURN TABLE DIAMETER	4,000 mm	5,000 mm
SPEED	X, Y, Z = 120 m/min A, B = 540°/s (1.5 rev/s) C = 50 m/min TRAJECTORY = 208 m/min	X, Y, Z = 120 m/min A, B = 540°/s (1.5 rev/s) C = 50 m/min TRAJECTORY = 208 m/min
ACCELERATION	$X, Y, Z = 1.2 g$ $A, B = 9.5 \text{ rev/s}^2$ $C = 4 g$ TRAJECTORY = 2.1 g	$X, Y, Z = 1.2 g$ $A, B = 9.5 \text{ rev/s}^2$ $C = 4 g$ TRAJECTORY = 2.1 g
ACCURACY (*) - according to VDI/DGQ 3441 standards - measurement length: complete stroke	X, Y, Z = $0.03 \text{ mm}$ A, B = $0.005^{\circ}$	X, Y, Z = 0.03 mm A, B = 0.005°
MAXIMUM OVERALL DIMENSIONS Width Length (one machine) Length (two machines) Length (three machines) Height	6,500 mm 7,500 mm 15,100 mm 22,700 mm 3,800 mm	7,500 mm 7,500 mm - - 3,800 mm
WEIGHT Machine Weight (without scrap conveyor)	19,500 kg	20,000 kg
FIBER LASER POWER	3,000 W - 4,000 W	3,000 W - 4,000 W





<sup>(\*)</sup> The accuracy of the piece depends on its type, dimensions and pretreatment, as well as on the application conditions

## Laser Next 2141



#### THE FLEXIBLE SOLUTION WITH LARGE WORKING ENVELOPE AND BEST-IN-CLASS EFFICIENCY

The Laser Next 2141 is the latest addition in the Laser Next family; it combines the efficiency and productivity of the other Laser Next products with a unique flexibility.

Thanks to multiple machine configurations (fixed tables, split cabin, shuttles and turn table) it can meet any production need. Laser Next 2141 is a multipurpose solution developed and designed for large-part processing and jobshop productions with advanced technology for different applications (3D cutting, 2D cutting and welding).



#### **FLEXIBLE**

Different applications with a single machine. 3D cutting, 2D cutting and welding in a single multipurpose solution with multiple machine configurations.



#### **RELIABLE**

Fully tested and reliable thanks to the experience of the successful Laser Next platform.



#### **HIGH CAPACITY**

Very large working envelope for large parts processing combined with reduced footprint.



#### **EFFICIENT**

Higher Overall Equipment Efficiency due to reduced downtime and maintenance. Less resources dedicated and no special skills needed for simplified maintenance.



#### **ACCURATE**

High precision, with no backlash or wear, thanks to the linear motors on main axes and direct motors with optical scales on the focusing head.



Large-part processing with superior efficiency and reliability.



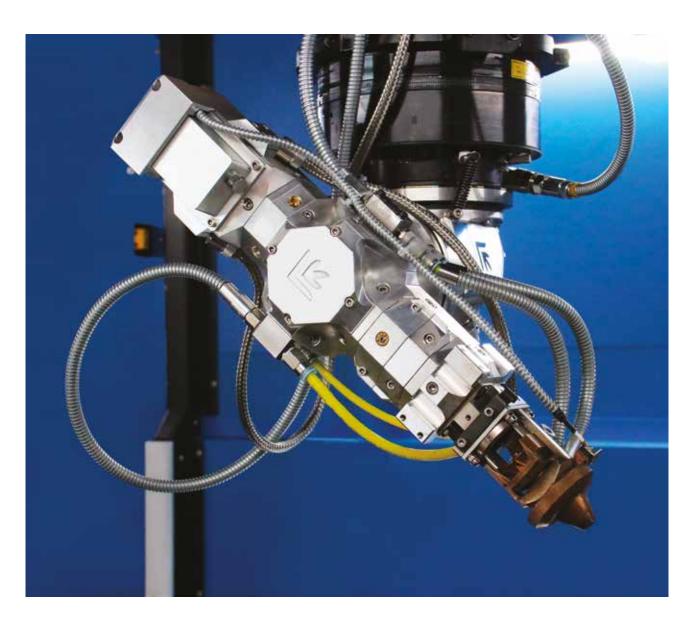
Movable tables configuration with manual or automatic movement, both in X or Y direction.



Turn table configuration available with servomotor and absolute encoder for part loading/unloading in covered time.



Carbon fiber  $\boldsymbol{Z}$  axis and main carriage in aluminum casting.



#### **MACHINE FEATURES**

Split cabin configuration with removable central wall and movable roof: high safety and great accessibility for enhanced productivity.

Linear motors on main axes and direct motors with optical scales on the focusing head for superior dynamics and precision.

Synthetic granite frame with state-of the-art topology optimization methods for smooth and regular machine movements, even at the highest dynamics.

Advanced dynamics control to get the best performance on large parts processing.

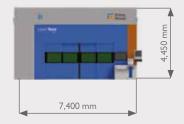
High brilliance fiber laser with high energy efficiency, no maintenance and eco-compatible use.

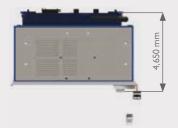
User-friendly and powerful 3D and 2D CAD/CAM software allows an easy and quick generation and testing of the entire cutting program.

# **Technical specifications**

# Laser Next

AXIS STROKES	X = 4,140 mm Y = 2,100 mm Z = 1,020 mm
HEAD AXIS STROKES	A = $360^{\circ}$ continuous B = $\frac{1}{2}135^{\circ}$ C = $\frac{1}{2}12$ mm
SPEED	X, Y, Z = 120 m/min A, B = 540°/s (1.5 rev/s) C = 50 m/min TRAJECTORY = 208 m/min
ACCELERATION	X, Y, Z = 1 g A, B = 9.5 rev/s <sup>2</sup> C = 4 g TRAJECTORY = 1.73 g
ACCURACY (*) - according to VDI/DGQ 3441 standards - measurement length: complete stroke	X, Y, Z = 0.03 mm A, B = 0.005°
MAXIMUM OVERALL DIMENSIONS Length Width Height	7,400 mm 4,650 mm 4,450 mm
WEIGHT (BASIC MACHINE)	22,000 kg
STANDARD FIBER LASER POWER	3,000 W - 4,000 W





<sup>(\*)</sup> The accuracy of the piece depends on its type, size and pre-treatment, and the conditions of application.

# Rapido



#### PRODUCTIVITY, QUALITY AND EFFICIENCY WITH UNMATCHED PRICE

Today the real challenge for laser machines manufacturers is to combine productivity, efficiency and flexibility with an attractive customer price. RAPIDO®, the latest generation of this tried-and-tested machine, is the key to these modern needs. RAPIDO is equipped with fiber laser source.

The high brilliance fiber laser with high energy efficiency, eco-compatible use and no maintenance gives the greatest benefits in case of series production.

Many applications can take advantage of this source, resulting in lower cycle times and reduced cost per part.



#### **FLEXIBLE**

Different applications with a single machine. The working area can be divided in two halves thanks to a movable partition wall and a sliding roof.



#### **RELIABLE**

Fully tested and reliable thanks to the long-lasting experience in the widest range of applications.



#### **USER FRIENDLY**

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



#### **PRODUCTIVE**

High productivity, quality and efficiency: best in class for machine architecture and control solutions.



#### COMPACTNESS

Large work volume with reduced machine dimensions – less factory space.



The split wall and sliding roof can divide the working area in two halves, giving the possibility to load/unload on one half safely while the laser head works on the other.



Direct-drive head featuring high dynamics, accuracy, and quality of movements.



High computational power HMI and integrated CAM (optional).



Synthetic granite frame for the best stiffness and damping capacity, resulting in smoothness of movements, even at the highest dynamics.



#### **MACHINE FEATURES**

Focusing head with direct motors and optical scales grants high dynamics, accuracy, no backlash, reduced maintenance and robustness. Welding head available.

High brilliance fiber laser with high energy efficiency, no maintenance and eco-compatible use.

Great accessibility thanks to the overhead retractable arm, cantilever structure and no sagging.

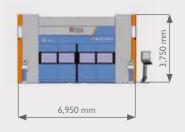
Synthetic granite frame designed with state-of-the-art topology optimization methods grants the smoothness of movements, even at the highest dynamics.

User-friendly and powerful 3D and 2D CAD/CAM software allows an easy and quick generation and testing of the entire cutting program.

# **Technical specifications**

### rapido°

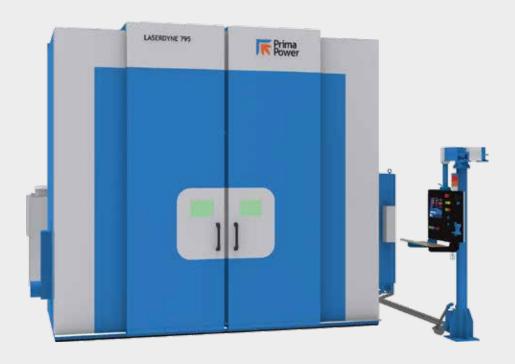
AXIS STROKES	X = 4,080 mm Y = 1,530 mm Z = 765 mm
HEAD AXIS STROKES	A = 360° continuous (without limitations) B = $\frac{1}{2}$ 135° continuous C = $\frac{1}{2}$ 12 mm
SPEED	X, Y, Z = 100 m/min A, B = 1.5 rev/s TRAJECTORY = 175 m/min
ACCELERATION	X, Y, Z = 0.8 g A, B = 60 rad/s <sup>2</sup> (9.5 rev/s <sup>2</sup> ) C = 4 g TRAJECTORY = 1.4 g
ACCURACY (*) - according to VDI/DGQ 3441 standards - measurement length: complete stroke	X, Y, Z = 0.03 mm A, B = 0.005°
MAXIMUM OVERALL DIMENSIONS Width Length Height	5,650 mm 6,950 mm 3,750 mm
WEIGHT Machine Weight (without scrap conveyor)	18,700 kg
FIBER LASER POWER	2,000 W - 3,000 W - 4,000 W





 $<sup>(^*)\</sup> The\ accuracy\ of\ the\ piece\ depends\ on\ its\ type,\ dimensions\ and\ pretreatment,\ as\ well\ as\ on\ the\ application\ conditions$ 

# LASERDYNE® 795



### THE PREMIER MULTI-AXIS LASER PROCESSING SYSTEM FOR DRILLING, WELDING AND CUTTING PRECISION COMPONENTS

The LASERDYNE® 795, a 5-axis laser machining system, is designed to drill, cut and weld medium to large 3D parts with a unique moving beam motion system. Constructed for high-speed operation without compromising mechanical accuracy, it is the first and only standard built multi-axis laser system to guarantee volumetric accuracy.

The LASERDYNE® 795 is designed to accept  $\mathrm{CO}_2$ , Nd:YAG and now fiber lasers for cutting, drilling and welding 2D and 3D parts. These systems are used by aerospace, turbine engine and contract manufacturing companies that require flexibility of motion and tight tolerances when laser processing. The open frame architecture and moving beam motion system allows the system to be configured to handle parts of virtually unlimited size.



#### **EFFICIENT**

Fast, accurate, and most versatile 3D beam delivery including industry's best 5 years unlimited warranty.



#### **RELIABLE**

Machine and laser generator by Prima Group with over 30 years of experience in laser material processing technology.



#### **FLEXIBLE**

The most versatile processing platform available today for land based or aerospace turbine and automotive components. Providing access to the most difficult part geometries.



#### **PROFITABLE**

Energy efficient laser sources, low operating costs and minimal maintenance. Proven long lifetime performance for lowest capital cost amortization.



#### **USER FRIENDLY**

Control features an easy to use touchscreen, a dual operating system and a full complement of LASERDYNE® exclusive software.



The compact profile of the LASERDYNE® BeamDirector® makes this the only machine that can drill at angles as shallow as 10 degrees from the surface along the entire stroke of the Z-axis.



Able to produce dense patterns of holes in thin metals without significant distortion.



The LASERDYNE® BeamDirector® provides quick and easy change of the focusing lens and of the lens protection cover slide.



Turnkey systems may include dust collection system, camera mounted within the work area and process development.



The LASERDYNE Beam Director provides 900 degrees of rotary motion and 300 degrees of tilt motion.



#### **MACHINE FEATURES**

Rigid structure incorporates a granite base with a heavy-duty steel weldment construction with precision machined surfaces, large diameter, high rigidity ball screws, wide track rails.

High capacity BeamDirector® direct drive design eliminates gears and belts for higher accuracy, allowing greater travel and reach over zero offset style wrists.

Adaptive Hole Size Control, the single, best method of producing the highest quality laser drilled holes, ensures hole size and critical flow requirements with minimal operator involvement.

The SPC (Statistical Process Control) – Data Acquisition<sup>TM</sup> monitors and records key processing data used to create each part and records the data in a permanent record.

Auto Focus Control (AFC), a unique LASERDYNE® concept, allows all machine axes to react to sensing of part surface creating unlimited "R" axis correction with speed and unmatched sensitivity.

# **Technical specifications**

#### LASERDYNE® 795

**AXES STROKES** 

X = 1,000 or 2,000 mm Y = 1,000 mmZ = 1,000 or 1,370 or 1,830 mm

 $\begin{array}{c} \text{BeamDirector}^{\circledast} \ 3 = 900^{\circ} \ \text{continuous motion in C axis} \\ 300^{\circ} \ \text{continuous motion in D axis} \end{array}$ 

**HEAD AXIS STROKES** 

BeamDirector® 3: C = 900°

 $D = 300^{\circ}$ 

SPEED

 $\mbox{X, Y, Z: 20 m/min} \\ \mbox{BeamDirector$^{\circ}$ 3: 90 rpm} \\ \mbox{Rotary Axis (optional)} = see individual specification$ 

RESOLUTION

X, Y, Z: 0.001 mm BeamDirector® 3: 0.001°

ACCURACY (\*)

- According to VDI/DGQ 3441 standards

X, Y, Z: 0.020 mm bi-directional BeamDirector® 3Y: +/- 6 arcseconds BeamDirector® 3X: +/- 15 arcseconds

Rotary Axis (optional) = see individual specification

REPEATABILITY

X, Y, Z: 0.020 mm bi-directional BeamDirector® 3Y: within 6 arcseconds BeamDirector® 3X: within 15 arcseconds Rotary Axis (optional) = see individual specification

<sup>(\*)</sup> The accuracy of the piece depends on its type, dimensions and pretreatment, as well as on the application conditions

### LASERDYNE® 811



### HIGH-PRECISION LASER PROCESSING SYSTEM FOR 3D AND 2D WELDING, DRILLING, CUTTING AND DED ADDITIVE MANUFACTURING

The LASERDYNE® 811 is the most advanced laser processing system on the market and provides optimal performance with the speed and precision required for today's challenging laser welding, drilling and cutting applications. The system supports small to medium, 2D, and 3D parts with a unique moving beam motion system.

Constructed for high-speed operations without compromising mechanical accuracy, is the first and only standard-built multi-axis laser system to guarantee volumetric accuracy and provide seamless integration with a wide variety of automation solutions.



#### **FLEXIBLE**

A single machine that supports welding, drilling, and cutting of 2Dand 3D components. The BeamDirector® and quick change nozzles enables the machine to quickly change from one laser process to another. The machine supports 3 to 7 axes of simultaneous motion.



#### **RELIABLE**

Tested and validated for laser welding, drilling, and cutting. The machine encompasses over 40 years of engineering and industrial laser processing expertise. LASERDYNE® products have a well-earned reputation for consistently and quickly manufacturing users components.



#### **ACCURATE**

Precise and repeatable performance yields quality parts and subassemblies for laser welding, drilling, and cutting. The S94P controller and purpose built motion system provide a complete, real-time system for all aspects of the laser process.



#### **EFFICIENT**

Shorter cycle times. Higher overall equipment efficiency due to reduced downtime and maintenance. Less resources are dedicated to maintaining the machines. More efficient use of floor space for the total working envelope of the machine.



#### **VALUE**

The LASERDYNE® 811 provides the best value for precision laser processing. Improved overall system performance and built in SmartTechniques™ are designed for fast, efficient, and reliable precision laser processing, providing quality manufactured parts from start to finish.



The integrated System S94P Laser Process Controller provides the user the tools needed to produce the parts they need.



Prima Power LASERDYNE® has the technology and software features to create precision holes quickly and consistently in variety of materials.



Optional Power Meter is integrated into the base for reliable positioning.



Flexible beam delivery with precision, control, and performance



Turbine blade edge being built up using the 4 jet additive nozzle.



#### **MACHINE FEATURES**

LASERDYNE® 811 is a flexible platform that can be adapted to suit the needs of different customers in different market segments. It can perform precision 2D and 3D cutting, drilling, welding, and DED additive, depending on the configuration.

Is equipped with the Prima Power LASERDYNE®'s third generation BeamDirector®, which has the features that set it apart from other 3D systems. There is the full 5-axis range of motion that allows for processing within the entire work envelope.

LASERDYNE® 811 is unique with its large, front automated door and two side doors. The ergonomic accessibility allows for safe entry into the enclosure.

An optional automated turn-table is available to make processing quicker for small part components this option allows for one processed part to be removed and a new part to be loaded onto the table while the other side of the turn table is being processed.

The LASERDYNE® 811 supports a variety of automation possibilities which can be easily integrated with the machine. It supports access from three sides (left, front and right side). The symmetric enclosure and structure offers layout flexibility for the work cell and optimized floor space

# **Technical specifications**

#### LASERDYNE® 811

TRAVEL	X Axis Y Axis Z Axis Beam Director®	1100 mm (43.5 inch) 800 mm (31.5 inch) 600 mm (24 inch) C Axis - 900 degrees motion D Axis - † 150 degrees from vertical (0 degrees is poiting down
SPEED	X, Y, and Z BeamDirector® Rotary Axis	> 50 m/min 0-90 rpm 0-150 rpm¹
ACCELERATION	X, Y, and Z BeamDirector®	1.2 g on each axis 88 rads/sec <sup>2</sup>
ACCURACY	X, Y, and Z BeamDirector®	± 0.012 mm (0.0005 inch) ± 15 arcseconds
LASER OPTIONS <sup>2</sup>	CW QCW	Up to 4000 W Up to 23000 W

Note 1: Depends on rotary table specifications. A variety of tables are available.

Note 2: Other laser powers and options are available based upon the applications needs.

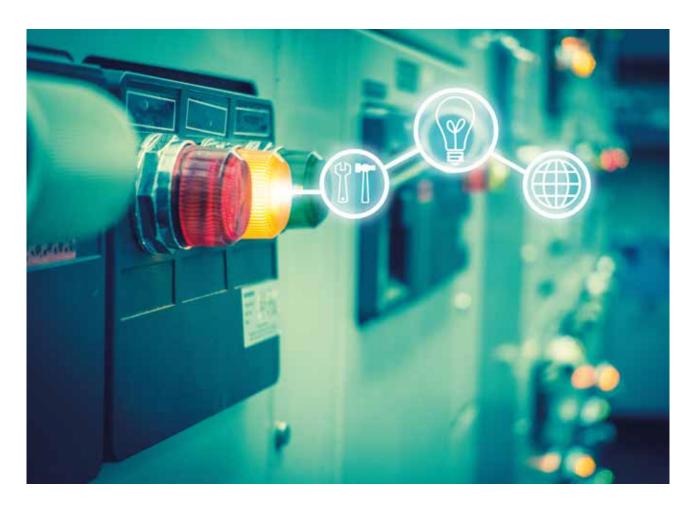
# Prima Power software ecosystem

The Prima Power software suite is a true ecosystem that provides the ideal solution to assist the customer in all phases of production, from offline programming to production data collection and reporting.

**Overview:** Our software suite allows control of the entire production flow and monitoring of each stage of processing.

**Updating:** Our software are continually updated to be aligned with the evolution of the machines.

**Usability:** Prima Power software solutions are equipped with simple and intuitive interfaces, which ensure correct use even by unskilled operators. Some modules are developed specifically to be installed on mobile device.



# Prima Power's Software technology helps you optimize your production

**Easy machine programming**: Integrated, automated, and easy-to-use solutions for the programming of Prima Power systems designed to be production management tools with the maximum positive impact in terms of flexibility and efficiency.

**HMI**: A suite of machine user interface software solutions that controls machine operations, tools, production orders, and stacking of finished parts directly on-board. Thanks to a simple and intuitive touch screen interface, you can easily manage the parameters and configurations of the machine. Dedicated solutions for 3D laser machines, such as the ThreeDEditor further increase the ease-of-use and flexibility of the system.

**Production reporting**: Online customer self-service portal that provides the users with detailed information about their production and machines granting important benefits, quality and resource management improvement, downtime reduction, and organizational learning.

## 3D Laser dedicated software solutions

Prima Power 3D Laser machines take advantage of dedicated software solutions in order to optimize the operation of the machine, reduce downtime and additional costs and increase the level of control and flexibility of the production.

## **Easy programming with Prima Power 3D CAM**

Prima Power 3D CAM is a Cam application to program 3DLaser machine, in 3 license levels Sharp, Genius and Premium, to support different use-cases: Prototyping and production machines, Integration of existing (old) machines, it can be also used for robot-systems (arc welding...).

Prima Power 3D CAM functionalities are the perfect fit for these 3D lasercutting systems: it supports the entire process from CAD data import to NC program optimization.

#### **DIGITAL TWIN**

Prima Power 3D CAM also functions as a digital twin of the laser machines. By connecting to the Prima Power Virtual Controller is possible to:

- Edit the code on the virtual HMI interface
- Perform partial or entire simulations and check the collisions
- Calculate the exact cycle time
- Learn how to use a Prima Power machine without an hardware installation



### ThreeDEditor: changing 3D Laser partprogram on board

ThreeDEditor, the 3D graphic editor of a partprogram, made for Prima Power 3D Laser machines. It displays, starting from a machine part-program, the working paths, and allows changes and the simulation of the part-program and it generates a new part-program with the applied changes.



The ThreeDEditor runs at machine's console of the 3DLaser Prima Power machine, allowing:

- Visualization of the model of the machine and laser head, working paths, allowed commands and program listing
- Editing of the technology, geometry macros, working path and parameters
- Simulation of the working path in order to preview the changed part-program before possible saving

## **Numerical Control**

Our products include intelligent and user- friendly CNC 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.



#### LASERDYNE® NUMERICAL CONTROL | S94P LASER PROCESS CONTROL

LASERDYNE® engineers and customers know the most important element of productivity is the ability to produce parts correctly without scrap. The System S94P Laser Process Controller continues an impressive history of providing laser system users with unique control feature tools. The new LASERDYNE® SYSTEM controller features an easy to use touch screen, a dual operating system (Linux for machine operations and Windows for operator interface), and a full complement of LASERDYNE® exclusive software including:

#### **SmartTechniques**<sup>™</sup>

Advanced integrated control of laser, motion, and process sensors to ensure your laser processes are more productive, yield higher quality, and are more robust.

#### **ShapeSoft**™

Enabling faster development of processes for shaped hole production.

#### **CylPerf**™

The powerful yet simple way to program and visualize complex patterns of features on a cylindrical part.



# 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 14,000 machines installed in more than 80 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



