

Prima Power at Euroblech 2016 - Many technological breakthroughs and its own new fiber source on the whole laser range

## New Laser Next 2130 - The world premiere of the 3D laser cutting machine dedicated to the new door ring concept

Hot stamped parts are increasingly replacing traditional metal formed parts in automotive frame design and this trend is confirmed also for the next years. These components play in fact a fundamental role in reducing vehicle weight, and consequently fuel consumption and  $CO_2$  emissions, and keeping overall strength to grant 5-star safety ratings.

A recent trend that is gaining momentum is the adoption of a new door ring concept, hot stamped as one part instead of the four parts which are usually required. This minimizes production costs, reduces the weight and increases the performance of this component.

Prima Power has designed a new product focused on this specific application: Laser Next 2130. This new model, presented as world premiere at the Euroblech exhibition in Hannover from 25 to 29 October, maintains the performance and the winning solutions of the 1530 model with an increased working volume, making it the right solution for the cutting of large size hot stamped components.

"We could already offer the best and fastest solution for the cutting of standard sized hot stamped components, - explains Marco Pivanti, 3D Laser Product Manager at Prima Power but we needed an evolution of the Laser Next 1530 featuring an increased Y stroke to allow



the processing of larger components such as the door ring. Today we are proud to announce that a first class machine dedicated to this new and promising application has been added to our product range".

Laser Next 2130 has a considerable working volume of  $3050 \times 2100 \times 612$  mm with a high-precision and dynamic 5 m turntable. Thanks to a well-conceived layout, the system is nonetheless extremely compact and space efficient.

Laser Next can boast the best dynamic performance on the market for a 3D laser machine (208 m/min trajectory speed and 2.1 g acceleration), granted by the use of highly innovative solutions and materials for kinematics and machine structure such as direct motors and transducers for main axes and focusing head, and machine frame in synthetic granite with optimized shape.

Laser Next 2130 can be equipped with 3 kW or 4 kW high brilliance fiber laser. The model exhibited in Hannover features **the new fiber laser source developed and manufactured by Prima Power**.

"Laser Next is typically used for mass production of automotive components, where efficiency is a decisive factor." - continues Marco Pivanti. "The possibility to count on a single source supplier, ready to grant maintenance and assistance on all system components, it is an important plus for our customers. With its new CF series generators, Prima Power is the only laser machine manufacturer to develop internally all essential elements of its products. This adds to the efficiency of Prima Power 3D laser systems, wellproven by hundreds of installations for 24/7 manufacturing of hot stamped components across the globe.".

Laser Next features Prima Power state-of-the-art focusing head: direct drive motors for top performance, double protection SIPS and fully metallic sensor for highest safety, Focal Position Control for great flexibility, compact size for best dexterity, fully sealed enclosure for complete protection.



## Laser Genius has outdone itself - The new version of the high performing 2D laser machine by Prima Power comes with plenty of innovations to further increase customer benefits

Best quality and maximum speed without compromises on the whole thickness range and best integration of all machine components, totally developed and manufactured by Prima Power as single source supplier: these are some of the main benefits of the new version of Laser Genius on show in Hannover.

Prima Power has developed its **new fiber laser head** with adaptive optics for the automatic management of the focal position and diameter and a fast, reactive and accurate stand-off measurement. The new head is designed for excellent cutting quality and dynamics on all materials, the highest cutting pressures (certified mechanical structure) and the harshest environment (totally sealed and protected case).

"With our new head the range of applications of Laser Genius is widened to cover all materials and thicknesses always with the best results." - states Giulio Amore, 2D Product Manager at Prima Power. "This increased flexibility adds to the other amazing characteristics of this unique product: linear motors on X and Y axes, carbon fiber carriage, synthetic granite frame. It also features the optional technological suites SMART Cut, MAX Cut and NIGHT Cut to maximize customers' competitiveness according to their application".

An important breakthrough on the Laser Genius is **the new fiber laser developed and manufactured by Prima Power**. The CF series, available with 3 kW and 4 kW power, features high reliability and quality diodes, better protection against back-reflections, a patented highly reactive electronic shutter (switch on/off time 200 ms) and a high integration into the system. The highly efficient service directly supplied by Prima Power is a further strength of these generators.



In Hannover Laser Genius is exhibited with the **Open Cabin**: fully opening sliding doors granting excellent accessibility and user friendliness for the operator, in line with Prima Power's tradition. The Lean Cabin is also available for minimum footprint, easy installation and competitive price.

Laser Genius is managed by the new, cutting edge **Prima Power Open Laser2D CNC**, featuring multi-interpolation and optimized motion algorithms for best Approach, Lead-In and Disengage movements, cycle time reduction, smart gas pressure management, improved grid cutting speed, innovative software compensation solutions to further enhance cutting quality. The Human Machine Interface framework is **Prima Power Tulus Laser2D HMI**, a highly logical, modern and user friendly interface with a smart task list concept, fast tool setup, optimized technological parameters, simple management of sorting and stacking operations. The machine productivity is further enhanced by the **CAD/CAM application NC Express e<sup>3</sup>** with highly positive impact on sheet usage, tool path and cycle times.

Prima Power products are "Industry 4.0 Inside", ready for the smart manufacturing era, with a complete connectivity to the company organization of the customer, the digitalization of system and production monitoring, diagnostics, analysis and service through advanced solutions such as Fleet Management, and the new app for a simple and smart use of the machine Tulus MUPS (Machine User Personal aSsistant).

Also machine automation presents important developments. Laser Genius is equipped with the new **Combo Tower Laser**, the flexible storage system with integrated loading and unloading features for 2D laser machines **developed and manufactured by Prima Power**. It is a key module for automating the material flow, making different materials quickly and automatically available whenever needed. It can also serve as intermediate storage for ready cut components along with skeleton. There can be one or two shelving units in the Combo storage and height can be chosen by needs. The model with one shelving unit is designed to serve only one 2D laser machine, while with two shelving units more machines can be integrated as part of the system; depending on the required work stages and techniques, these are selected from the wide range of Prima Power solutions for punching, laser cutting, integrated punching/shearing and punching/laser cutting.



"Today we can really declare that we have closed the circle: we have the total control on laser technology." - continues Giulio Amore. "Laser source and head, automation, hardware and software: all the essential machine elements are developed, manufactured and maintained by Prima Power directly. This really makes the difference for our customers, which can count on a single-point-of-contact, embracing the entire responsibility on their success. Moreover, with our comprehensive range of technologies and products, we are a single-stop partner for any sheet metal processing need".

## Platino® Fiber: Prima Power fiber technology with an attractive price level

Platino Fiber, the price-performer laser machine within Prima Power 2D laser range, is exhibited at the Euroblech 2016 in its latest, innovated version, to satisfy customers who wish to combine quality and versatility with a reduced investment.

"Platino is a highly reliable product boasting over 2000 installations around the globe," states Giulio Amore, 2D Laser Product Manager at Prima Power - "the new model we are presenting in Hannover has all winning features of our well known laser workhorse with some important evolutions such as the new Prima Power CNC control".

Platino Fiber is designed for the utmost compactness, accessibility, ergonomics and easy integration with automation modules. Its synthetic granite frame grants thermal stability and vibration damping, increasing the quality of the cutting path. Its **Lean Cabin** is also meant to be compact, fast to install and price efficient.

Platino Fiber is a versatile cutting tool thanks to its **focusing head**, allowing easy changes of production with no setup time, since all materials are cut with a single, universal lens. The reliability of the head is also further enhanced thanks to its design, where the optical chain is totally sealed and protected from any contamination.



Other features of the focusing head are the Safe Impact Protection System (SIPS), protecting the machine head in case of collisions with workpieces or fixtures, the quick alignment system (OPC), the high dynamics focal axis with 35 mm stroke, a wide range of nozzles for any application which can be automatically exchanged.

The machine is managed by the new, cutting edge **Prima Power Open Laser2D CNC**, featuring multi-interpolation and optimized motion algorithms for best Approach, Lead-In and Disengage movements, cycle time reduction, smart gas pressure management, improved grid cutting speed, innovative software compensation solutions to further enhance cutting quality. Off-line programming is performed through the easy and fast **CAD/CAM application NC Express e3** with optimized sheet usage, tool path and cycle times.

A versatile laser machine as Platino Fiber is obviously offered with various laser powers, according to application needs. Also for sheet metal handling the choice is wide to suit all production types and includes the full range of **Prima Power automation modules** dedicated to laser systems: Compact Server (displayed in its latest version with enhanced reliability), new Combo Tower Laser, LST, up to the factory-wide Night Train FMS® solution.

High-resolution illustrations are available in the Download section of the Prima Power website (<u>http://www.primapower.com/downloads</u>)

For more information please contact:

Laser Next Mr. Marco Pivanti, Product Manager, 3D Laser Products t. +39 011 410 31 marco.pivanti@primapower.com

Laser Genius and Platino Fiber Mr. Giulio Amore, Product Manager, 2D Laser Products t. +39 011 410 31 giulio.amore@primapower.com

www.primapower.com



## About Prima Power

Prima Power is a world class supplier in the high technology field of laser and sheet metal fabrication machines. Its product portfolio is one of the most comprehensive in the field and includes: laser machines for cutting, welding and drilling, turret punch presses, combined punch/shear and punch/laser systems, press brakes, panel benders, bending centres, and flexible manufacturing systems (FMS).

Prima Power is the Machinery Division of Prima Industrie, a Group with over 1600 employees across the globe, manufacturing plants in Italy, Finland, USA and China and a highly specialized sales and service network in over 80 countries.