
Prima Power introduces extensive range of new Combi Laser technology

True to its tradition of continuous product development, Prima Power launches a complete range of new generation servo-electric punch-laser combination machines. At EuroBLECH 2016, it is promoted with a Combi Genius 1530 Dynamic version complemented with Compact Express automation and new Prima Power CF4000 fiber laser source. Another traditional Prima Power strength is modularity, and thus the new technology is also available in high-performance Punch Genius turret punch press range.

Numerous improvements have been made to automation range, sheet position axis and process monitoring for reliable unmanned production.

High-performance punching

Available maximum sheet sizes for Combi Genius are 1,250 x 2,500 mm, 3,000 x 1,500 mm and 4,300 x 1,500 mm, corresponding new names are Combi Genius 1250, Combi Genius 1530 and Combi Genius 1540.

New CG comes with servo-electric punching and two different performance suites; Pure meets the targets of efficient production with attractive price level and Dynamic offers the best productivity and highest performance on the market. Both of them can be equipped with the whole range of options.

Maximum punching force available is 30t, sheet weight 250kg, highest punching speed 1000hpm and tool rotation speed 250rpm.



“Prima Power’s customized turret concept allows the availability of up to 384 tools or 128 index tools simultaneously in turret, which practically eliminates the tool setup completely”, says product manager Antti Kuusisaari and continues: “A new option is the Intelligent Ram which shortens tool change time and increases the number of tools in turret and especially that of index tools. More value can be added to the end product using special tools for tapping, bending, roll forming, marking etc.”

New Hole Check system increases process reliability in unmanned production. The system checks the punched holes, when necessary, and informs the operator if it is missing. This might happen if the tool is damaged for some reason.

A further option is the high-precision, indexable servo-electric 200 kN upforming unit for high and complex forms.

State-of-the-art fiber laser cutting

Combi Genius combines the benefits of punching performance with the latest in fiber laser cutting, raising the productivity of the highly versatile integrated manufacturing concept to a new level.

As the laser source, a new Prima Power CF fiber resonator of either 3 kW or 4 kW can be chosen to provide higher speed and quality cutting results.

The optimized cutting head, collimator, new transfer fiber and factory tested cutting parameters ensure higher cutting speeds and better quality. As standard, 3 auto adjusted high pressure assist cutting gas lines are included for less setup.

Combi Genius has new advanced systems for monitoring of laser processes to secure unmanned production. Laser Plasma Monitoring (LPM) follows the cutting process quality and restarts the cutting if any problems appear. Lens Condition System (LCS) monitors the cutting lens condition, informs the operator and stops the process before any further damages occur.

Easy to operate - designed for high surface quality



The control unit has one or two displays, and the whole punching-laser cutting process is easy to monitor from the upper display as four cameras have been installed in the cell.

Prima Power's programming system and cell control work in perfect combination and can be linked to the factory ERP system. Operator's daily life is made easy by using innovative Tulus MUPS application, which informs what, when and how different tasks should be performed. Further innovations are new TaskLoader for easy program selection with bar code reader and ToolID system for punching tool verification during setup.

The new Easy Access concept with a movable machine table makes manual loading of all size sheets convenient.

As standard, Combi Genius has two work chutes, one (300 x 400 mm) for fast sorting of smaller work pieces and an 800 x 800 mm chute for larger components. From the chutes the parts are brought next to the machine for manual removal or onto conveyor systems. A 500 x 500 mm work chute is available for removing punched parts. Both part sorting chutes can be equipped with a pallet sorting device under the table.

As requirements for high surface quality are more important than ever, special attention has been paid to this. The Scratch Free system (option) has vertically moving, programmable brushes in front of and also inside the turret. Also, a new brush type on the laser chutes provides smooth part evacuation and prevents the parts' lower surface from scratching.

Automation and safety

Prima Power's well-known Compact Express solution is available for automating loading and unloading. The latest model features faster cycle times and the highly practical system: forklift operator can operate the safety door by using remote control. Compact Express is an excellent solution to automate the precut blank process; its new part escort function on unloading device prevents scratches and provides a nice stack of parts for the next operation.



Full range of automation is available to support unmanned production. Alternatively, the LST system can be chosen for automatic loading, unloading and component stacking. To accomplish the full automation range, LSR robot with FlexiPick gripper and RALC functions make part picking and stacking operations reliable, efficient and fast.

Easy Cover is a new, practical solution for required safety. It surrounds the entire system and protects the environment from stray radiation; yet the construction allows easy performance of manual loading, unloading and maintenance tasks.

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

For more information please contact:

Mr. Antti Kuusisaari, Product Manager, Punching, Combi and Shearing +358 50 541 8237,

antti.kuusisaari@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.