

Prima Power introduces new punching & shearing combi technology

To utilize the almost 30 years' experience of combined punching and shearing technology, Prima power introduces completely renewed Shear Genius models. These new models include the latest new features of the new generation Punch Genius and add many new ideas for shearing and automation. Together all these features provide higher productivity in a compact layout to existing and new customers.

Enhanced productivity is complemented by a totally new industrial design and technology which is also easy to maintain.

High-performance punching

Available maximum sheet sizes for Shear Genius are $3,000 \times 1,500$ mm and $4,300 \times 1,500$ mm, and the corresponding new names are Shear Genius 1530 and Shear Genius 1540.

"New SG comes with servo-electric punching and two different performance suites: Pure meets the targets of efficient production with an attractive price level and Dynamic offers the best productivity and the highest performance on the market. Both of them can be equipped with the whole range of options", says product manager Antti Kuusisaari.

Maximum punching force 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. 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 hole 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 shearing

Shear Genius combines the benefits of punching performance with the latest innovations in shearing process. Automatic blade clearance setting and programmable sheet holders ensure accurate part dimensions. New table and conveyor system inside the shearing unit speed up sorting and new sequences between punching and shearing practically eliminate all process delays.



Easy to operate - designed for high surface quality

The control unit has one or two displays, and the whole punching-shearing process is easy to monitor from the upper display if 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 the 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 for the shear decreases dramatically the blade maintenance time to just a few hours. A safe operation during maintenance provides more regular blade checking and keeps the cutting quality constant.

Since the new shear has scrap sorting system integrated inside the shearing unit, it shortens the layout. New metallic conveyors for the shearing scrap provide reliable and maintenance free operation during unmanned production.

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 the turret, shearing unit and also inside the turret.



Automation and safety

Shear Genius is made for unmanned production and is the most reliable system for this, many times it is also part of the PSBB line. At EuroBLECH 2016 you will see the new Shear Genius connected to the PSBB production line.

New servo driven loading device provides shorter loading cycles and new sheet position measuring system protects the high accuracy when running precut blanks, e.g. from an integrated coil line. The new loading device also has a new optional feature, which makes the gripper rotate. This enables completely new ideas in planning the factory layout and material flow, and also connections to automatic FMS systems.

Part sorting conveyors are now driven by using inverter technology. This provides smoother starts but faster part sorting. This new sorting unit with two EUR pallets can be integrated under the sorting conveyors.

Furthermore, a full selection of automation devices such as SPB part buffer, STS stacking system and PSR stacking robot are available to fulfill different part handling requirements. And for sure, new Shear Genius makes new PSBB lines to be even more productive in all kind of production and production methods.

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

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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.