

The Bend
The Combi
The Laser
The Punch
The System
The Software

Shear Genius® Integrated punching and shearing

Servo electric Shear Genius® SGe

Highest productivity with integrated shearing

The new servo electric Shear Genius® by Prima Power is based on truly extensive experience and the latest technological development: punching technology since 1983, servo electric punching since 1998, integrated right angle shearing since 1987.

Technology with productivity and sustainability

The heart of the new servo electric Shear Genius® SGe is an updated servo electric turret punch press. The right angle shear has a servo electric actuation system of its own, which makes shear movement at the same time both fast and fully controlled; this optimizes productivity. Automatic loading has been integrated, and also part removal and sorting are automatic. All options well known from the E6 punching technology as well as full Shear Genius® automation solutions are available.

The SGe has optimized tool changes; other auxiliary times have been minimized for best production output. Well known features such as automatic clearance setting of blades are included to maintain high part surface quality. Output is 5 - 15 % higher compared with hydraulic models.

The latest version of Tulus® operating system has a new online simulation view for follow-up and restart. Integrated tool library with NC Express™ program-

ming and servo electric punch makes tool setup and adjustment easy and fast.

From agile one piece production...

First of all, Shear Genius® can be operated as a versatile, high performance turret press. Fast setup, high tool capacity and convenient manual loading and unloading make it a perfect machine tool also for one piece production.

... to full-scale mass production

In serial production the Shear Genius® benefits can be utilized to the full. The process starts with automatic loading and ends with automatic removal and sorting of sheared components. Before that, punching, forming, bending, tapping and marking have been performed, automatically, as programmed.

Of course, the Shear Genius® need not operate as an individual cell. There are numerous alternatives to automate the material flow both on the loading and unloading side; e.g. a coil line connection is available. Further, the Shear Genius® can be integrated with a simple raw material storage, or function as central unit in a Prima Power flexible manufacturing system (PSBB or Night Train FMS®).

...always with optimized results ... for productivity and sustainability

In line with Prima Power's Green means® philosophy, the fully servo electric Shear Genius® SGe meets the highest requirements for productivity, equalling high quality and low cost of components fabricated, due to high accuracy and sheet utilization, low energy and maintenance cost and a high level of automation. At the same the technology is state-of-the-art in terms of sustainable manufacturing.



Main technical data

Ram force	30 tons		
Max. tools in turret / index tools	200 / 80		
Hit speed, max.	1,000		
Positioning speed, max.	150 m/min		
Index tool rotation speed	250 rpm		
Connection requirement	3 x 25 A / 400 V		
Average energy consumption	5 kW		
Material thickness, max	Al	Mild steel	Stainless steel
Punching	8 mm	8 mm	8 mm
Shearing	5 mm	4 mm	3 mm



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.

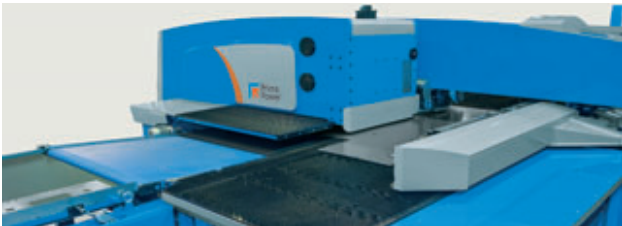
And you make better sheet metal components at lower cost.



Advantages of the servo electric SGe

- * Lower energy consumption
- * Lower maintenance costs
- * High sheet utilization

- * Higher productivity
- * Advanced bending and forming capabilities with electric stroke



Programmable sheet holders and automatic clearance setting contribute to high component quality.

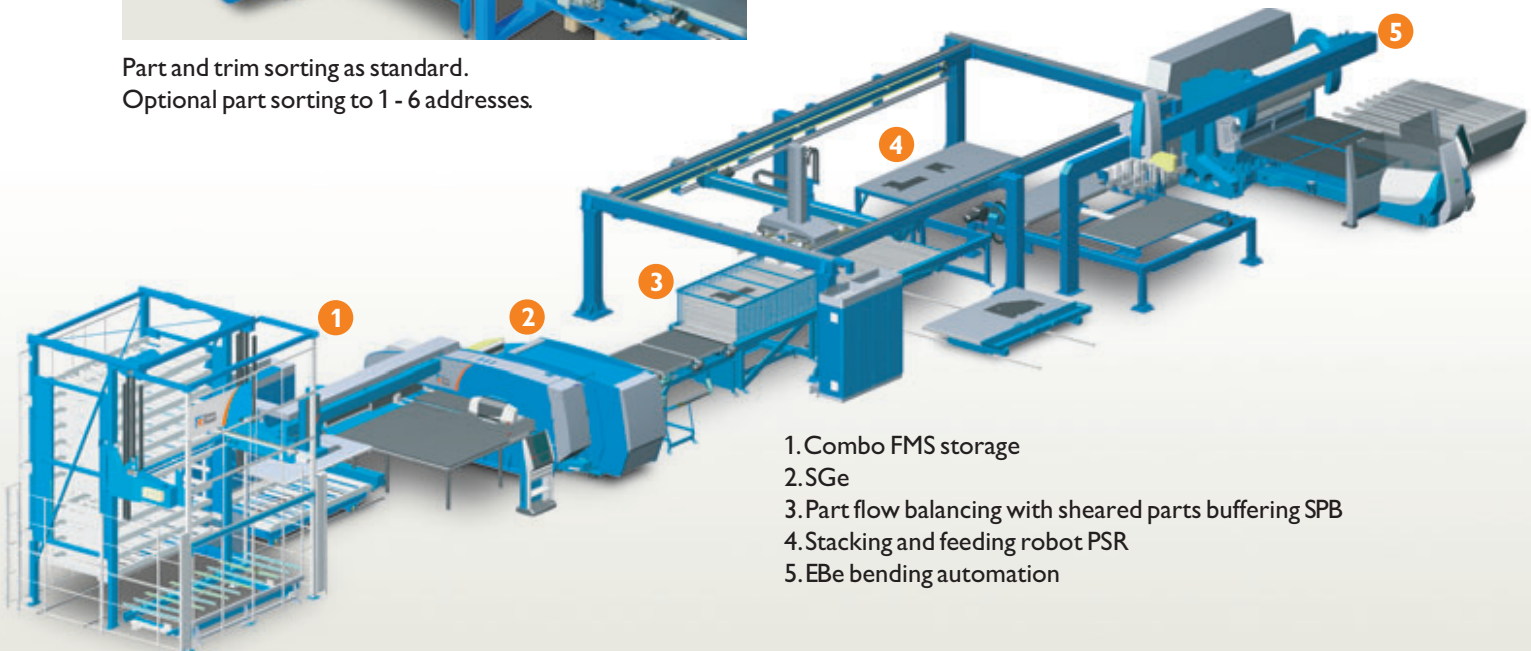


Automated part stacking up to 40 addresses.



Part and trim sorting as standard. Optional part sorting to 1 - 6 addresses.

Shear Genius® is the first step towards an automated production line (PSBB) or a full scale factory wide manufacturing system (FMS).



1. Combo FMS storage
2. SGe
3. Part flow balancing with sheared parts buffering SPB
4. Stacking and feeding robot PSR
5. EBe bending automation

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