Prima Power LPe6x – Integrated punching and laser cutting
The new LPe6x punching – laser cutting cell by Prima Power makes this flexible and productive technology available on an attractive investment level. The cell includes the servo electric Prima Power E6x turret punch press and the Prima Group’s own CX type CO₂ laser source with 2.5 or 3 kW laser power according to application. Working area is 1,500 mm x 3,000 mm.

**Modern punching capacity**

The inherent benefits of servo electric include energy efficiency, versatility and accuracy and low maintenance cost. Further energy savings are achieved through a new idle operation mode, into which the turret punch press switches automatically if not operated for a while.

As for versatility and efficiency, for example in forming servo electric technology provides top level accuracy in the positioning of the punching cylinder. Additional work stages like marking and tapping can be easily performed using optional equipment.

In addition to standard punching applications, complex fabrication tasks can be performed. The height of forms made using forming tools can be adjusted directly from the machine screen and saved in the tool library of the Tulus® user interface. The number of rotating tools can be increased with indexable Multi-Tool® technology. This simplifies programming and shortens set-up times. The new quick-change tool holder solution has the same effect.

Maximum ram force of 17, 20 or 23 ton can be chosen. This, together with the selection of different power level for the laser source allows cost efficient and economical sheet metal fabrication. Index tool rotation speed is 133 rpm and maximum nibbling speed 700 hpm.

Easy manual loading, automatic closing of clamps and the 500 mm x 500 mm work chute add considerably to fabrication efficiency. Brush segments rising from the table protect sensitive materials moved over the dies. Automatic clamp setting makes daily machine use faster and easier as well as improves safety.

**High-performance Prima Power laser cutting**

LPe6x is equipped either with the Group’s own standard CX2500 or the CX3000 laser. It can cut material up to 8 mm thickness with quality and efficiency.

Both lasers feature low energy consumption. The energy saving mode function, developed already several years ago, is beneficial in combination with the servo electric punching system.

The well balanced laser power available offers most economic fabrication for a wide range of materials.

**Flexible automation with Compact Express**

The LPe6x cell can be equipped with Compact Express automation for loading and unloading. Sheets are loaded and unloaded by equipment which, true to its name, is highly compact, adding practically nothing to the floor space requirement of the basic machine. Compact Express is fast and easy to install and can also be retrofitted as an upgrade.

Depending on the fabrication task at hand, the most suitable one of four different ways of operating can be chosen: automatic loading and unloading, automatic loading and manual unloading, manual loading and automatic unloading, or manual loading and unloading.

The equipment is integrated close to the machine, but still manual operations are easy as they can be performed on the free side of the machine. Material flow is practical, and pallets can be loaded and components removed from them while the machine operates. The machine can be installed against the wall or in a corner.

Equipped with Compact Express the cell can also be connected to Combo FMS® or Night Train FMS.

**Automatic part handling – LST**

Also component handling can be automated by choosing the LST system which picks components from the machine and stacks them into programmed positions in the palletizing area. Further, the LST features an automatic compact skeleton removal function, and the entire working cycle of the machine becomes automatic. The LST can be equipped with additional tables and integrated with the Combo FMS® and Night Train FMS®.

Material handling capacity is available for sheet thickness range 0.5…8 mm and a maximum sheet weight of 200 kg. The gripper of the standard LST construction has 1,200 mm sideways movement for easy utilization of the whole stacking area. The LST can also be utilized for robot assisted last cut RALC-Lite.

The equipment is easy to program with the NC Express™ programming system by Prima Power and fast stacking management is achieved by using the Tulus® user interface.
LPe6x

17, 20 or 30 ton servo electric punch press
Prima Group’s own CX type CO₂ laser source with 2.5 or 3 kW laser
SU6 sorting module
Automatic laser scrap sorting
Material loading table
Part stacking table
Skeleton unloading
Quick change station
Tulus® Software user interface

Compact Express & LST:
Max table capacity 3,000 kg
Max sheet weight 200 kg