



## Elevators & Escalators

**Manufacturing Solutions** 

## Elevate your business and reach a new level

The sheet metal components for this sector are characterized by medium-large dimensions, aesthetic and decorative materials for the visible parts and standard materials for the structure. All Prima Power technologies combine high productivity and flexibility, so they are also suitable for any type of component. Prima Power range of sheet metal processing machines and systems cover all steps of sheet metal working: laser cutting, punching, combined punch/shear and punch/laser, as well as automatic bending.



#### THE SOFTWARE

The Prima Power software suite is a true ecosystem that provides the ideal solution to assist the customer in all working phases: from the production planning, to the off-line programming, the production data collection and the reporting. Prima Power software is developed for any customer use including on-board, off-line and on mobile devices.

#### THE SYSTEM

Prima Power offers multiple configurations of Flexible Manufacturing Systems that combine the best automated bending technology with various punching and cutting solutions, storages and buffer systems. Different machines in one single integrated solution to meet your production needs.

#### THE BEND

The Prima Power wide range of Panel Benders offers all the different production solutions through modern, sustainable and servo-electric technologies with semi-automatic, fully automatic as well as stand-alone cells or multi-technology lines.

#### THE COMBI

Integrated Punching & Laser Cutting with servo-electric punching technology for a quick response to production orders. The Combi is the most versatile machine in Prima Power product range thanks to the high degree of productivity reached by the speed of the punching machine and the versatility of the laser.

#### **THE SHEAR**

Integrated Punching & Shearing for better part quality thanks to no nibble marks and savings in raw material with consequent elimination of skeletons and less punching scrap.

#### THE PUNCH

State-of-the-art in servo-electric punching technology with perfect combination of energy saving and ergonomics for greater accuracy and productivity.

#### THE LASER

2D laser machines for a broad range of cutting applications. Prima Power traditional laser source based on CO2 and the innovative fiber technology, and are developed and produced in-house or are the result of a strict collaboration with the most important manufacturers in the field.

#### **THE PRESS**

Fast, accurate and efficient servo-electric for medium power as well as hydraulic press brakes for high tonnage market to satisfy different customer needs without loosing in quality and accuracy. Both products can be integrated with a Robot in systems, or as stand-alone solution with automatic tool change, and they can use the best CNC and off-line programming technologies available in the market.

## The mobility leads you upwards,

## elevators and escalators lead you upstairs







The reconstruction in the cities and their consequent expansion with a vertical increase is a driving key element in the elevator and escalator market sector, which is expected to grow rapidly, reaching new challenging targets in the next ten years. This is due to a solid need, to lack of space and to the greater focus of the private and public sphere towards an augmented investment for the improvement of infrastructures at public spaces like schools, shopping malls, railway stations, airports, hospitals, rest homes etc.

Therefore, safety, product life cycle, global product sustainability, new materials, design and cost reduction are among the main drivers of the elevator and escalator market.

# Enhance your products with a sustainable and an efficient process

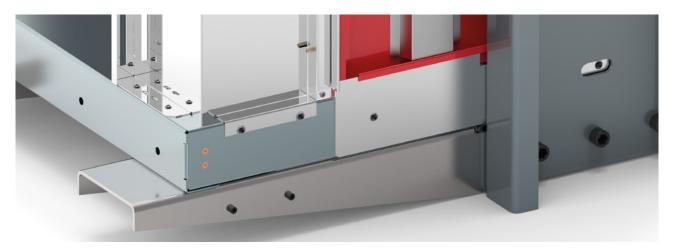
The attention we pay to our customers' needs also extends to environmental sustainability with advanced technological solutions that ensure a lower environmental impact. That's why all Prima Power technologies are designed and developed according to the "**Green Means**®" concept, which combines productivity and ecological commitment. Working with more efficiency leads to:

- low electric consumption in a single worked part thanks to an efficient organization of the material handling as well as of cutting processes and bending;
- reduce the environmental impact in favour of a sustainable production that does not require highly polluting activities as welding, washing and painting;
- cut the cost by using pre-finished materials and high-level machines that avoid any esthetical damage, as well as by integrated technologies for high realibility;
- obtain better products at lower costs thanks to the programming efficiency and the high precision of the machines that eliminate waste.

## Elevator manufacturing process. From design to the market



The automatic 3D programming in today's market offers great benefits for manufacturers who are looking for achieving quality and reducing the costs of the product; in fact, it allows better optimization of the operations and quick correction of possible mistakes during the offline programming, thus avoiding wasting time during the process. The flexibility of Prima Power machines, important value in the prototyping phase of elevators and escalators, is achieved by several features and integrated technologies, which allows processes like punching and shearing combination, small forming and bending, marking, threads holes, smash bends, engraving, cutting, supported by parametric programming.



For small and medium sized companies, our punching machines and our wide range of press brakes, the basic and most common equipment in this sector, provide high flexibility at excellent cost/efficiency ratio. Our combined punch-shear machines can boost productivity in elevator and escalator large manufacturing need.



The automatic Panel Benders (stand-alone or connected in line) grant higher productivity with the best bending quality. Different bending sizes with wide possibilities of configuration can guarantee the solution for various applications to the user. Our combined punch-laser solutions offer the capability to punch, form and laser cut contours in a unique process for enhanced part quality, flexibility and high productivity.

**Application fields**: all panels for platform, cabin walls, ceilings, sliding doors, as well as escalators' kickplates, outer faceworks, balustrades and stopping panels.

# Automate your business with smart software and parametric programming in step with technology

The ever-updated suite of software products from Prima Power provides a **complete set of solutions covering all stages of sheet metal processing**, from the connection to ERP systems up to the finished product and through the collection of production data.

All Prima Power software products are in line with the underlying concepts of the Industry 4.0. Therefore, Prima Power software provides the ideal solution to assist you in all production phases, allowing its use through off-line, on-board and mobile devices.

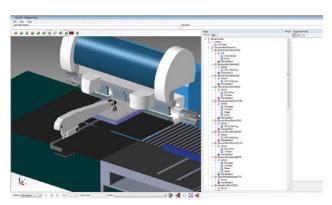


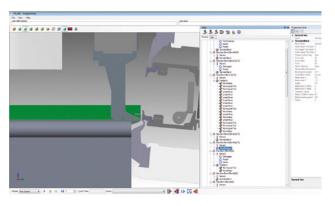
Master BendCam is the modern and automated CAD-CAM for all Prima Power panel benders and uses advanced 3D simulation for controlling the feasibility of parts before starting the real manufacturing process. It uses interactive graphic techniques to simulate the bending process in a realistic way, generating optimised and safe programs.

Master BendCam can be supplied with the innovative Parametric Function, a fundamental function for elevator and escalator market as it manages all standard bending cycle macros, manipulator repositioning and ASP position. This additional module enables the automatic stretching of the width and the length of the part. The parametric programming allows bending or punching parts with the same profile/shape but in different sizes with the benefit of a customized production.

Furthermore, the parametric gives the possibility to choose between "script" or "CAM" stretching: the script is faster and for simple parts as X and Y dimensions are directly applied to the child program, while the CAM does an additional simulation - including collision check - before adding the program to task list.

The Parametric package includes one on board and one offline license (no extra dongle needed, just software upgrade); additional offline licenses can be purchased separately.







Prima Power machines are equipped with servo-electric technology: faster, more precise and greener but can also provide hydraulic proposals. The advantages of Prima Power technology are:



99,9% of automated operations



10% greater productivity



Up to 99% of sheet utilization



Great precision and repeatability



60% energy saving



-64% of CO<sub>2</sub> emissions

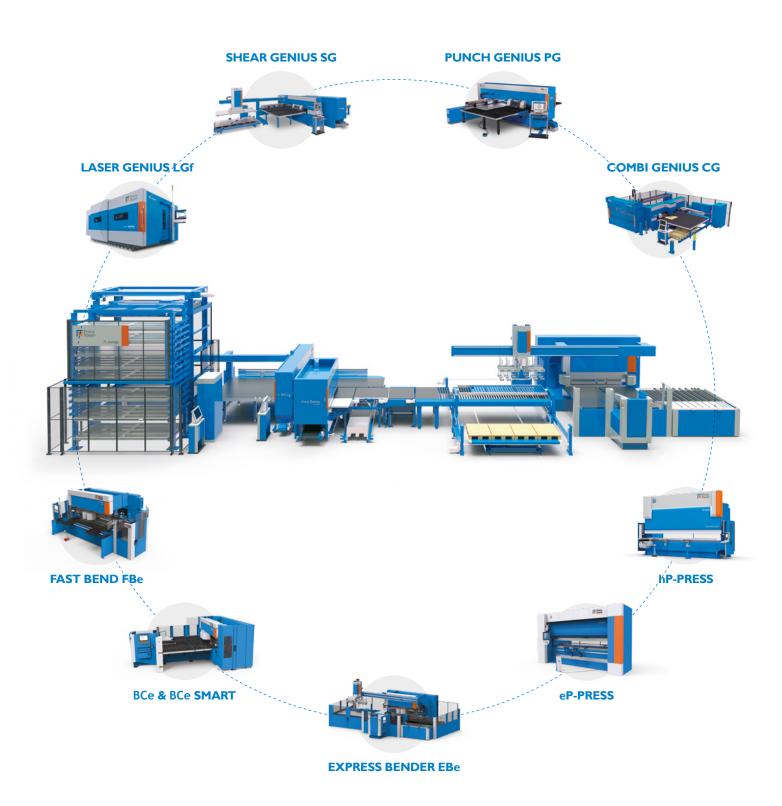


Excellent reliability and less maintenance costs

Our professional services complement our advanced technology and are the key to better productivity and higher profits.

# Prima Power All in One. The Only One.

Prima Power offers a comprehensive range of products and services for sheet metal working and laser cutting. A true all in one partner. The only one to develop all the essential components of its products: numerical control, automation, laser head, and even our own fiber laser source.



### **A Global Footprint**

Prima Power is present in 5 continents, with branches or subsidiaries in 28 countries worldwide. The sales and service network supports our customers wherever they are with distributors and agents in over 80 countries.



