

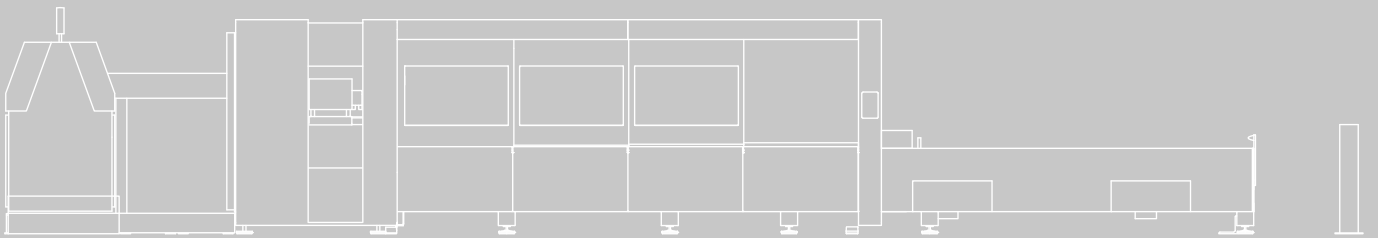
**Bystronic**



# efficiency in laser cutting

## **BySpeed with ByLaser 6000**

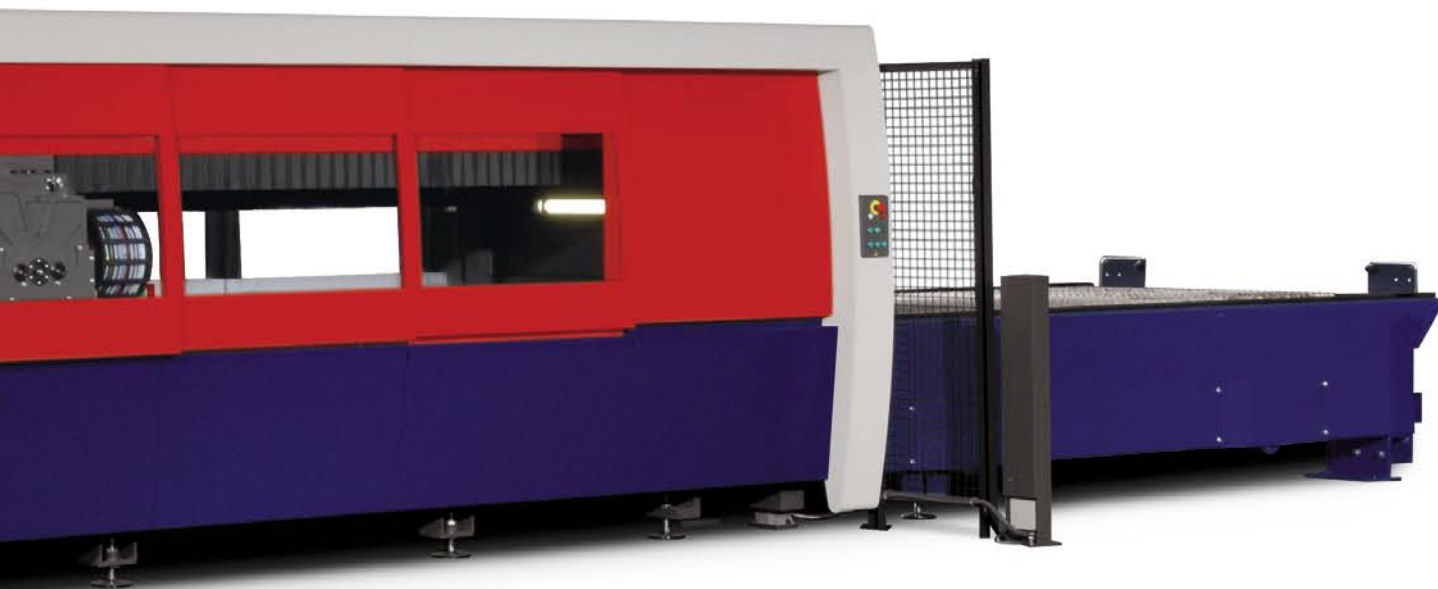
Dynamic power package for the highest  
reliable output of parts



# BySpeed with ByLaser 6000 – dynamic, powerful, indispensable

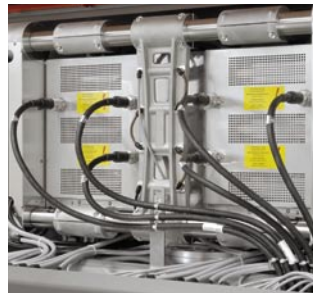
BySpeed with ByLaser 6000 is the dynamic power package for the highest reliable output of parts. This laser cutting system is impressive with its pure dynamics and concentrated six kilowatts of power, which is achieved with low operating costs. This is made possible by means of a highly efficient wear-free semiconductor power supply and magnet-mounted compressors. BySpeed's unique productivity across the entire spectrum of sheet metal thicknesses is due to the newest cutting technologies, highest speeds, lowest cutting downtimes, and its outstanding process stability. These features make the BySpeed indispensable for modern sheet metal processing.





# Important components

The perfect interplay of individual components that are proven and attuned to one another forms the basis for a first-class machine system that provides maximum customer benefit. "Everything from a single source" is the successful Bystronic principle, which was also applied to the BySpeed: All system elements essential for process stability come from our own development and ensure a convincing solution that provides maximum customer benefit.



## Laser source ByLaser 6000

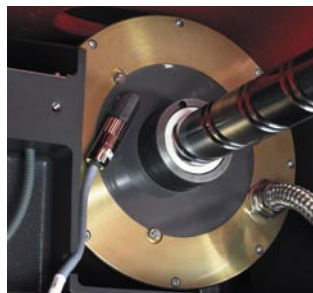
The ByLaser 6000 delivers 6 kilowatts of power to the machine and guarantees a consistently high beam quality.

Its impressive qualities include extremely low operating costs thanks to its highly efficient wear-free semiconductor power supply with high degree of efficiency and the magnetic-mounted and thus also wear-free compressor.



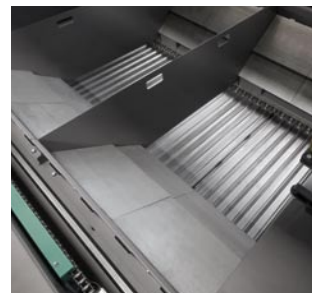
## Cutting head

The cutting head optimally supports the cutting technologies used such as the extremely effective controlled pulsed plunging (CPP). Thanks to the quick-change system, the cutting head can be replaced easily within a few seconds. Cleaning of the nozzle occurs automatically.



## DHM drive

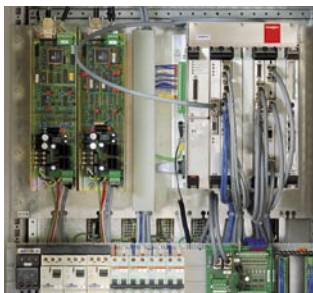
With the development of the unique direct helical motor (DHM) concept on the x/y axes, we have succeeded in attuning all relevant parameters optimally. With just a fraction of the magnetic surface of conventional linear motors, equivalent drive power is generated.



## Parts conveyor

For the easy and convenient discharge of small parts and debris from the cutting area, an extremely robust parts conveyor is used with the BySpeed.

Thanks to the clever guard plate system, the machine frame is protected from damage. Individual guard plates can be created and exchanged easily on the laser cutting system.



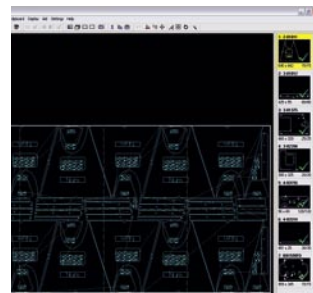
#### **ByVision high-performance control**

Bystronic's ByVision high-performance control sets standards with respect to simplicity and speed. Even large cutting plans can be transferred to the machine within a few seconds. The hardware components are located in a single, compact box, which can be exchanged for another one during maintenance work in the shortest possible time.



#### **Operator terminal**

On the touch screen of the operator terminal, precisely the functions that are required at a given moment are made available. Thus the menu operation is easy and user-friendly. The terminal and the user interface are designed strictly according to ergonomic standards.



#### **Bysoft CAD/CAM software**

Bysoft is the CAD/CAM software package developed by Bystronic for cutting and bending. Optimally attuned to Bystronic systems, this software ensures the fullest possible implementation of the cutting and bending technologies used. Bysoft is user-friendly and practically oriented and it supports work preparation ideally with quick programming. The user's work becomes easy thanks to need-oriented functions and a system structure that extends across all software modules.

## Expansion possibilities

- Additional transverse parts conveyor that conveys small parts and debris into the container provided next to the machine
- Handling and automation solutions, especially automatic loading and unloading, and fully automatic sheet storage
- Tactile scanning when cutting nonconductive materials

## Service & Support

Bystronic's proven technology and extensive expertise produce systems that are extremely reliable. With its global network of specialized service and training experts and comprehensive spare parts inventories in the local markets, Bystronic guarantees that it will support what it sells. In addition to maintenance, spare parts delivery, and repair services, customers are also offered training programs as well as hardware, software, and operational support so that they are in a position to get the most from their machine investment.

## Areas of application

The BySpeed is sensational thanks to its unique dynamics and impressive positioning speeds, which translate into the shortest part times. With the latest cutting technologies, this system achieves the highest reliable output of parts across the entire spectrum of sheet metal thicknesses, and provides the user with a significantly better competitive position. With the scanning mode, for example, you can cut up to 350 rectangles per minute.



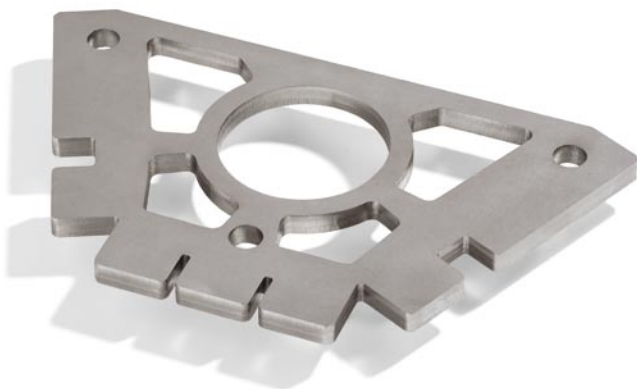
**Automation**  
Guide rail  
3 mm, aluminum

**Food industry**  
Peeler  
4 mm, stainless steel



**Commercial vehicle construction**  
Strut  
10 mm, mild steel





### Construction equipment industry

Support plate  
15 mm, stainless steel

### Farm machinery industry

Chain wheel  
25 mm, mild steel



## Customer benefits

- Unique productivity across the entire spectrum of sheet metal thicknesses.
- Precisely cut components due to the high-quality machine concept and an optimal cutting process.
- Quick table change reduces cutting downtimes.
- Great process stability thanks to the use of the latest cutting and punching technologies.
- Optimal access and maximum security across the entire working area.
- Ergonomic and safe operating concept thanks to encapsulation and easy-to-use, robust safety door.
- Easy design of the cutting head permits quick focal width change.
- Long-lived product thanks to high-quality components that are optimally attuned to one another and tested to ensure a long life span.



This brochure may show parts that are not standard equipment, but are available as options. For the better visibility of machine details, some safety covers may have been opened or removed for these pictures. The right to make changes to dimensions, construction, and equipment is reserved. For technical data, see separate data sheet.

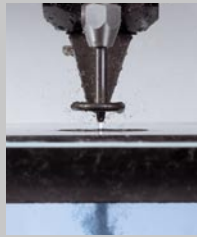
Bystronic is a worldwide active supplier of application-oriented systems and services for the laser and waterjet cutting processes, as well as bending: economical, high-performance, reliable.



**Laser cutting**  
Laser cutting systems for the innovative processing of a wide variety of materials and geometries



**Bending**  
3-point and air bending machines for high-precision working of sheet metals



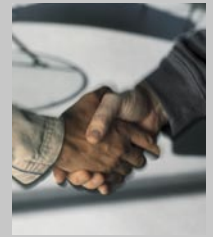
**Waterjet cutting**  
Waterjet cutting systems for cutting metals, glass, synthetics, ceramic, and many other materials



**Automation**  
High-performance handling and automation solutions from simple loading systems to fully automated laser production cell with integrated storage system



**Software & Control**  
User-friendly programming and operation with requirement-oriented application programs and interfaces to CAD and ERP systems



**Service & Support**  
Competence and customer proximity with after-sales support available worldwide: local contact persons, prompt delivery of spare parts, and professional training courses

## Your contact

[www.bystronic.com](http://www.bystronic.com)