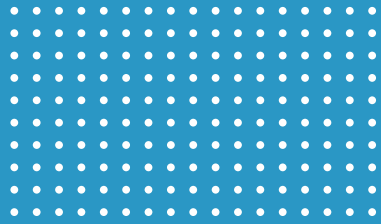


*Fiber laser  
cutting machine*



# TAURUS

EXCEEDING LIMITS



# TAURUS

## EXCEEDING LIMITS

Taurus, LVD's large-format laser cutting machine, answers the call for processing extra-large sheets with a unique modular design. As its name implies, Taurus is rugged and hardworking, producing high-quality straight or bevel cuts over the entire cutting area at optimal speeds.



### CUTTING HEAD

An advanced cutting head with automatic focus positioning and zoom optics allows the use of optimum cutting technologies for all types of metals.

*“With Taurus you can cut parts on one section of the table, while loading or offloading on another.”*



## **LARGE-SCALE ADVANTAGES**

Taurus is a modular system that can be configured to meet your needs. The machine bed length begins at 10 m and can be expanded in increments of 4 m to a maximum of 42 m. The machine accommodates extra-large or multiple sheets. It improves sheet utilisation and nesting efficiency and enables the user to cut parts on one section of table, while loading/unloading on another, keeping downtime to an absolute minimum.

## **ACCESSIBILITY**

Only the gantry has an enclosure, which make Taurus extremely accessible. The operator has use of two touch panels for convenient access to the control at all times. The cutting zone has a detachable front panel for maintenance, check-ups, parts evacuation. A door at the side ensures quick access for basic operator tasks. With a handheld control unit the operator can safely move all axes for setup or to load the nozzle changer.



## BEVEL CUTTING

Taurus can be equipped with state-of-the-art bevel head technology, fully torque motor-driven with ultra-high positioning accuracy ensuring constant and precise bevel cutting in a wide range of applications. Bevel cutting or 2.5D cutting means the cutting head is not only cutting with a straight angle on the material surface, but can be tilted to a maximum 45° in all directions.

The bevel cutting option offers a fast and cost-effective way to prepare material for subsequent welding operations or to create geometrical shapes.

## HIGH DYNAMICS

The mechanical design and drive system ensure high machine dynamics in large-format cutting.

## Why Taurus?

- High machine dynamics in large-format cutting thanks to mechanical design and drive system
- Modular laser system (10 to 42 m) for extra-large or multiple sheets
- Easy and secure access to entire working area for maintenance, check-ups and parts evacuation
- Minimal downtime cutting parts on one section of the table while loading/unloading on another
- State-of-the-art cutting head with automatic focus positioning and zoom optics
- Advanced bevel cutting option
- Powerful CADMAN-L software available for full use of the cutting technology



## AUTOMATIC NOZZLE CHANGER

An optional automatic nozzle changer has the capacity to hold up to 30 nozzles in a turret-style magazine positioned close to the cutting head. A camera inside the nozzle changer checks the nozzle diameter, alignment and condition.

The nozzle changer for a Taurus with bevel option can accommodate both straight and bevel cutting nozzles.

## ADVANCED CADMAN® SOFTWARE

A good production flow requires seamless coordination between hardware and software. Therefore, investing in the powerful CADMAN-L software is more of a necessity than a luxury. For bevel cutting, an optional plug-in allows easy import of 3D parts from Solidworks, Solid Edge and Inventor.

Initiated from CADMAN-JOB, CADMAN-L software imports the correct unfolded parts from CADMAN-B, examines the geometry and the cut path. The software optimises part nesting, adds cut lines for easy scrap removal and applies common line cutting to save processing time and material. It will also automatically modify the cut path for collision avoidance.

CADMAN-L includes process parameter tables for material type and thickness, reducing the risk of operator error and guaranteeing the use of optimal cutting technology.

## CUT WITH CONFIDENCE

A range of built-in features allow you to operate the Taurus with confidence:

- Scanners allow secure movement of the gantry to prevent collisions with operators or external obstacles.
- Multiple Lazer Safe curtains and covers around the gantry prevent laser light from escaping the cutting zone.

# SPECIFICATIONS

## TAURUS

### MACHINE SPECIFICATIONS

Machine bed length	10 up to 42 m, in increments of 4 m	
Maximum cutting length	Straight cutting	Bevel cutting
X-axis min - max	9,900 - 41,900 mm	9,500 - 41,500 mm
Y-axis	3200 mm	2600 mm
Z-axis travel	200 mm	300 mm
Maximum sheet weight on table	700 kg/m	
Maximum positioning speed X-Y	100 m/min	
Maximum positioning speed Z	50 m/min	
Repetitive accuracy	+/- 0,025 mm	
Positioning accuracy*	+/- 0,050 mm	

### MACHINE DIMENSIONS (excluding filter and chiller)

Length	modular, from 14 up to 46 m
Width	7100 mm
Height	2200 mm (filter 4000 mm)

### IPG LASER SPECIFICATIONS

Maximum performance straight cutting	6 kW	8 kW	10 kW	12 kW
Mild steel	25 mm	25 mm	30 mm	30 mm
Stainless steel	25 mm	25 mm	30 mm	30 mm
Aluminium	30 mm	30 mm	30 mm	30 mm
Copper	15 mm	15 mm	15 mm	15 mm
Brass	15 mm	15 mm	15 mm	15 mm

### OPTIONS

Bevel head  
Nozzle changer  
Outside filter

Specifications subject to change without prior notice.

\* Achievable workpiece accuracy depends on the type of workpiece, pre-treatment and sheet size, as well as other variables. According to VDI/DGQ 3441.