

# Lasertube LT9 COMBO





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## A combined system without compromise

**LT9 Combo** is a combined system designed for laser cutting of tubes and steel sheet in which extreme flexibility and excellent performance come together without any compromise. It is a real lasertube that can be amortised also through steel sheet processing.

The use of linear motors guarantees dynamic performance that place the **LT9 Combo** in direct competition with the best systems available on the market, both as regards tube and steel sheet processing, exploiting the new potentials offered by fibre laser sources.

Flexibility, a distinctive feature of the “Combo” systems, designed and developed by ADIGE-SYS, is confirmed by the rapid passage from tube to steel sheet, by the variety of configurations available and by the wide range of applications also thanks to the use of fibre laser sources.



# Performances and Flexibility



## PERFORMANCE HIGHLIGHTS

Overall reduction of piece cost obtained thanks to:

- higher cutting speed of fibre laser on medium/thin stainless steel, aluminium and steel;
- better dynamics of the machine equipped with linear motors;
- higher rotation and traversing speed of tubes/profiles.

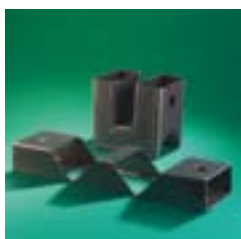
## FLEXIBILITY

- rapid changeover from tube to steel sheet and vice versa in only a few seconds;
- wide range of tube sections, from 16 mm to 225 mm dia. can be processed;
- vast range of lengths can be handled up to 12.500 mm, both in loading and unloading condition;
- machining of large steel sheets and/or complete automation of loading/unloading cycles, exploiting the various configurations available;
- processing of high-reflecting materials with fibre laser to penetrate market sectors unfamiliar with laser processing.



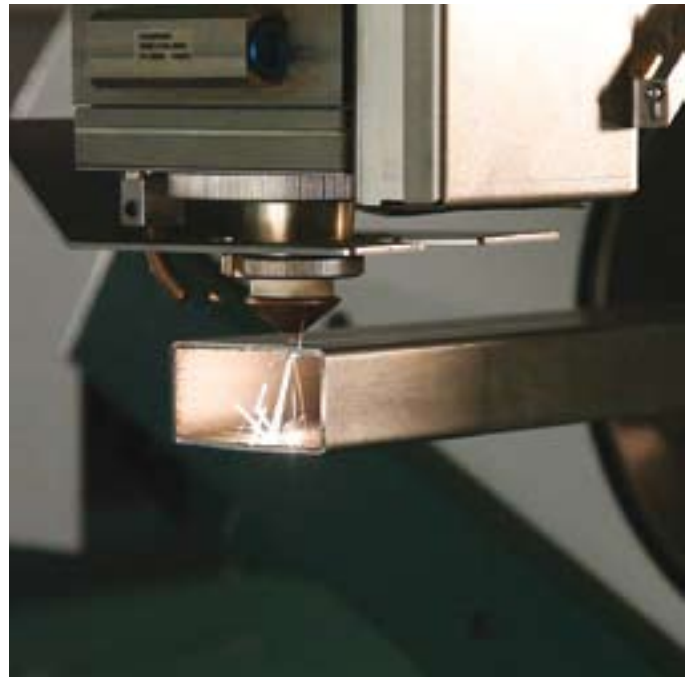
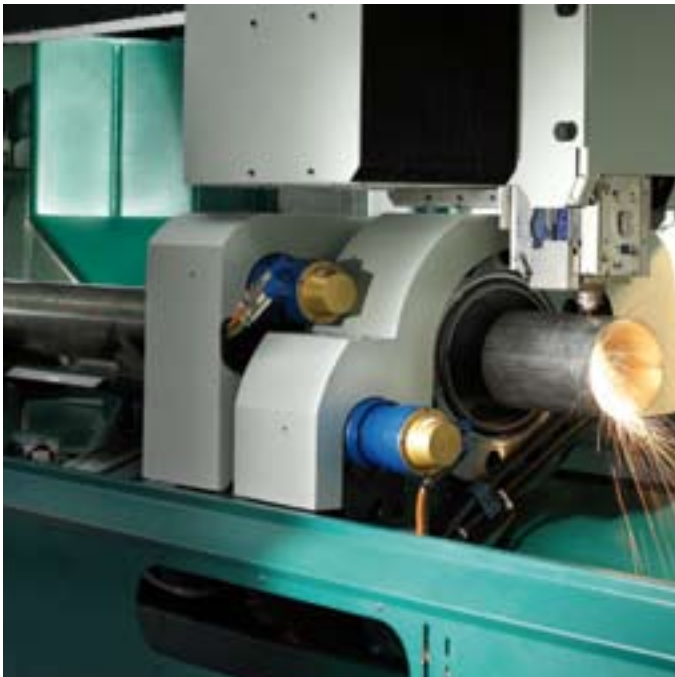
## WHAT ARE THE ADVANTAGES?

- **installed power and electric energy consumption** reduced by a half to a third by comparison to traditional laser sources;
- **higher beam quality delivers** outstanding performance levels, comparable if not far superior to CO2 sources of much higher power;
- **reduction of the maintenance costs** due to the less complex design of the laser source and the optic path;
- **processing of highly-reflective materials** such as copper and brass, opening up new potential markets that until now have been excluded from the laser cutting process.



# Characteristics

## Two systems in one



### TUBE PROCESSING

- **LT9 Combo** is a unique system designed for fully automatic laser processing of tubes and profiles with various sections and lengths exceeding 12 m both in loading and unloading conditions.

LT Combo holds an undisputed record as regards processing speed and efficiency.

- **Zero scrap.** The movement of both chucks allows the tube to be machined along its entire length without a front trim or rear scrap end.

- **High accuracy.** The tubes being processed are supported by two self-centering mandrels with eight jaws that guarantee a high processing accuracy. A precision range-finder helps to compensate the faults of the raw material.

- **Patented universal supports.** The tube is fully supported on the loading and unloading lines by universal supports which adapt to the different tube sizes without the need for any exchange mechanical parts.

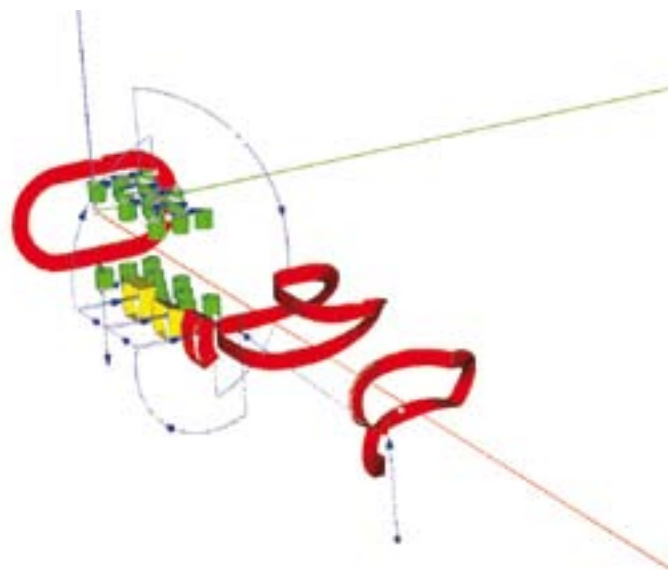


## SHEET PROCESSING

- Performances:** mild steel up to 20 mm with excellent quality, aluminium cutting (series 6060 and 1050) and stainless at high speed, copper and brass cutting up 5 mm.
- Large sizes:** Processing of large steel sheets with various configurations up to 3000 x 9000, but always compatible with the tube machining; changeover time from sheet to the tube working and vice versa less than 2 minutes.
- Cutting Parameters:** the fully proven cutting technology contained in the parameters data base supplied with LT Combo Fibre evolves from over 10 years experience in the laser cutting applications by ADIGE-SYS technicians.
- Un-attended working of the sheet:** automatic sheet loaders and tower storage systems offer the possibility of lights-out operation.



# Artube, the difference



## SOFTWARE TO DRAW, PROGRAM AND MANAGE THE TOTAL PROCESS

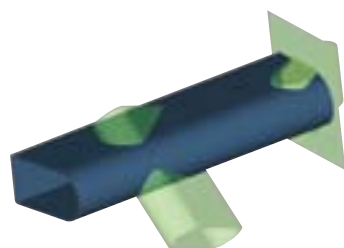
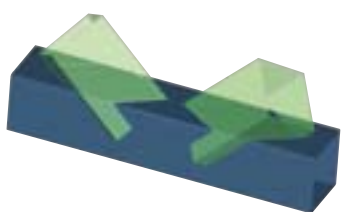
Artube is a three-dimensional, parametric, CAD-CAM package designed, developed and dedicated for tube applications. It manages the complete process from initial concept through to the creation of the job program in machine language. The marriage of the Artube programming software with the laser systems of BLM GROUP amplifies the productivity potential.

## IMPORTATION

Artube can import external file drawings in iges, step, x\_t formats.

## E-SERVICE

Artube is supported by tele-services or on-line. Updates and new modules can be downloaded via the internet.





## ASSEMBLER

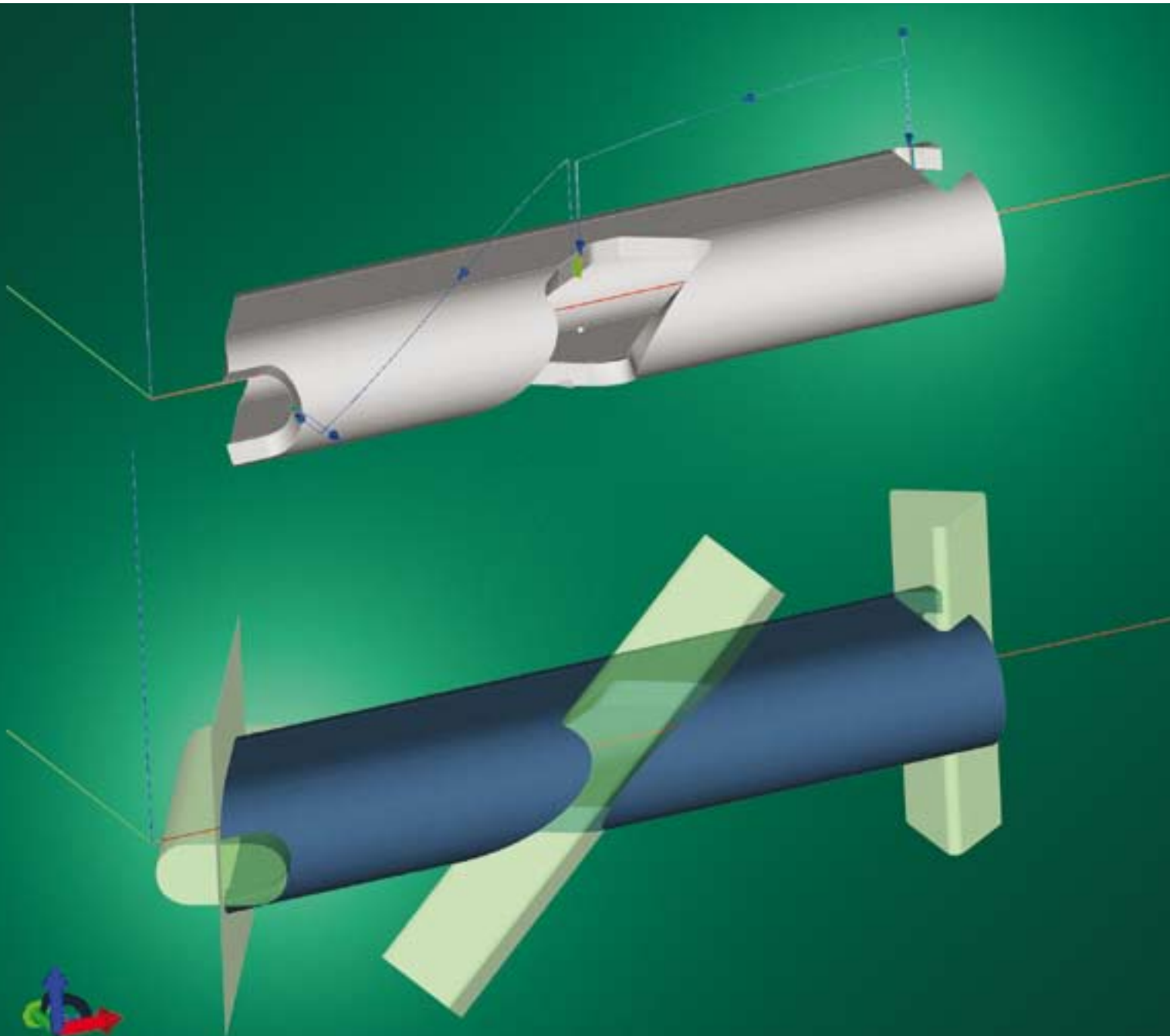
Three-dimensional parametric CAD-CAM software package that simplifies the drawing and the management of complex structures and frames.

## BEND CUT

A library of creative folding joints allowing frames to be designed and constructed in a more intuitive way to simplify welding jigs, welding and final assembly.

## OPEN PROFILES

Artube can also process open profiles such as channel, angle, flat and special sections or profiles.



# Technical Data

## TUBE

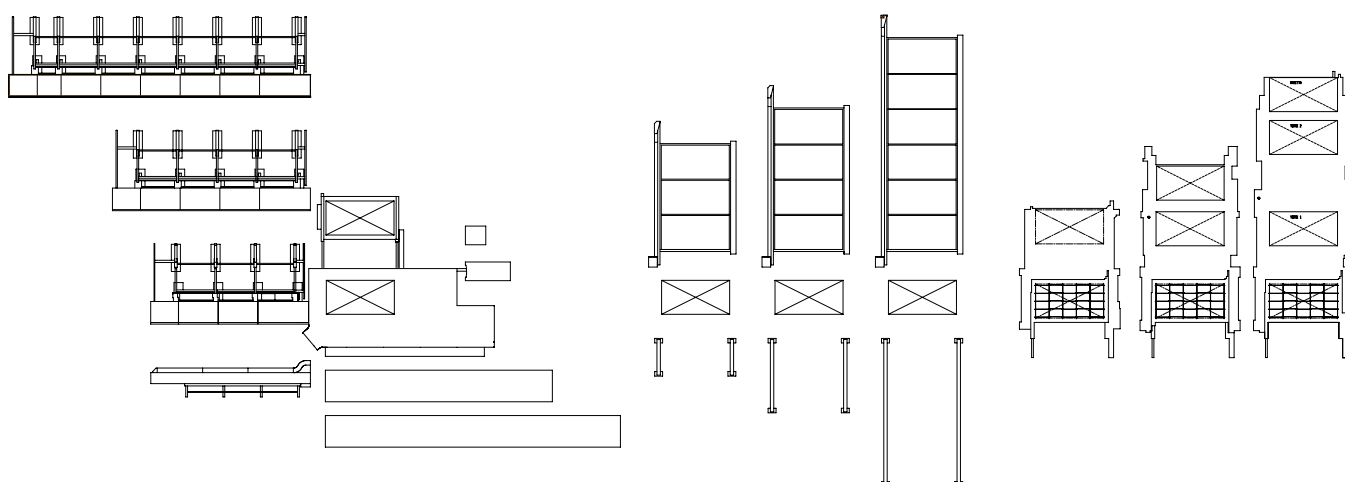
Round tube	min 16 mm - max 225 mm
Square tube	min 16 x 16 mm - max 160 x 160 mm
Rectangular tube	min 16 x 16 mm - max 200 x 100 mm
Bar length	6500 - 8300 - 12500 mm
Discharge length	6500 - 9500 - 12500 mm
Tube weight	200 Kg (35Kg/m on 6500 mm)
Special sections	channel, flats, angle and other sections on request

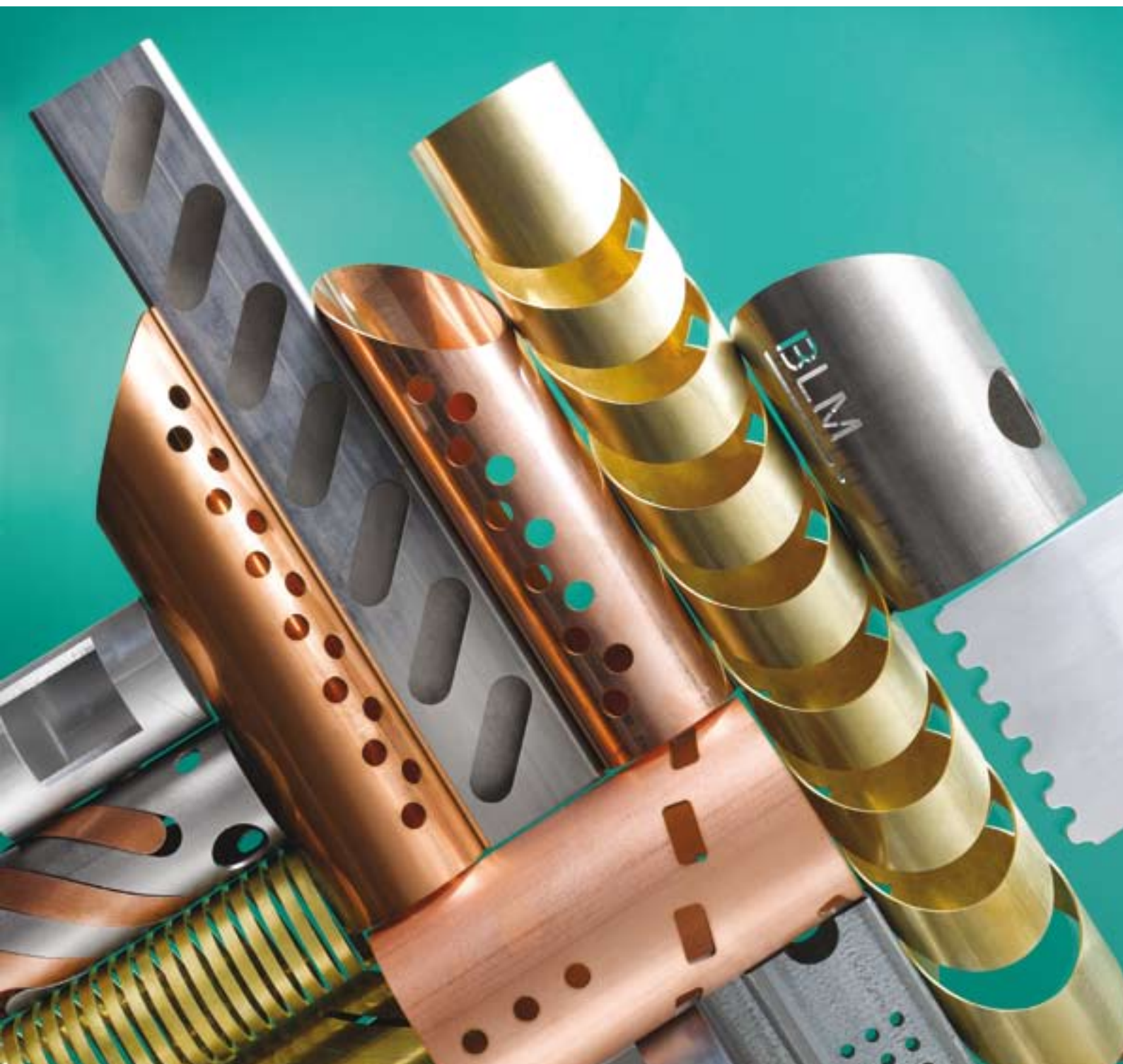
## SHEET

Dimensions	3000 x 1500 mm - 3000 x 4500 mm - 3000 x 6000 mm - 3000 x 9000 mm 3000 x 12000 mm (version CO2)
Maximum thickness	20 mm
Maximum speed	210 m/min
Max. acceleration	3g
Positioning precision	0,05 mm
Re-positioning precision	0,03 mm

## LASER

Fibre sources	2 kW - 3 kW	CO <sub>2</sub> sources	2.5 kW - 3 kW - 3.5 kW - 4.5 kW
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## BLM GROUP



### **LASER CUTTING FOR SHEET AND TUBE**

tube bending

endforming

lasertube cutting system

sawing, deburring and washing

cutting & end machining

handling

3d measuring

manufacturing cell

non touch measuring systems

process control software

## ADIGE-SYS

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