

# TROTEC LASER SP SERIES

## Impressive diversity of materials

With the SP series of laser machines, you can cut or engrave the widest variety of possible materials. The range ranges from acrylic, plastic or wood, to cardboard, MDF, textiles or paper. Discover all the possibilities.

The materials that the SP series can work with (100, 300, 400, 500), shown below, to cut are:

### **Plastics:**

Acrylic (PMMA)  
Acrylonitrile butadiene styrene copolymer (ABS)  
Engraving plastics (laminates)  
Polyamide (PA)  
Polybutylene terephthalate (PBT)  
Polycarbonate (PC)  
Polyethylene (PE)  
Polyester (PES)  
Polyethylene terephthalate (PET)  
Polyimide (PI)  
Polyoxymethylene (POM), e.g. DelrinR  
Polypropylene (PP)  
Polyphenylene sulfide (PPS)  
Polystyrene (PS)  
Polyurethane foam (PUR)  
Foam (PVC-free)  
PETG (modified PET)  
SAINT

### **Textiles:**

Polyester (PES)  
Felt  
Microfiber  
Technical fabrics  
Leather  
Artificial leather  
Natural fiber (e.g. cotton, linen)  
Wool  
Silk  
Aramid

### **Others:**

Wood  
Cardboard  
Paper  
Cork  
Rubber

The following materials correspond to those that the SP series can perform the Record action (engraving):

#### Plastics:

Acrylic (PMMA)  
Acrylonitrile butadiene styrene copolymer (ABS)  
Engraving plastics (laminates)  
Polyamide (PA)  
Polybutylene terephthalate (PBT)  
Polycarbonate (PC)  
Polyethylene (PE)  
Polyester (PES)  
Polyethylene terephthalate (PET)  
Polyimide (PI)  
Polyoxymethylene (POM), e.g. DelrinR  
Polypropylene (PP)  
Polyphenylene sulfide (PPS)  
Polystyrene (PS)  
Polyurethane foam (PUR)  
Foam (PVC-free)

#### Textiles:

Felt  
Leather  
Artificial leather  
Natural fiber (e.g. cotton, linen)

#### Others

Wood  
Cardboard  
Paper  
Cork  
Rubber

The above corresponds to a set of information about the various materials with which the Trotec SP series machines can work. Clearly the materials that are not constituted in each section indicate that they are not suitable for working in the cutting or engraving modality.

## Datasheet:

The following technical information corresponds to the laser cutting and engraving machines of the SP series, specifically the SP3000, SP2000 series and the SP500 series, the chosen format corresponds to the following: "feature: Sp3000 |Sp2000 |Sp500", this means, a characteristic of the machine followed by a colon, and the first value found corresponds to the SP3000 machine followed by a "|" then it corresponds to the SP2000 machine after a "|" and ending with the corresponding value of the SP500 machine, the technical information of the machines is below:

**Working area (W x H):** 2210 x 3210 mm | 1680 x 2510mm |1245 x 710mm

**Max.1 height of workpiece:** 50mm | 50mm |112mm

**Loading area (W x H) :**2500 x ∞ mm | 1950 x ∞ mm | 1420 x 820mm

**Dimensions (W x H x D):** 3078 x 3914 x 1230 mm | 2520 x 3214 x 1230mm |1940 x 1240 x 1140mm

**Max processing speed:** 1 m/s |1 m/s | 2.54 m/s

**Acceleration max:** 10 m/s<sup>2</sup> |10 m/s<sup>2</sup>| 19 m/s<sup>2</sup>

**Motion System Technology:** Brushless DC Servo Motors | Brushless DC Servo Motors |  
Brushless DC Servo Motors

**CO2 laser power:** 60 - 400 W | 60 - 400W | 60 - 200W

**Laser class:** 2 |2 |2<sup>3</sup>

**Weight<sup>2</sup>:** 1600 kg| 1400kg | 520kg

**Energy consumption:**

400 V 3 Ph., 50/60 Hz, 3x16 A |400 V 3 Ph., 50/60 Hz, 3x16 A | 208 - 230 V, 50/60 Hz, 16 A  
380-400 V 3 Ph., 50/60Hz, 3x16 A 380-400 V 3 Ph., 50/60 Hz, 3x20 A

## Software

JobControlR : Si | Si | Si  
JobControlR Vision: opcional | Opcional | Opcional  
JobControlR Cut: Opcional | Opcional | Opcional

## Features and Options:

**Accessibility on all four sides:** Yes | Yes | No  
**Tandem work mode:** Optional | Optional | No  
**Automated extraction table:** Optional | Optional | No  
**Feeder:** Optional | No | No  
**Air purged optical elements:** Yes | Yes | Yeah  
**Mobile suction:** Optional | Optional | Optional  
**Gas kit:** Yes | Yes | Optional  
**Rotary engraving accessory:** Options | No | No  
**InPack Technology™ :** Yes | Yes | Yes  
**Harsh environment protection kit:** Yes | Yes | Yeah  
**OptiMotion™:** Yes | Yes | No  
**Sonar Technology™:** Optional | Optional | No  
**TroCare:** Optional | Optional | Optional  
**2 years warranty:** Yes | Yes | Yes

## Multifunctional table concept:

**Aluminum cutting table:** Optional | Optional | Optional  
**Acrylic cutting table:** Optional | Optional | Optional  
Aluminum slat cutting table: Optional | Optional | Optional  
Acrylic lamella cutting table: Optional | Optional | Optional  
Vacuum table: Optional | Optional | Optional  
Honeycomb cutting table: Optional | Optional | Optional

## Glasses:

2.0 in CO2: Stagnate | No | No  
2.5 in CO2 :Standard | Standard | Optional  
2.5 in CO2 CL : Optional | No | No  
5.0 in CO2 : Optional | Optional | Optional

## Compatible extraction systems:

Vent Set 3000  
Atmos PowerJet  
Vent Set 3000  
Atmos PowerJet  
Vent Set 500  
Atmos PowerJet

## Costs:

The cost of the SP500 laser cutting and engraving machine is \$75,000 US +Transportation  
The cost of the SP2000 laser cutting and engraving machine is \$78,000 US+Transportation  
The cost of the SP2000 laser cutting and engraving machine is \$80,000 US+Transportation  
The machine installation service is covered the costs of the machine