

ANTARES

LASER CUTTING & MARKING



WWW.AM-LASER.COM

ANTARES is the easiest and most flexible CO₂ LASER system to die-cutting, kiss-cutting, micro-perforating and marking operations onto sheet (several UNI ISO formats), paper (gum-silicon coated ones), thin cardboard materials, such as ABS, PC, PP, OPP, PET, AL (even coupled), and so on.

ANTARES is the only one capable of carrying out perfectly at register and simultaneously all laser processings at printing register, ensuring a maximum accuracy further to a broad utilization flexibility in different applications. Thanks to a double work plan, laser can process during loading and unloading manual operations done by operator. Double work plan loads different format sheet starting from A4 to two 50 cm [19.69"] x 70 cm [27.56"] simultaneously.

ANTARES combines the performances of a normal cutting laser plotter with a swift galvanometric system, achieving high production speeds and quality onto 50 cm [19.69"] x 70 cm [27.56"] work areas, making it the most flexible and quickest system to die-cutting and marking processings for graphics, electronics (membrane keyboards), cartographic sector.

TECHNICAL FEATURES

General

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| <ul style="list-style-type: none"> • Maximum format of laser processing: 700mm [27.56"] x 500mm [9.69"] • Maximum sheet format : 710mm [27.95"] x 510mm [20.08"] • Minimal sheet format: 297 mm [11.69"] x 210 mm [8.27"] • Weight in grams: 120 – 380 gr/m² • Register: ± 0,05 mm • Arrangement to fume and scrap aspiration onto work plan | <ul style="list-style-type: none"> • Double grated work plan • Double work plan with register references. • Manual loading / unloading • Scrap collector • Work plan with anti-burning devices • Protection barrier between automated-layaway work plans |
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Laser source

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|--------------------------------|------------------------------|
| • Source: | CO ₂ |
| • Power (Watt): | 115 238 |
| • Peak power (Watt): | >230 >480 |
| • Frequency (kHz): | 0,1 – 50 0,1 – 50 |
| • Pumping: | Discharge RF |
| • Cooling: | Closed loop H ₂ O |
| • Average autonomy assessment: | 14.000 h |

Scanning head

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|---------------------------|---------------------------|---------------------------|
| • Focal: | f=200 mm [27.87"] | f=650 mm [25.59"] |
| • Work area (mm): | 200 x 200 [27.87"x27.87"] | 500 x 500 [25.59"x25.59"] |
| • Spot diameter: | ≈ 150 µm | ≈ 450 µm |
| • Writing speed (linear): | > 3 m/s [$> 9.84'/s$] | |
| • Writing speed (raster): | > 5 m/s [$> 16.40'/s$] | |
| • Position speed: | > 5 m/s [$> 16.40'/s$] | |
| • Diode pointer: | 650 nm | |

Mechanical aspects

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| <ul style="list-style-type: none"> • High-hardiness electro-welded stabilized steel structure | <p>It allows to avoid vibrations during work phase movements and to carry out single processing onto high-thickness materials, too</p> |
| <ul style="list-style-type: none"> • X, Y movement of scanning head realized by controlled axes recirculating-ball screw. | <p>It allows to process onto whole work area, streamlining laser spot</p> |
| <ul style="list-style-type: none"> • Work plan with anti-burning device. | <p>It allows to avoid burnings in the back of material</p> |
| <ul style="list-style-type: none"> • Protection barrier between automated-layaway work plans | <p>It ensures operator's safety when processing</p> |

Options

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| <ul style="list-style-type: none"> • Optical register | <p>It ensures register even on irregular format sheet.</p> |
| <ul style="list-style-type: none"> • AM-Drive-RCM software | <p>AM Drive RCM software option enables by internet connection to activate a remote assistance service. AM remote assistance operative station can this way enter directly the system installed by client to carry out all system diagnosis activities and assistance to operator.</p> |

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| <ul style="list-style-type: none"> • EOLO smoke exhauster with activated carbon filters | <table border="0"> <tr> <td></td> <td style="text-align: center;">THC 400</td> <td style="text-align: center;">THC 2500</td> </tr> <tr> <td>Nominal capacity:</td> <td style="text-align: center;">400 mc/h</td> <td style="text-align: center;">2500 mc/h</td> </tr> <tr> <td>Max depression:</td> <td style="text-align: center;">200 mbar</td> <td style="text-align: center;">50 mbar</td> </tr> <tr> <td>Voltage:</td> <td style="text-align: center;">400 V three-phase</td> <td style="text-align: center;">400 V three-phase</td> </tr> <tr> <td>Frequency:</td> <td style="text-align: center;">50 Hz</td> <td></td> </tr> <tr> <td>Motor power:</td> <td style="text-align: center;">2,9 kW</td> <td style="text-align: center;">5,5 kW</td> </tr> <tr> <td>High-efficiency filters (Eff. 95%):</td> <td style="text-align: center;">filtering surface 2,5 mq</td> <td style="text-align: center;">18,5 - 37 mq</td> </tr> <tr> <td>"HEPA" filter (Eff.99,95%):</td> <td style="text-align: center;">filtering surface 14 mq</td> <td style="text-align: center;">42 - 84 mq</td> </tr> <tr> <td>Carbon active:</td> <td style="text-align: center;">10 kg</td> <td style="text-align: center;">48 – 96 kg</td> </tr> </table> | | THC 400 | THC 2500 | Nominal capacity: | 400 mc/h | 2500 mc/h | Max depression: | 200 mbar | 50 mbar | Voltage: | 400 V three-phase | 400 V three-phase | Frequency: | 50 Hz | | Motor power: | 2,9 kW | 5,5 kW | High-efficiency filters (Eff. 95%): | filtering surface 2,5 mq | 18,5 - 37 mq | "HEPA" filter (Eff.99,95%): | filtering surface 14 mq | 42 - 84 mq | Carbon active: | 10 kg | 48 – 96 kg |
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AM has the right to modify the features mentioned in own catalogues at any time and without any notice.