BRAIDO
COMPUTER-AIDED OVERBRAIDING
Rapid loading of carriers
The machine is equipped with a special locking system that facilitates the replacement procedure. A foldable handle allows the tray to be turned manually which facilitates spindle loading.

Complete production traceability
A software functionality enables the data from each braiding phase to be recorded, such as part reference, production order, production method, etc.

Braiding speed control
The braiding speed can be controlled by a potentiometer on the front panel or using the foot pedal similar to an accelerator.

Fault detection by optical sensor
Optical sensors automatically stop production and warn the operator if a broken wire strand is detected.

Display of the braiding point by laser pointer
As an option, a laser pointer can be installed to display the theoretical braiding point and therefore begin braiding at the optimum position.

BRAIDO
Braido machines provide the perfect solution to the demanding production requirements of electromagnetic shields and mechanical protection for electrical harnesses.

Braido customers especially appreciate the simplicity of braiding operations, as well as the machine’s impressive speed and its impeccable production quality.
SYSTEM

ERGONOMIC COVER WITH SOUND PROTECTION AND WRIST SUPPORT

CAPSTAN DISENGAGEABLE AND MOTORIZED

TOUCH SCREEN 17"

EMBEDDED ELECTRICAL CABINET

DRY LOWER CASING (WITHOUT OIL BATH)

PEDAL FOR BRAIDING SPEED CONTROL

BRAIDO LINE
- Braido 24 H: horizontal overbraider 24 carriers
- Braido 32 H: horizontal overbraider 32 carriers
- Braido 48 H: horizontal overbraider 48 carriers

CARRIERS
Two types of carriers can be used with the machine and can be supplied in batches of 24, 32 or 48.

01 Carriers for textile materials
Carriers optimized for braiding textile materials thanks to the use of ceramic eyelets.

02 Carriers for metallic materials
Carriers optimised for braiding metallic materials due to the use of casters and the presence of a rotating head.

ACCESSORIES

01 Barcode reader
Enables production order barcodes to be scanned in order to facilitate the production process.

02 Label printing
This label printer produces high-quality barcode labels that indicate harness number, phases performed, etc. Requires BRAIDO software. Custom label formatting available upon request.

03 Ergonomic cart on wheels for easy storage and movement of the carriers.
BRAIDO SOFTWARE

The software developed by Laselec offers numerous functions enabling a significant increase in productivity.

- Management of production files that contain the specifications of each overbraiding phase.
- Machine settings management: to guarantee consistent production, BRAIDO software offers setting creation. This allows for machine configuration for specific types of production.
- Management of operators with their access level: according to their authorizations, operators have different access rights in the software.
- Optimized production: To minimize carrier changes, the BRAIDO software allows you to sort the production to be carried out.
- Production of all identical settings of one part in the internal database then all subsequent settings of this same part.
- Operator assistance during production: display of the harness plan to view the phase to be produced.
- Production traceability: this functionality enables the data from each braiding phase to be recorded, such as: part reference, production order, production method (by file or manual), operator, date/time, machine used, part reference, lengths, setting used with the possibility of exporting to CSV format.
- Detailed production counter: the software enables the display (with the possibility of exporting to CSV format) of the number of phases produced as well as the production time over different periods.
- Fault detection: automatic production stop feature when a fault is detected (cut wire, coil end etc.).

MONITORING AND NETWORK

As an option, BRAIDO equipment networking helps to increase workshop productivity and to obtain real-time feedback on the braiding operations performed.

The main advantages are:
- File integration on the supervisory station
- Real-time consultation of the production status on all machines
- Traceability centralization of all machines on the supervisory station
- Centralized management of machine settings on the supervisory station
- Centralized management of operators’ accounts

Technical specifications

<table>
<thead>
<tr>
<th></th>
<th>Braido24</th>
<th>Braido32</th>
<th>Braido48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of carriers</td>
<td>24</td>
<td>32</td>
<td>48</td>
</tr>
<tr>
<td>Braiding operation</td>
<td>Vertical (horizontal table)</td>
<td>Vertical (horizontal table)</td>
<td>Vertical (horizontal table)</td>
</tr>
<tr>
<td>Operating speed</td>
<td>260 tpm or 43 steps per minute</td>
<td>260 tpm or 32 steps per minute</td>
<td>220 tpm or 18 steps per minute</td>
</tr>
<tr>
<td>Capstan</td>
<td>Ø500 mm</td>
<td>Ø600 mm</td>
<td>Ø600 mm</td>
</tr>
<tr>
<td>Bobbin capacity</td>
<td>Textile: flange Ø50 mm, total length 158 mm, volume 228 cm³</td>
<td>Textile: flange Ø46 mm, total length 142 mm, volume 156 cm³</td>
<td></td>
</tr>
<tr>
<td>Strands per bobbin</td>
<td>2 to 10, width of layer ≤ 1.5 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control-command</td>
<td>Windows 10 IOT computer with Braido software and 17” touch screen feature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions (L x I x h) (**)</td>
<td>1100x950x1900 mm</td>
<td>1100x950x1900 mm</td>
<td>1400x1220x1940 mm</td>
</tr>
<tr>
<td>Weight (**)</td>
<td>500 kg</td>
<td>550 kg</td>
<td>700 kg</td>
</tr>
<tr>
<td>Quick carrier change system</td>
<td>As standard</td>
<td>As standard</td>
<td>As standard</td>
</tr>
<tr>
<td>Carrier protection</td>
<td>As standard</td>
<td>As standard</td>
<td>As standard</td>
</tr>
<tr>
<td>Adjustable lighting</td>
<td>As standard</td>
<td>As standard</td>
<td>As standard</td>
</tr>
<tr>
<td>Electrical cabinet</td>
<td>Fully integrated in the machine frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power supply</td>
<td>230 VAC (+/-10%VAC) / 50-60 Hz – 30A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>Complies with CE standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine warranty</td>
<td>24 months</td>
<td>24 months</td>
<td>24 months</td>
</tr>
</tbody>
</table>
Headquartered in Toulouse, France, Laselec develops laser solutions for stripping and marking wires as well as interactive assembly boards for wire harness manufacturing.

Laselec is one of the leading companies in the world for the development and production of serial production machines and customized solutions for laser wire processing. The company meets all significant international quality standards in the aerospace industry and counts renowned aircraft manufacturers among its customers.

Having strived to be at the forefront of innovation and quality, its unique expertise and experience allows Laselec to manufacture the most efficient equipment available, while providing customers with low maintenance and operating costs.

Laselec has been part of Komax since 2017. The two companies have been working successfully together on various projects since then. Thanks to this partnership, Laselec’s solutions have increasingly found their way into other markets, such as the automotive and railway industry.