Presentation of the LUCAS online configurator
General overview

• The configurator is a modern, visual marketing tool, presented as a digital catalogue.

• It is directly accessible on the LUCAS website, so that clients can use it autonomously and configure a LUCAS system to suit their needs and preferences.

• Once configuration is complete, the client has the option of downloading a 3D model of the system to insert in the intended working location. Technical specifications may also be downloaded to check the technical characteristics of the product, its effective dimensions, and a full parts list of components.
The first page of the configurator shows all the products in the LUCAS range of robotic axes.

Customers just click to choose the product that best meets their needs!
1\textsuperscript{st} choice: Floor track

First standard product in the LUCAS range of linear axes.
**Configuration page** where you can:

- Select parameters from a predefined list;
- Modify values by moving a cursor;
- Enter a gross value;
- Check an option.
• Choose from the leading robot manufacturers, including: COMAU, ABB, FANUC, KUKA, YASKAWA, STÄUBLI, etc.

• Select a robot from the list.
• Depending on the robot selected, the configurator displays the track category suited to the dimensions and guiding of the robot on its trolley.

• The minimum category by default is displayed in a red box. It is, however, possible to choose a higher category, provided it is not shaded in grey.

• The minimum height of the robot support surface depends directly on the category selected and the maximum value is 1500 mm higher. For categories:
  - 1 - 3: min h = 490 mm, max h = 1990 mm
  - 4 - 5: h = 512 mm, max h = 2012 mm
  - 6 - 9: h = 516 mm, max h = 2016 mm

• LUCAS production does not manage extension heights under 250 mm. If the value entered is between the minimum height and minimum height + 250 mm, the configurator will show the nearest possible height.
Horizontal offset is possible when the robot support surface height is above: minimum value + 250mm

The category is redefined according to the extension piece considered.

Extension piece linked to the example configured
Choose the bellows option for a non-walkable casing solution.

Cable carriers (CC) are available in 3 inside widths: 120, 170, and 220 mm.

CCs may be installed in 3 positions: on the Rack Side (RS) of the beam, the Side Opposite the Rack (SOR), or on the beam Above the Housing (AH).

There is a limited choice of CC positions and widths. These choices may be input in any order.

<table>
<thead>
<tr>
<th>CC width</th>
<th>CC position</th>
<th>Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories 1 - 5</td>
<td>120 170 220</td>
<td>RS SOR</td>
</tr>
<tr>
<td>Category 6</td>
<td>120 170 220</td>
<td>RS AH SOR 220 ↔ AH</td>
</tr>
<tr>
<td>Categories 7 - 9</td>
<td>120 170 220</td>
<td>RS AH SOR</td>
</tr>
</tbody>
</table>

- RS: Rack Side
- AH: Above Housing
- SOR: Side Opposite Rack
Once the effective travel has been entered, the length of the beam is calculated on the basis of the category and options:
- 1 or 2 trolleys;
- With or without bellows option.

Precision is calculated according to the effective travel entered.

The precision and two-way repeatability depend on the category and quality required, (see table at bottom of slide).

The one-way repeatability value is invariable (+/- 0.05 mm).

<table>
<thead>
<tr>
<th>Category</th>
<th>Precision (mm)</th>
<th>Two-way repeatability (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q8</td>
<td>Q6</td>
<td>Q8</td>
</tr>
<tr>
<td>Categories 1-3 (Module 3)</td>
<td>+/- ((0.04 x travel (m)) + 0.105)</td>
<td>+/- ((0.02 x travel (m)) + 0.047)</td>
</tr>
<tr>
<td>Categories 4-9 (Module 4)</td>
<td>+/- ((0.045 x travel (m)) + 0.125)</td>
<td>+/- ((0.023 x travel (m)) + 0.054)</td>
</tr>
</tbody>
</table>

Selected by default.
• Beam straightness is another technical specification of the configured system.

• The trolley position parameter is simply used to position the trolley at a certain distance from its starting point to display it better.

• The speeds proposed in the configuration tool go up to 2 m/s (in 0.5 m/s increments). The maximum speed is used as a basis for LUCAS system calculations.
View of the corresponding 3D model

- Side view
- Top view
- Front view
Finalising the configuration

• The last step is to enter the client's business email address and accept the license agreement to access the download.

• The model may be downloaded in 2D or 3D in several different versions, together with the technical specifications (available in PDF format), to provide a summary, and the parts list for the components in the configured system.