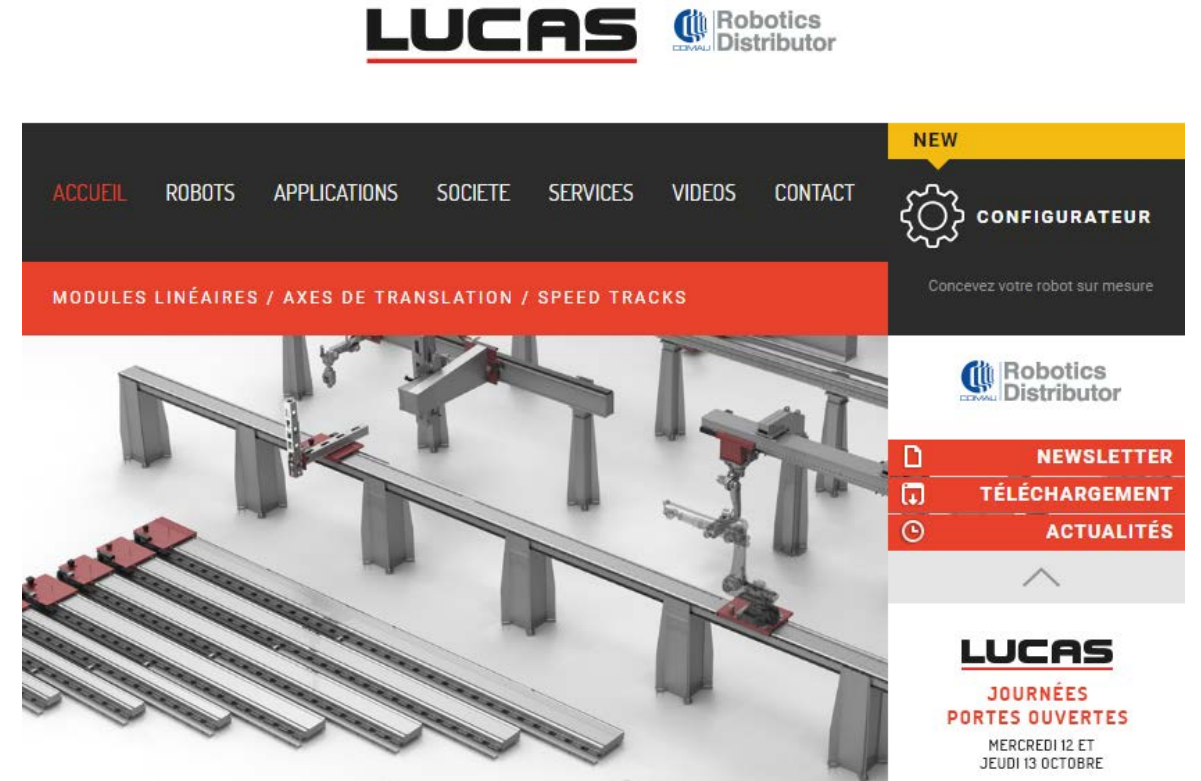# Presentation of the LUCAS online configurator
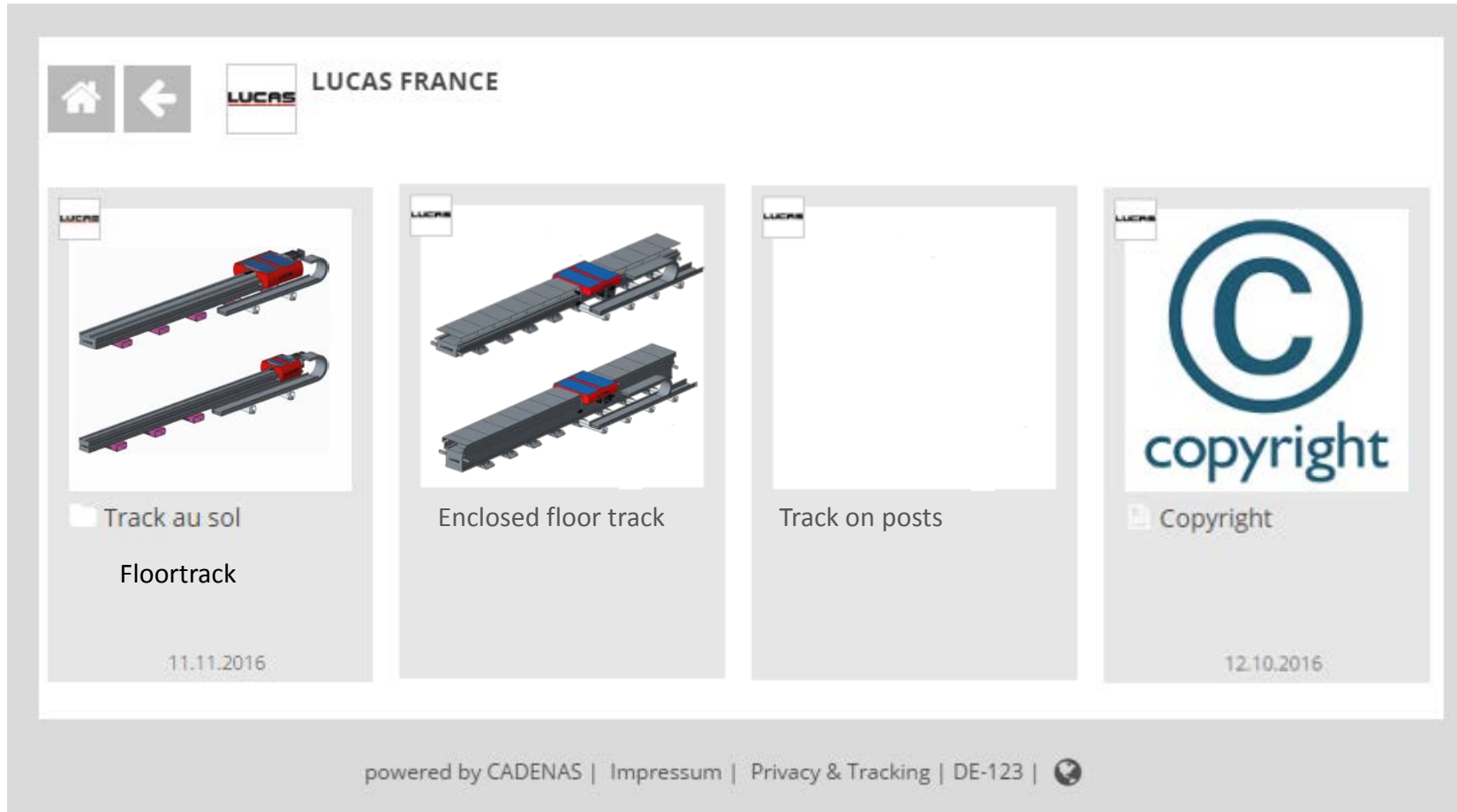
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General overview

- 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.

LUCAS FRANCE

Track au sol

Floortrack

Enclosed floor track

Track on posts

copyright

Copyright

11.11.2016

12.10.2016

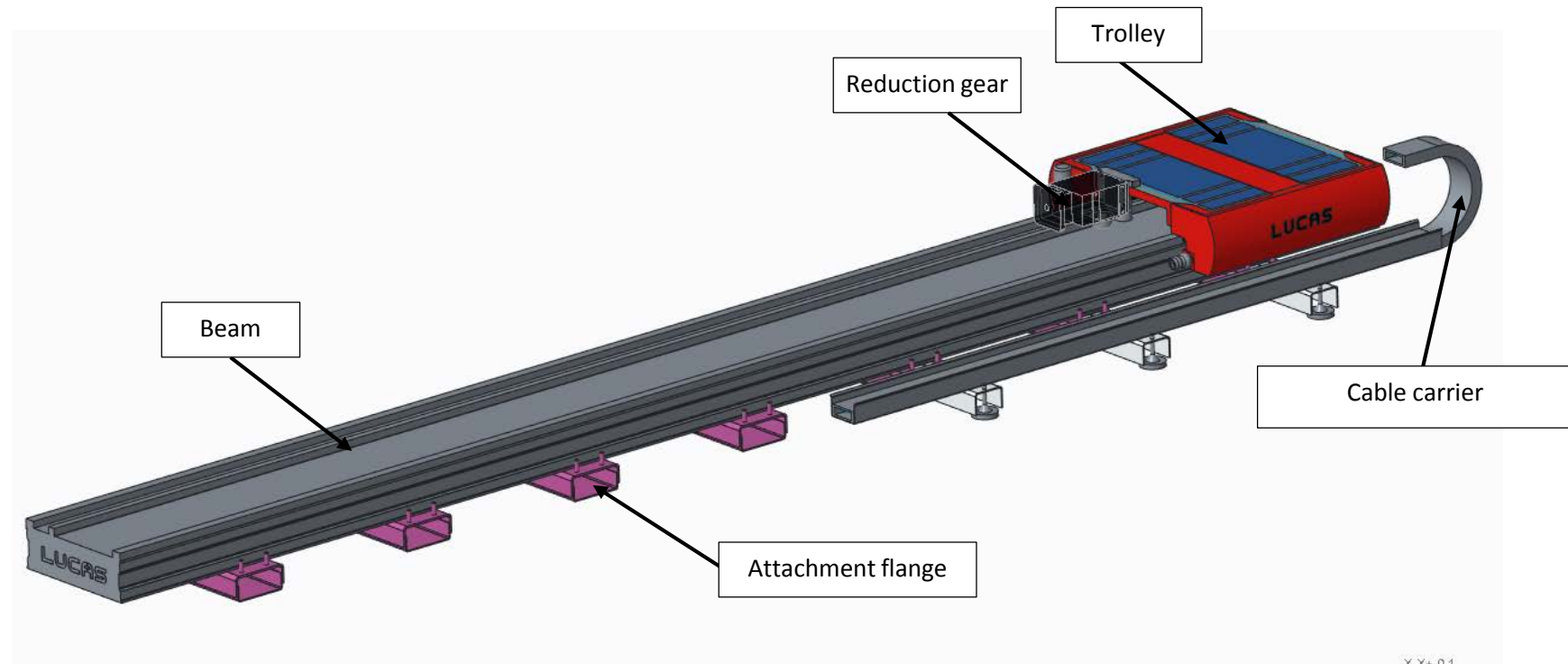powered by CADENAS | Impressum | Privacy & Tracking | DE-123 |

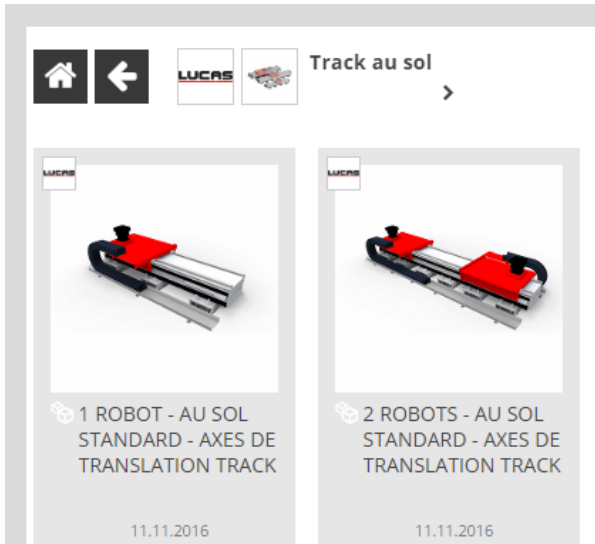The first page of the configurator shows all the products in the LUCAS range of robotic axes.

Customers just click to choose the product that best meets their needs!

1st choice: Floor track

First standard product in the LUCAS range of linear axes.

Floortrack

Track au sol

11.11.2016

Trolley

Reduction gear

Beam

Cable carrier

Attachment flange

X.X+-0.1

3D model to be updated

Configuration page where you can:

- Select parameters from a predefined list;
- Modify values by moving a cursor;
- Enter a gross value;
- Check an option.

Configuration process

- Choose from the leading robot manufacturers, including: COMAU, ABB, FANUC, KUKA, YASKAWA, STÄUBLI, etc.

- Select a robot from the list.

Minimum category for the robot selected

Category 2

| Category 1 | Category 2 | Category 3 | Category 4 | Category 5 | Category 6 |

1/2

Robot support surface (SS) height required

Min extension: 250 mm

490   950   1990

950   mm
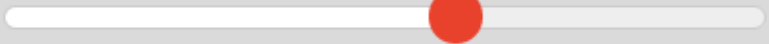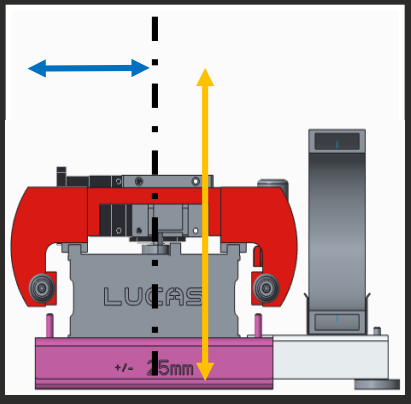
- Depending on the robot selected, the configurator displays the track category suited to the dimensions and guiding of the robot on its trolley.

- 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 + 250mm, the configurator will show the nearest possible height.

Horizontal offset required *Min SS height: 250 mm*	0 900 1 500 900	mm	⊞
	⚠ • The height of the robot support surface is measured from the surface to which the track is attached.		
Minimum category associated with the offset entered	Category 3 ▼		⊞
Dimensions of robot footprint *(W x L)*	790 x 840	mm	

- 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
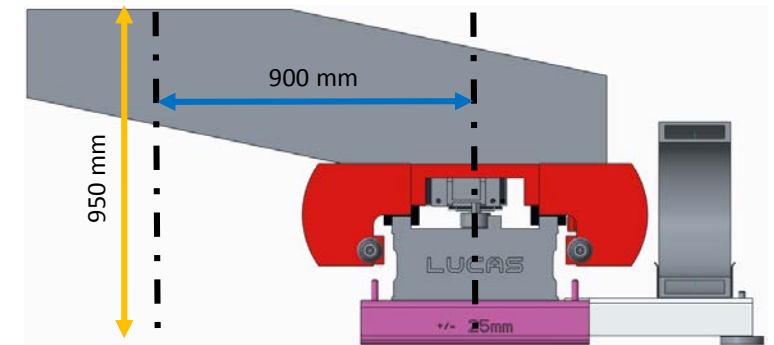
| Bellows *(non-walkable)* | YES OUI ☐ NO NON ☒ | ⊞ |
| Cable carrier width | 120.0 ▾ | mm ⊞ |

| Cable carrier position

RS: Rack Side
AH: Above Housing
SOR: Side Opposite Rack | RS | AH | SOR |

← →

- Choose the bellows option for a non-walkable casing solution.

With   Without

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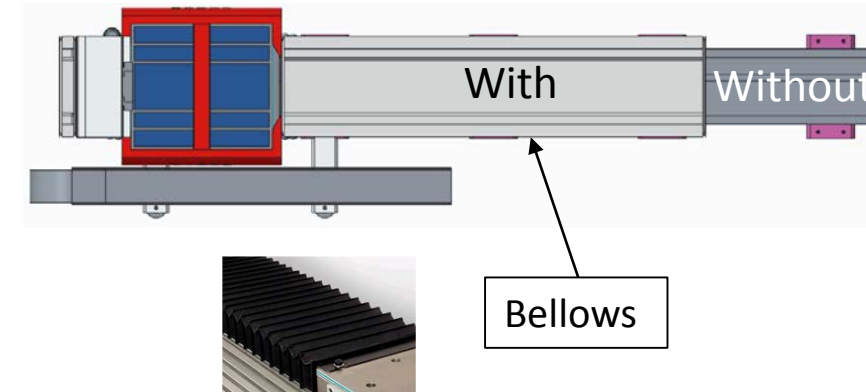
- Cable carriers (CC) are available in 3 inside widths: 120, 170, and 220 mm.

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

- 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).

	CC width			CC position			Restriction
Categories 1 - 5	120	170	220	RS		SOR	
Category 6	120	170	220	RS	AH	SOR	220 ←/→ AH
Categories 7 - 9	120	170	220	RS	AH	SOR	

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| Effective travel	5000		mm	
Beam dimensions *(W x H x L)*	400 x 200 x 6500		mm	
Rack precision *Standard: Quality 8*	+/- 0.305		mm	
Repeatability *Standard: Quality 8*	One-way +/- 0.05		mm	
	Two-way +/- 0.187			
Quality	Standard (Q8) ☒	Superior (Q6) ☐		

Selected by default.

- 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).

	Precision (mm)		Two-way repeatability (mm)	
	Q8	Q6	Q8	Q6
Categories 1-3 (Module 3)	+/- ((0.04 x travel (m)) + 0.105)	+/- ((0.02 x travel (m)) + 0.047)	+/- 0.187	+/- 0.129
Categories 4-9 (Module 4)	+/- ((0.045 x travel (m)) + 0.125)	+/- ((0.023 x travel (m)) + 0.054)	+/- 0.221	+/- 0.149

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Beam straightness	+/- 0.1	mm/m
Number of fastenings	6	
Trolley position	1500	mm
Max trolley speed *For speeds > 2 m/s, please contact LUCAS directly*	2.0	m/s

- 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.

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View of the corresponding 3D model

Side view

Top view

Front view
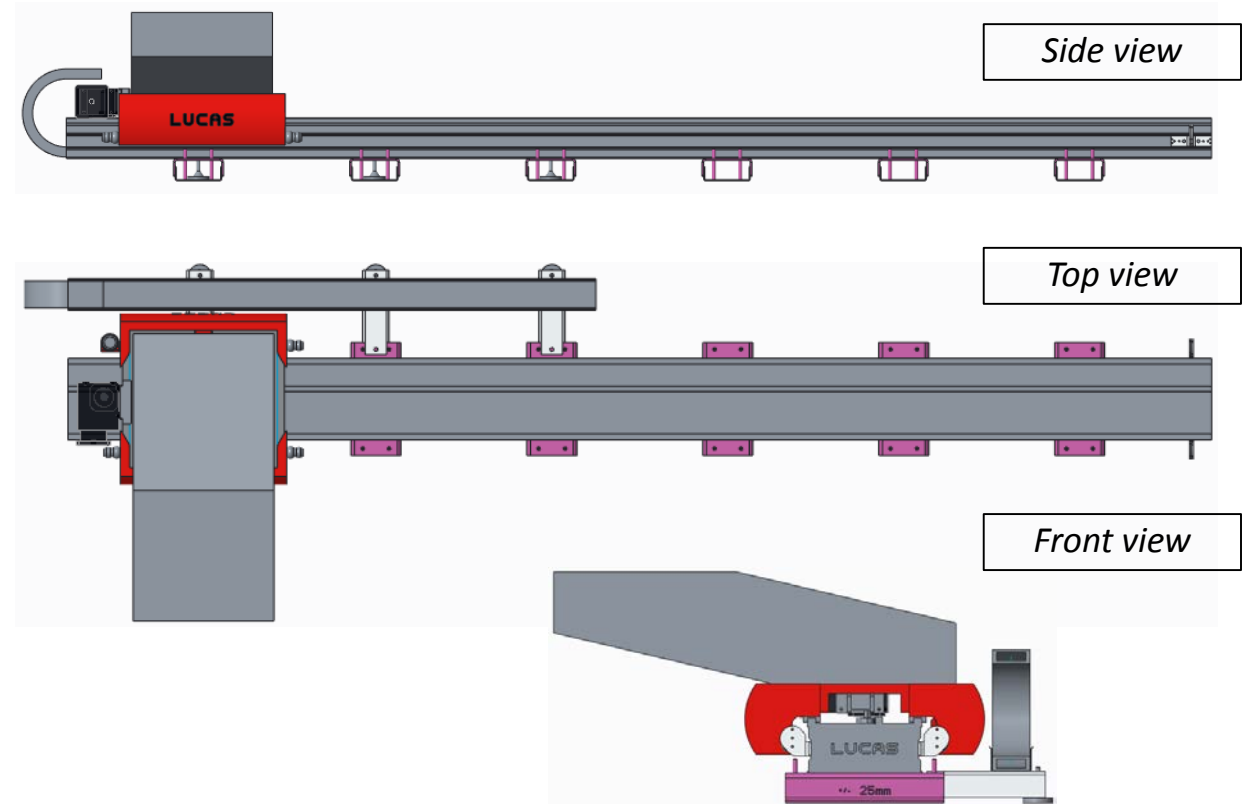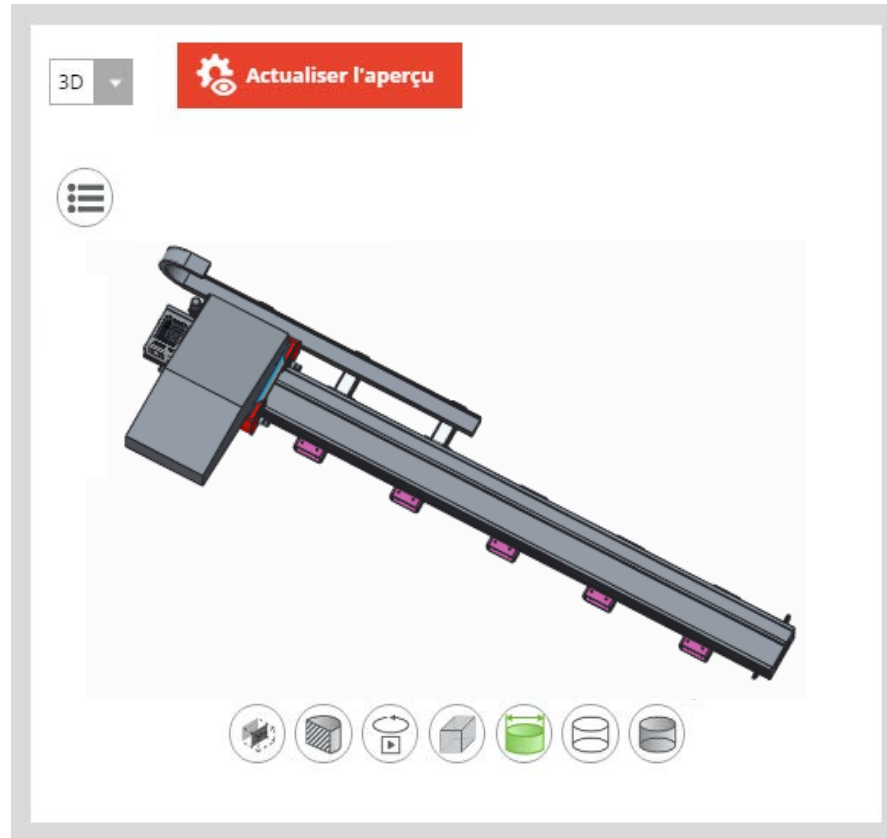
Finalising the configuration

- 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.