

PILOT COCKPIT

No P95577012



ISSUE : EN
REVISION : A
DATE : 12 - 2024

Instructions

REF: 8695 5521

Original instructions

Thank you very much for the trust you have shown by choosing this piece of equipment. It will give you trouble-free service if it is used and maintained as recommended.

Its design, component specifications and manufacturing are in accordance with applicable European directives.

Please refer to the CE declaration enclosed to identify the directives applicable to it.

The manufacturer shall not be liable for any combination of parts not recommended by it.

For your safety, please follow the non-limitative list of recommendations and obligations, a large part of which are included in the Labour Code.

Please inform your supplier if you find any error in this instruction manual.

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INFORMATION

This technical literature is intended for the following machines or products:

- PILOT COCKPIT ➔ P95577012

REVISION

REVISION : A DATE : 10/24

DESCRIPTION	PAGE
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A - DESCRIPTION

1 - System requirements

- Windows 8.1 or above, 64-bit architecture
- 700 MB drive space required
- For export in Excel format: Microsoft Excel 2016 or above



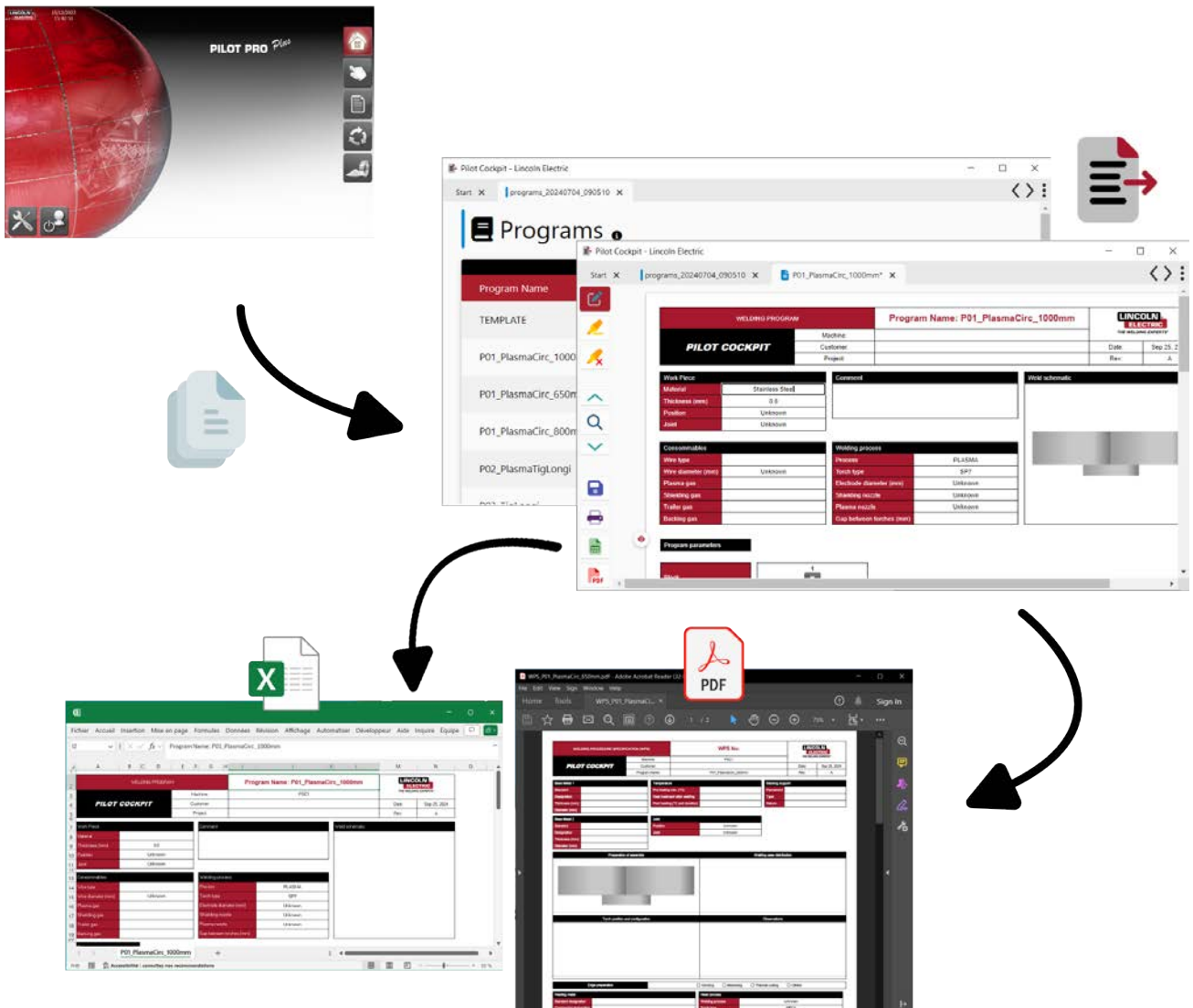
Software performance will depend on hardware performance and use.

2 - Overview

Pilot Cockpit is a software utility dedicated to the processing of data from machines with **Pilot Advance** and **Pilot Pro Plus** HMLs.

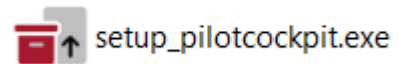
It is used for displaying, editing and exporting documents (PDF and/or Excel format) based on the data from these machines:

- Welding programs
- WPS (Welding Procedure Specification)
- Welding ticket
- Production logs and alarms
- Opening of previously saved documents



B - INSTALLATION

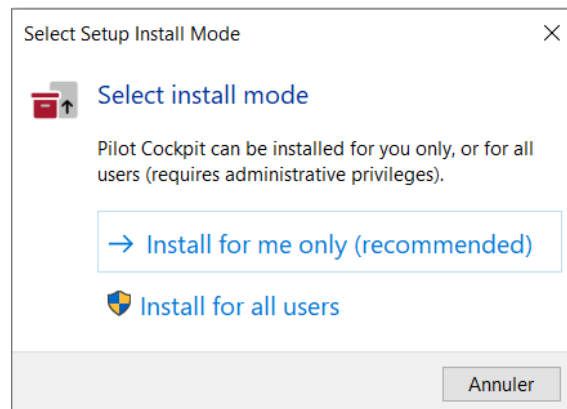
- ☛ To start the installation program, double click on it.



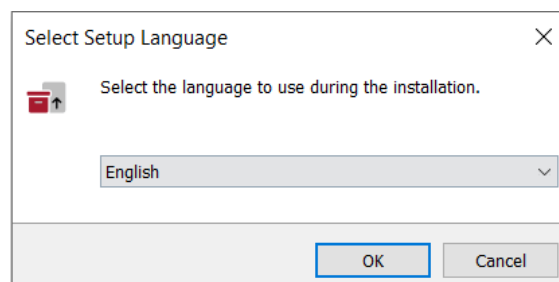
- ☛ Select the installation mode.



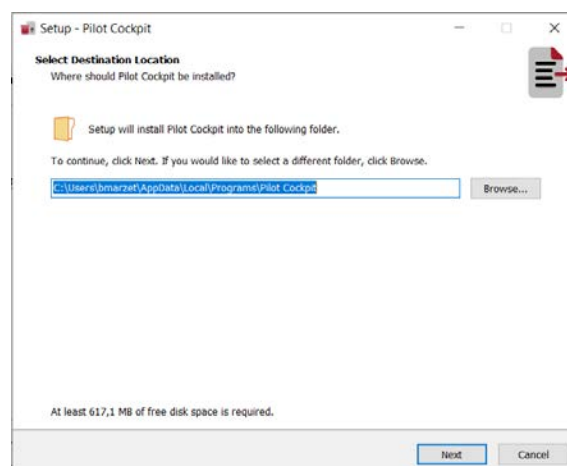
Installation may require administrator rights. Please contact your IT department for help.



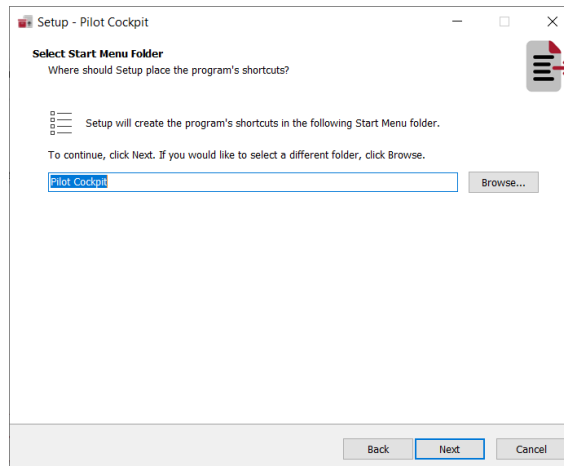
- ☛ Select the language of the installation wizard and click on **OK**.



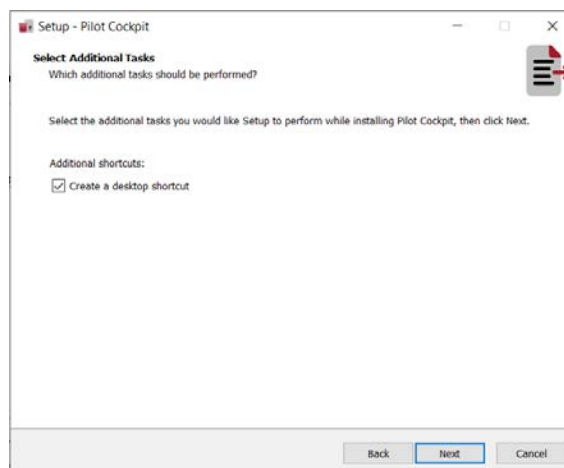
- ☛ Confirm the installation path and click on **Next**.



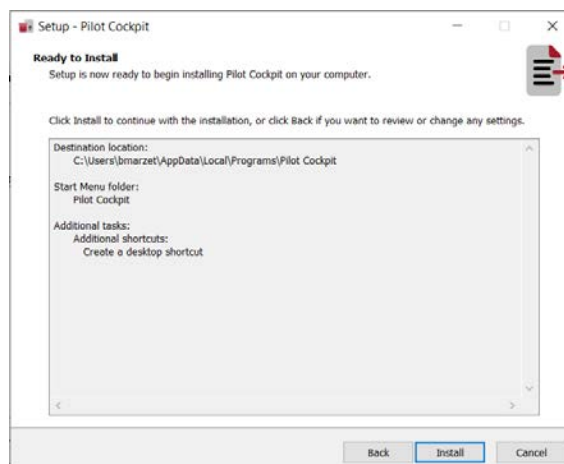
- ☛ Confirm the shortcut folder in the Start menu and click on **Next**



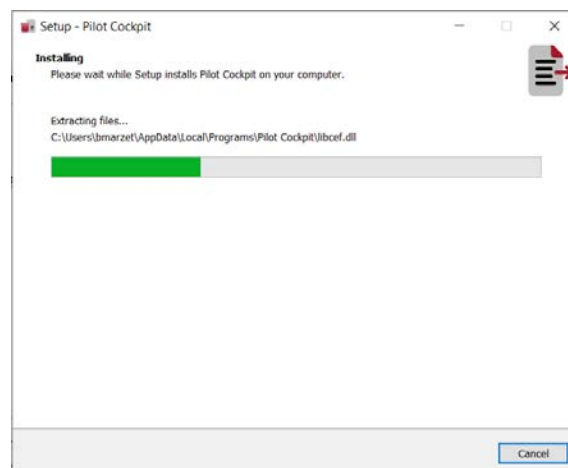
- ☛ Indicate if you want to create an icon on the desktop and click on **Next**



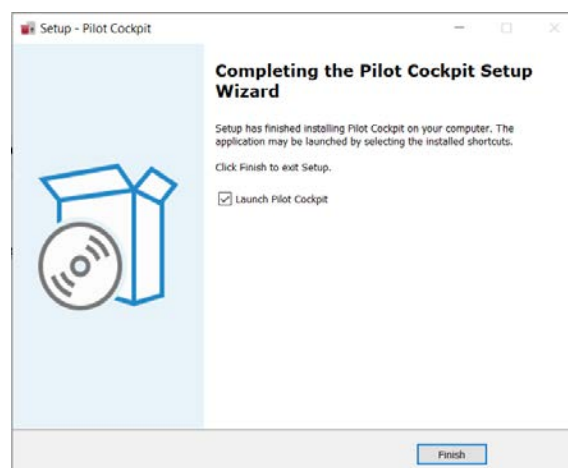
- ☛ Confirm the selected settings and click on **Install**



☛ Wait for installation to be completed.

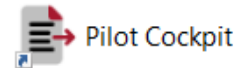


☛ Indicate if you want to start **Pilot Cockpit** immediately and click on **Finish**.



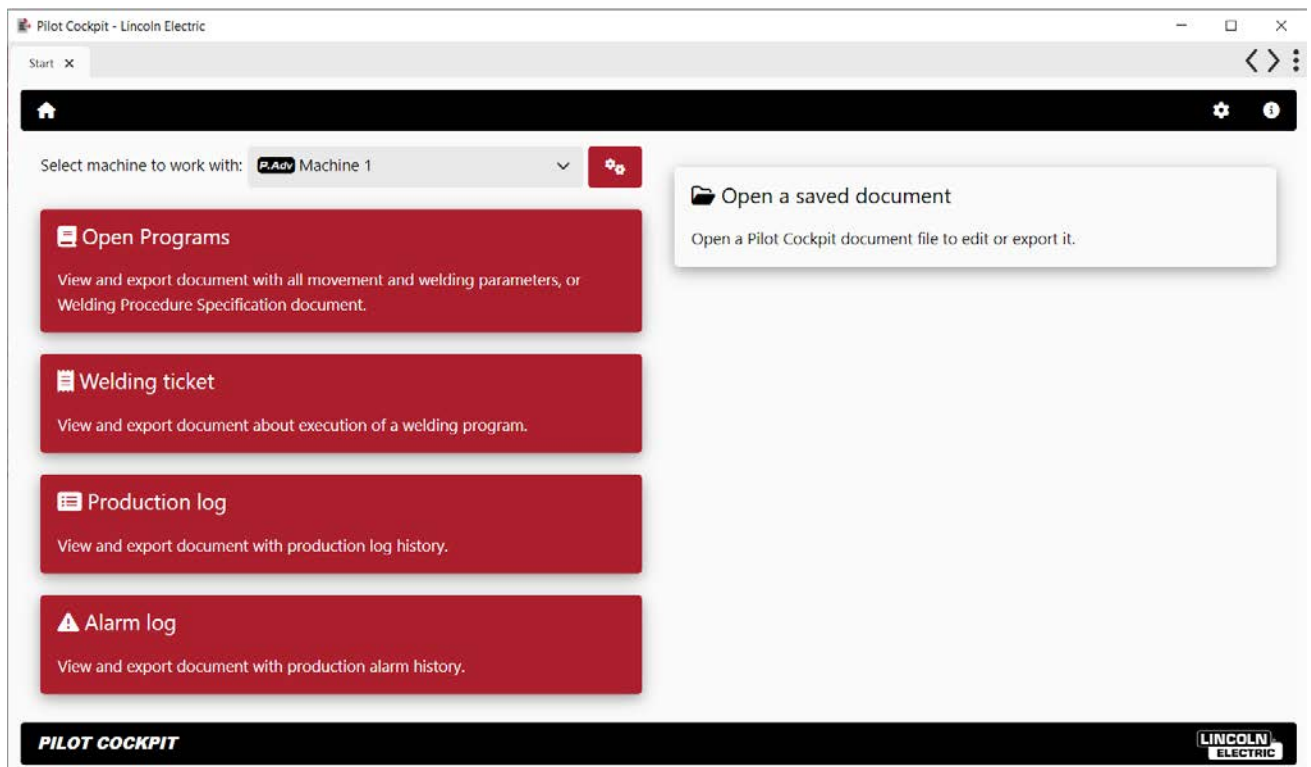
1 - Starting Pilot Cockpit

Click on the **Pilot Cockpit** shortcut from the Start menu or the Desktop.

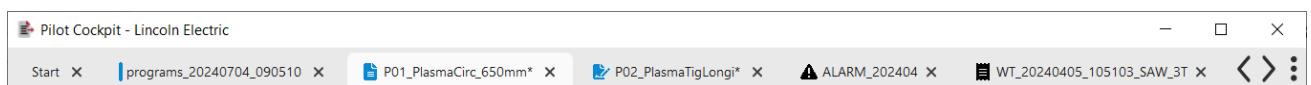


After the welcome message, the start screen will open.

2 - Start screen



Pilot Cockpit uses tab-based navigation, and the upper bar is dedicated to such navigation. The first tab is that of the start screen, and the others relate to open files or documents.







A tab ending in an asterisk “*” means that it contains changes that have not been saved or applied.

The icons of the tabs are coloured to make it easier to identify documents from the same file. Each file is represented by a different colour.

Description of commands:




Tab navigation bar

	Close tab
	Scroll tabs to the left (when the navigation bar is full)
	Scroll tabs to the right (when the navigation bar is full)
	Quick access to a tab (menu)








The start screen provides access to all the features of the application:

- Machine management
- Configuration of the application
- Opening of machine data
- Opening of previously saved documents


Menu bar


	Back to start screen
	Open Pilot Cockpit configuration
	Information about third-party components


Start screen


 Machine 1	Machine selection drop-down menu
	Open machine configuration
	Open Programs (machine programs) file
	Open WT (welding ticket) file
	Open Production (machine log) file
	Open Production (alarm log) file
	Open existing Pilot Cockpit document (.lpcr format)

3 - Creating and exporting documents

 **Open Programs**
View and export document with all movement and welding parameters, or Welding Procedure Specification document.

 **Welding ticket**
View and export document about execution of a welding program.

 **Production log**
View and export document with production log history.

 **Alarm log**
View and export document with production alarm history.

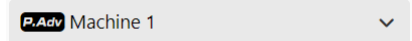
Documents are displayed and created from the start screen of **Pilot Cockpit**.



Work data must first be obtained from the machine. Please refer to the operating manual of your HMI for the procedure for exporting data to your PC.

3.1 Creating a Program or WPS document

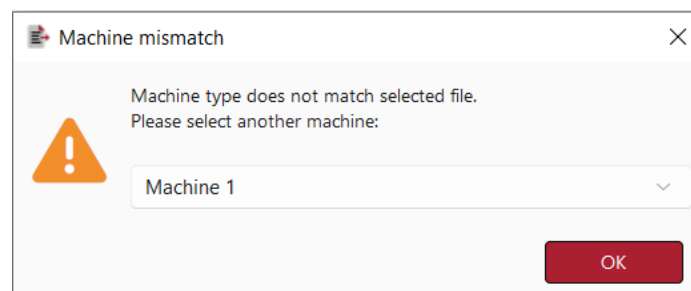
☛ From the start screen, at the top of the drop-down menu, select the machine or type of machine from which the data are obtained



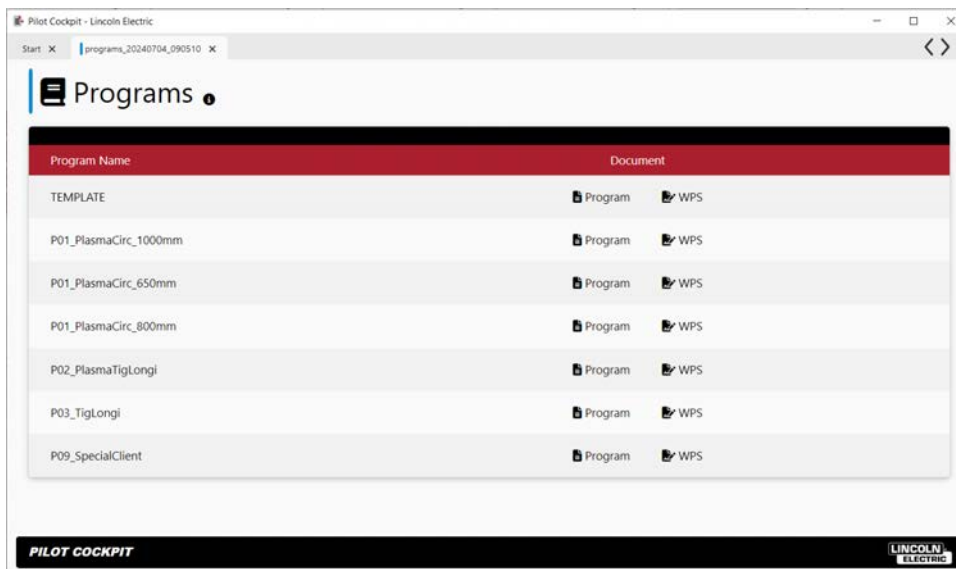
☛ From the start screen, click on the **Open programs** button.

☛ A dialogue box will ask you to open a file. Select the PROGRAMS_yyyymmdd_hhmmss.csv file from the machine.

☛ If there is any inconsistency between the opened file and the selected machine, warning messages may be displayed for selecting the right machine.





➤ After loading, a tab with a list of machine programs opens.



Description of commands:

Action on items

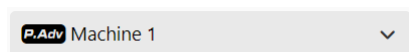
	Generate Program document
	Generate Welding procedure specification document

➤ On the row of the required program, in the Document column, click on the type of document to generate.

➤ A new tab opens with the generated document. Refer to the “Document editor” section to continue editing and saving the document.

3.2 Creating a Welding ticket document

➤ From the start screen, at the top of the drop-down menu, select the machine or type of machine from which the data are obtained

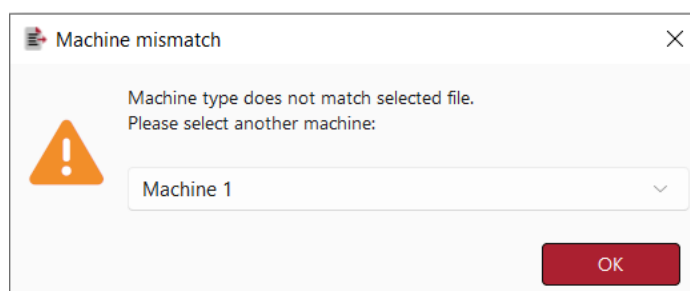


➤ From the start screen, click on the **Welding ticket** button.

➤ A dialogue box will ask you to open a file. Select the required WT_prog_yyyymmdd_hhmmss.csv file from the machine.

NB: the file name contains the name of the program applied followed by the date and time of end of running of the program

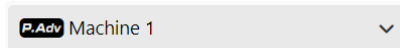
➤ If there is any inconsistency between the opened file and the selected machine, warning messages may be displayed for selecting the right machine.



☛ A new tab opens with the generated document. Refer to the “Document editor” section to continue editing and saving the document.

3.3 Creating an alarms or production events log

☛ From the start screen, at the top of the drop-down menu, select the machine or type of machine from which the data are obtained.



☛ From the start screen, click on the button:



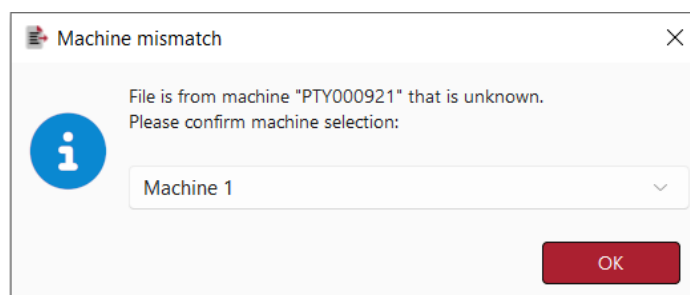
Production log (document containing all events) or,



Alarm log (document containing only the alarms).

☛ A dialogue box will ask you to open a file. Select the PRODUCTION_yyyymmdd_hhmmss.csv file from the machine.

☛ If there is any inconsistency between the opened file and the selected machine, warning messages may be displayed for selecting the right machine.



☛ A new tab opens with the generated document. Refer to the “Document editor” section to continue editing and saving the document.

3.4 Filtering the events in an alarms or production events log



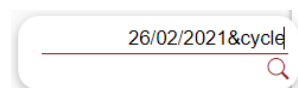
In production or fault logs, a magnifying glass icon on the edge of the page allows the user to filter/search particular rows

Only rows with the text entered in this field will be displayed. The character “&” is used to add another filter on the rest of the row.

Examples:



Only session events (user login/logout) are displayed



Only the events of 26/02/2021 relating to the cycle (start and end of cycle for instance) are displayed.

4 - Document editor

Pilot Cockpit - Lincoln Electric

Start X | programs_20240704_090510 X | P01_PlasmaCirc_1000mm* X

WELDING PROGRAM

Program Name: P01_PlasmaCirc_1000mm

PILOT COCKPIT

Machine: PSC1

Customer:

Project:

Date: Sep 13, 2024

Rev: A

Work Piece

Material

Thickness (mm) 0.0

Position Unknown

Joint Unknown

Comment

Weld schematic

Consumables

Wire type

Wire diameter (mm) Unknown

Plasma gas

Shielding gas

Trailer gas

Backing gas

Welding process

Process PLASMA

Torch type SP7

Electrode diameter (mm) Unknown

Shielding nozzle Unknown

Plasma nozzle Unknown

Gap between torches (mm)

Program parameters

Block 1

Intensity Flat DC

PRE WELD T (s) 0.5

PRE WELD I (A) 50

SLOPE UP I T (s) 0.1

WELD I (A) 80

Once your document is generated, a tab dedicated to that document is opened and you can edit and export it.







Description of commands:

Command sidebar	
	Enable/disable content modification
	Highlight selected text
	Remove highlighting in the selected text
	Zoom into the document
	Zoom out of the document
	Save the document in .lpcr format (to resume editing later on)
	Print document
	Export document in Excel format
	Export document in PDF format

4.1 Customising content/displaying a document

Depending on the type and content of the document, options may be displayed on the edge of the page to display or filter content or modify the layout.

Description of commands:

Context buttons	
	Hide/show rows in the table corresponding to the settings of the unused program. *
	Use a freehand drawing area/Use the generated image.
	Minimise the size of columns/Use usual column size. Minimise the size forces the PDF or print job to use only one page width.
	Hide/show rows in the table corresponding to the limits of the settings and process control. *
	Show only welding blocks/show all blocks.
	Filter/search rows containing the text. (Only in logs)

*: The default values of these options can be set up in the software configuration

4.2 Editing/completing a document



☛ In the document tab, click on **Enable content editing**.

☛ Place your cursor on the box to complete/edit and enter your changes.

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Date :	13 sept. 2024
Rev :	01

☛ You can navigate between boxes with the ↑ **Up** and ↓ **Down** and ⇄ Tabulation keys.



☛ Once the changes have been applied, click on **Disable content editing**.

NB: For editing charts/drawing areas, please refer to the section “Drawing editor”.

4.3 Highlighting a value or text

Highlighting an area:

☛ In the document tab, select all or part of the content of a box to highlight.

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Rev :	B



☛ Click on **Highlight**.

☛ The whole box (if all the text is selected) or the text is highlighted in yellow.

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Rev :	B

Deleting highlighted areas:

☛ In the document tab, select one or more highlighted areas to delete.

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Rev :	B



☛ Click on **Delete highlighting**.

☛ All the areas highlighted in the selection are deleted.

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Date :	13 sept. 2024
Rev :	B

4.4 Saving a document to subsequently resume editing in Pilot Cockpit (.lpcr format)



☛ In the tab of the document to save, click on **Save document**.

☛ A dialogue box will ask you to save the file. Select the required name and location for the file.

☛ A message indicates when the operation is completed and the asterisk "*" in the tab name disappears.

Saved



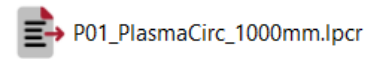
☛ The next time you click on **Save document**, the document will be saved automatically in the selected location.

4.5 Opening a previously saved document (.lpcr format)

There are two ways of reopening a document in **Pilot Cockpit**.

From the Windows file explorer:

☛ Find the .lpcr file in your folders and double-click on the file to open it.



☛ **Pilot Cockpit** is displayed with the document opened in a new tab.

From the Pilot Cockpit start screen:



☛ From the start screen, click on the **Open saved document** button.

☛ A dialogue box will ask you to open a file. Select the .lpcr file saved previously.

☛ The document is opened in a new tab.



NB: The **Save document** button will save the document directly in the same file. To save as/save a copy, copy/paste the file from the Windows explorer.

4.6 Printing a document



☛ In the tab of the document to print, click on **Print document**.

☛ Wait for the print job to be generated.

☛ A print dialogue box opens. Select the required printer and settings and click on **Print**.

NB: The printed file is formatted according to the same template as PDF export (A4 portrait/landscape, management of page breaks and repetition of headers etc.).

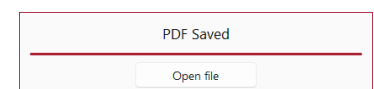
4.7 Exporting a document in PDF format



☛ In the tab of the document to export, click on **Export as PDF**.

☛ A dialogue box will ask you to save the file. Select the required name and location for the file.

☛ A message indicates when the export is completed and a button will allow you to open the PDF file directly.



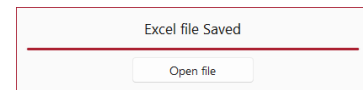
4.8 Exporting a document in Excel format



In the tab of the document to export, click on **Export in Excel format**.

A dialogue box will ask you to save the file. Select the required name and location for the file.

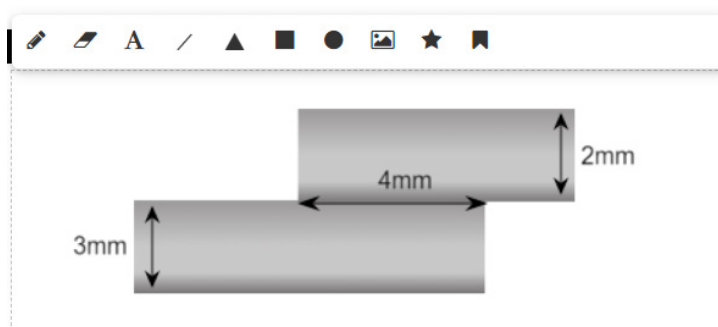
A message indicates when the export is completed and a button will allow you to open the Excel file directly.



NB: Excel exports are only possible in .xlsx format.

An Excel export may be on a single sheet, or with several sheets corresponding to the different parts of the document; see the section “Software configuration”.

5 - Drawing editor



Some documents contain locations dedicated to drawings/charts. To open the editor, click in the drawing area; the associated menu bars will be displayed as shown above.

Description of commands:

Upper command bar	
	Freehand drawing tool
	Eraser tool
	Insert text box
	Line and arrows tool
	Rectangle tool
	Circle tool
	Insert image
	Polygon tool
	Insert a weld seam from the library

For each selected tool/object, a settings bar is displayed in the lower area to change its appearance (colour, border, thickness, font etc.).

5.1 Editing, moving, resizing or turning an object

- ☛ Once the drawing editor is open, click on the object to edit.



- ☛ A box with handles is displayed. Resize or turn the object with the handles. Click and drag the object to move it.

- ☛ A settings bar is also displayed in the lower area to change the appearance of the object (colour, border, thickness etc.).

- ☛ If the object is text, double-click to edit the text or its font.

5.2 Moving an object forward or back or deleting it

- ☛ When the drawing editor is open, right click on the object
- ☛ A context menu opens and offers controls to move to the foreground or background, delete etc.

5.3 Inserting an image

For complex charts, more appropriate software should be used and the chart should be inserted in image format in the document.



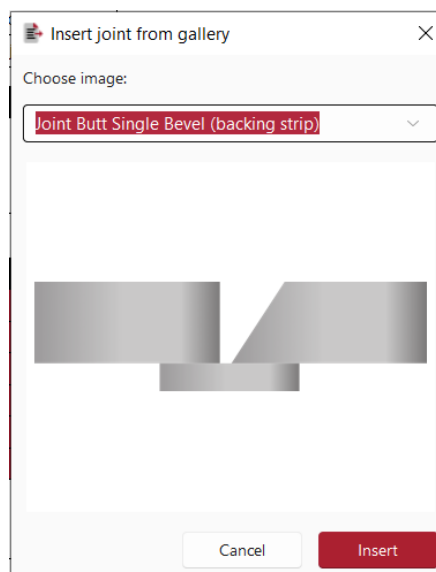
- ☛ When the drawing editor is open, click on **Insert image**.
- ☛ A dialogue box will ask you to open an image. Select the image to insert (recommended formats PNG or JPEG) and click on **Open**.
- ☛ The image is inserted and can be moved and resized.

5.4 Inserting a predefined Welding joint from the library

To make it easier to make charts, a seam library is offered

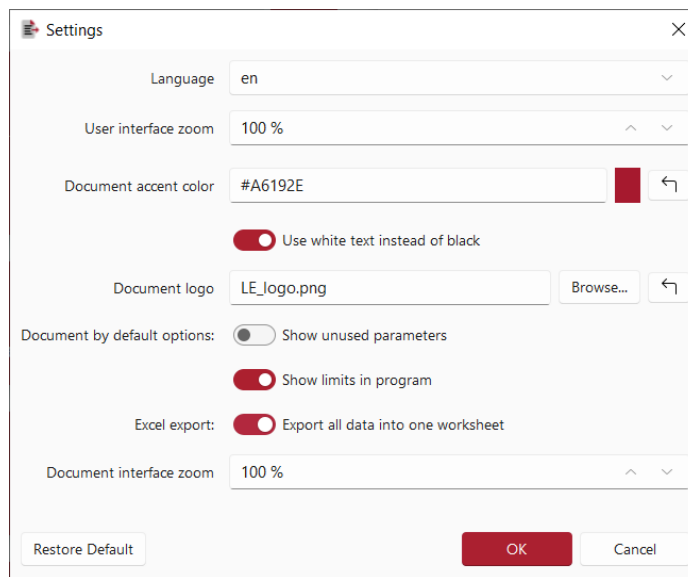


- ☛ When the drawing editor is open, click on **Insert joint**
- ☛ The seam library opens. Select the required seam in the drop-down list.



- ☛ An image preview is displayed. Click on **Insert** to add the image in the drawing tool.

1 - Software configuration screen



1.1 Changing the language of Pilot Cockpit



☛ From the start screen, click on the **Configuration** button at the top right.

- ☛ On the first row, **Language**, select the language you want in the drop-down menu.
- ☛ Confirming by clicking on **OK**
- ☛ An information message will ask you to restart **Pilot Cockpit**. Click on **OK**.
- ☛ Close and reopen **Pilot Cockpit**. The new language is applied.

1.2 Changing the logo and colour of generated documents

To generate customised documents, the logo and colour of documents can be personalised.



☛ From the start screen, click on the **Configuration** button at the top right.

- ☛ On the **Document colour** row, click on the coloured rectangle and select your colour.
- ☛ If your colour is dark, enable the **Use white text instead of black** option; otherwise, disable it.
- ☛ On the Document logo row, click on **Browse...** and select your logo in PNG format.
- ☛ Confirming by clicking on **OK**.

The new documents generated will apply those preferences.

NB: The button ↶ allows you to restore the original colour or logo.

1.3 Changing the display size

Depending on the size and resolution of your screens, you may want to enlarge or reduce the software display size.



➡ From the start screen, click on the **Configuration** button at the top right.



➡ On the **User interface zoom** row, use the right-hand arrows to increase or decrease the interface size



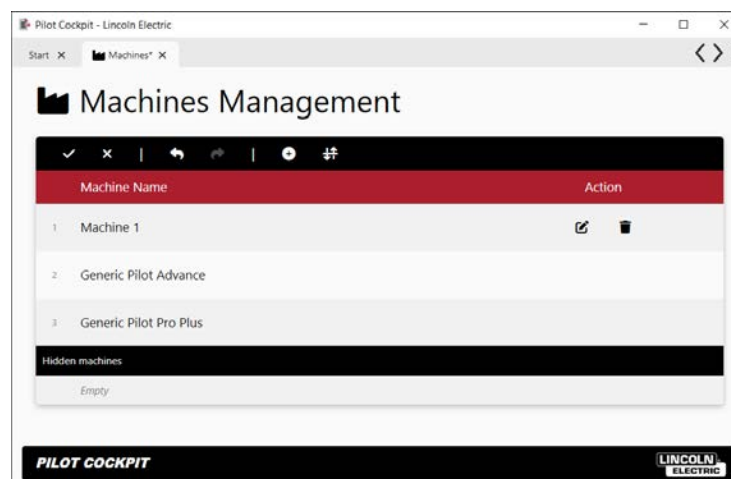
➡ On the **User interface zoom** row, use the right-hand arrows to increase or decrease the default zoom value applied in the document editor.

➡ Confirming by clicking on **OK**

2 - Machines management screen



➡ Go to the machines management screen by clicking on the button from the start page



Pilot Cockpit is pre-installed with two generic machines. These allow you to view and generate standard documents of your machines without any further configuration.

NB: To access all the features, you must enter your machines in **Pilot Cockpit**.

Menu bar	
	Apply changes and close tab
	Cancel changes and close tab
	Cancel last action
	Restore last cancelled action
	Create new machine
	Reorganise machine order

Action on items	
	Change machine
	Delete machine

2.1 Adding/modifying machines in Pilot Cockpit



☞ From the main machines management screen, click on the **Install machine** button in the menu bar.



☞ Complete the requested information. If necessary, select the machine specification/configuration file supplied while exporting data on compatible machines. Then confirm the creation of your machine with the **Apply changes** button.




☞ Carry out any other operations relating to machine configuration. Then save all your changes with the **Apply changes** button on the main machines management screen.

2.2 Selecting the machine that is selected when Pilot Cockpit starts

The machine selected when Pilot Cockpit starts is the first machine on the list. The instructions for changing the order of machines are provided below.

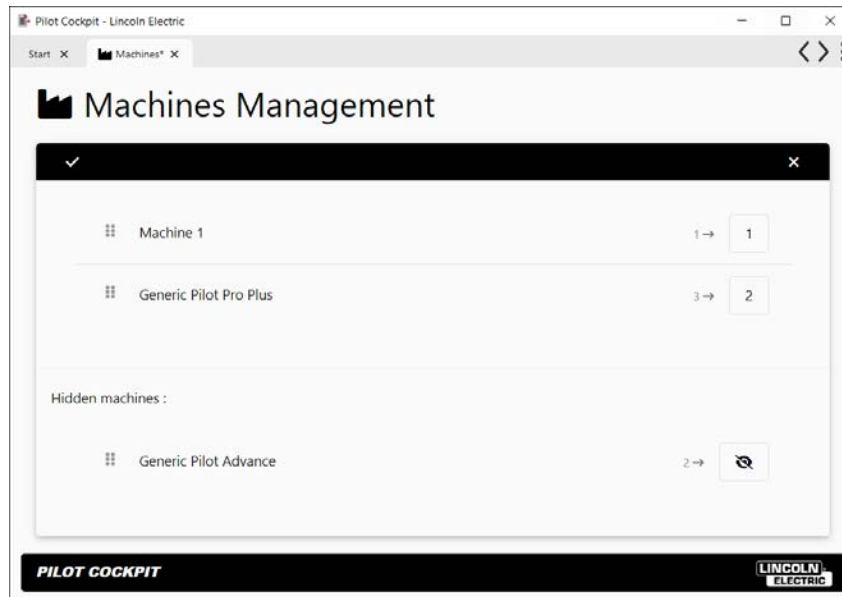
2.3 Changing the order or hiding/showing machines on the Pilot Cockpit start screen



☞ From the main machines management screen, click on the **Reorganise** button in the menu bar.

☞ Drag and drop items to select the new order of your machines. A **Hidden machines** area at the bottom allows you to hide machines in the list (while keeping their data).

NB: The generic machines that have been pre-installed cannot be deleted, but can be hidden here



☞ Confirm your organisation with the **Apply changes** button.



☞ Carry out any other operations relating to machine configuration. Then save all your changes with the **Apply changes** button on the main machines management screen.

[illegible]