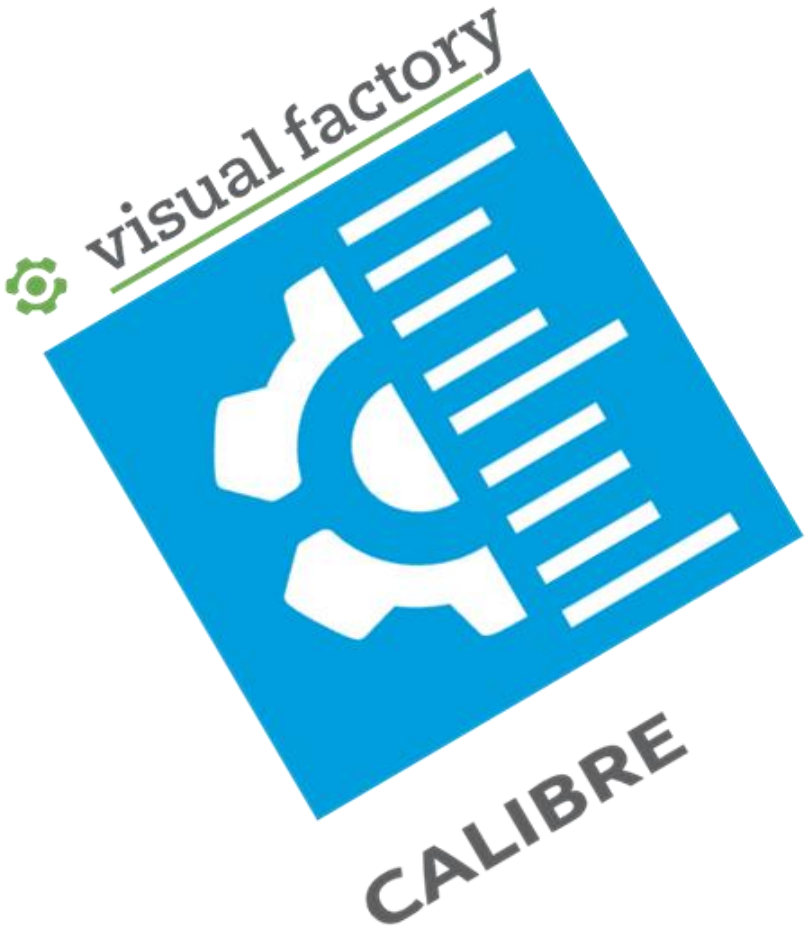
elecsoft

visual factory



Version 25

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Introduction

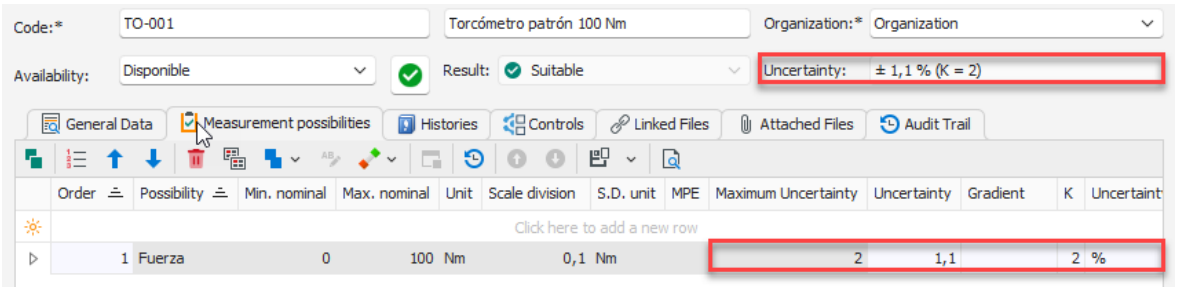
This document analyzes the improvements and new functionalities introduced in the Visual Factory Calibre 25 application with respect to version 23.

Improvements in configuration

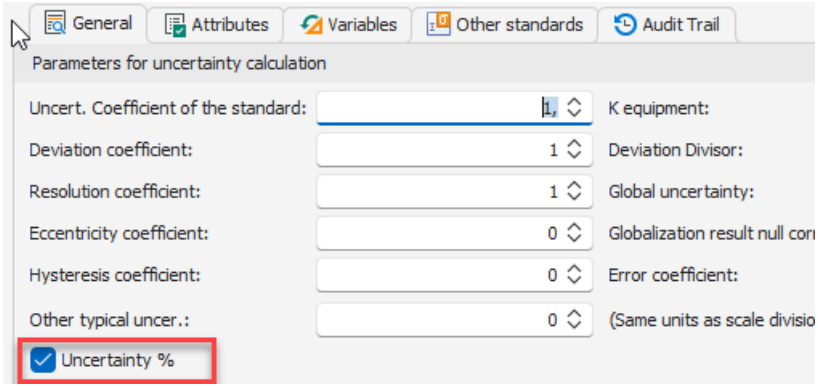
Uncertainty in %.

It is now possible to work with uncertainties expressed in percent (%). This includes both the assignment in the standard and the expression of the results in internal calibrations.

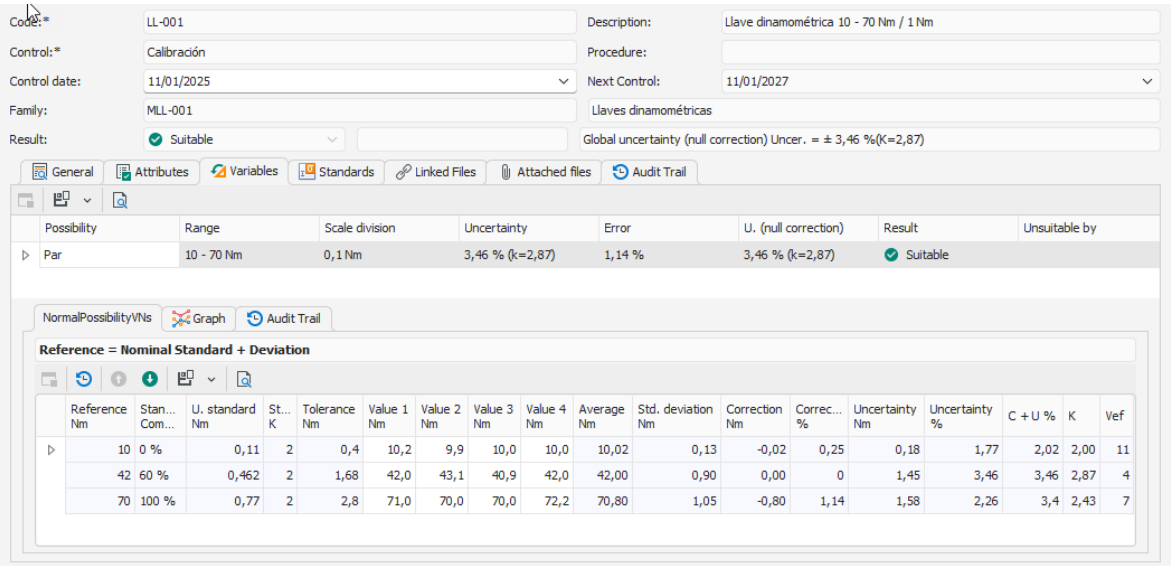
A typical example using uncertainty in % are torque wrenches. The standard torque wrench can be assigned uncertainties in %:



Configuration: Simply activate the corresponding option to use uncertainty in % during internal calibrations.



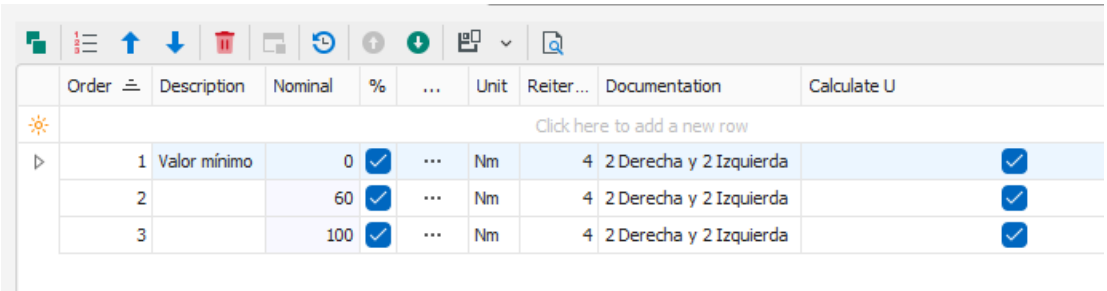
Results: The results of the internal calibration will also show the error and uncertainty in %.



Control points in %.

Sometimes it can be very interesting to express the control points based on a % of the maximum nominal of the equipment.

Continuing with the example of the previous torque wrench, we can configure the control points as follows:



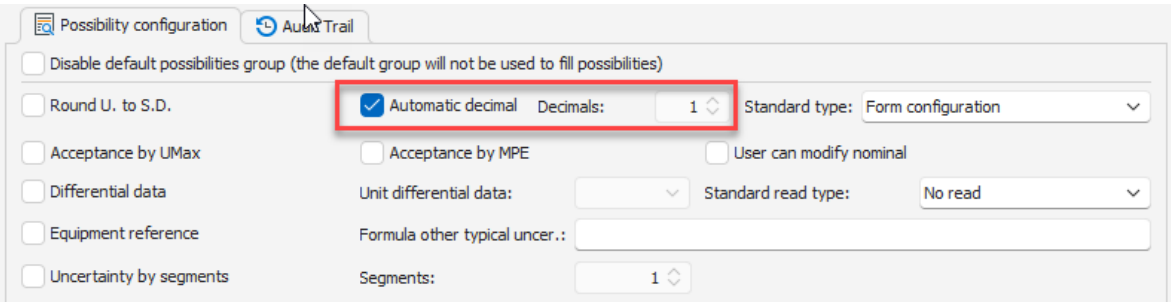
In this case 0% (or the minimum value of the range), 60% and 100% have been expressed. If we look at the screen in the previous section, these percentage values correspond to 10, 42 and 70 Nm.

Automatic number of decimal places

The application allows configuring each measurement possibility within the "Normal" format so that it automatically takes the number of decimal places, according to the decimals indicated in

the scale division. This facilitates the management of families, such as micrometers, which can be adjusted depending on whether the scale division is centesimal or millesimal.

The adjustment is made in:

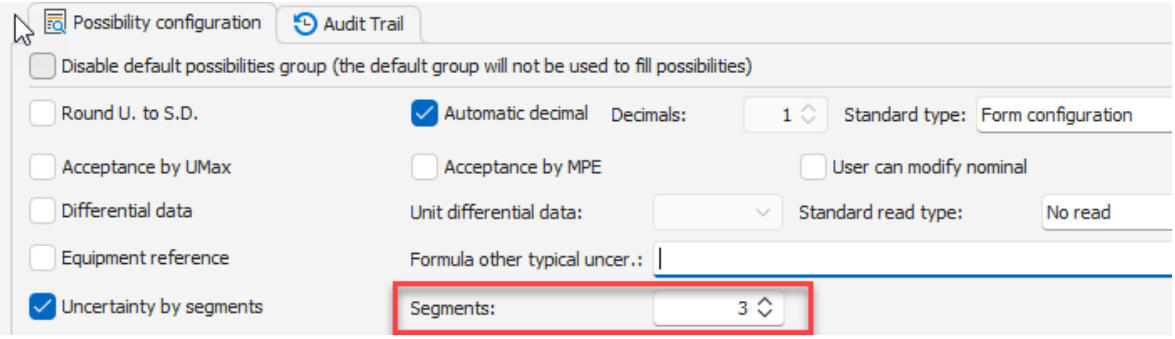


Calibration by segments or sections

This functionality is designed for measuring equipment such as fixed rulers, flexible rulers, flexometers and tape measures. It is useful when the standard cannot cover the entire range of the equipment and calibration must be performed in segments.

For example, for a 3 meter flexometer that we calibrate with a 1 meter coordinate meter, we will indicate that we will use 3 segments.

We will configure it this way:



Definition of Imax and EMA as a line function

Sometimes the maximum uncertainty or MAE (Maximum Admissible Error) is expressed by a straight line, for example:

- I. Max≤ 0.06 + 0.0004 L
- EMA≤ 0.08 + 0.0005 L

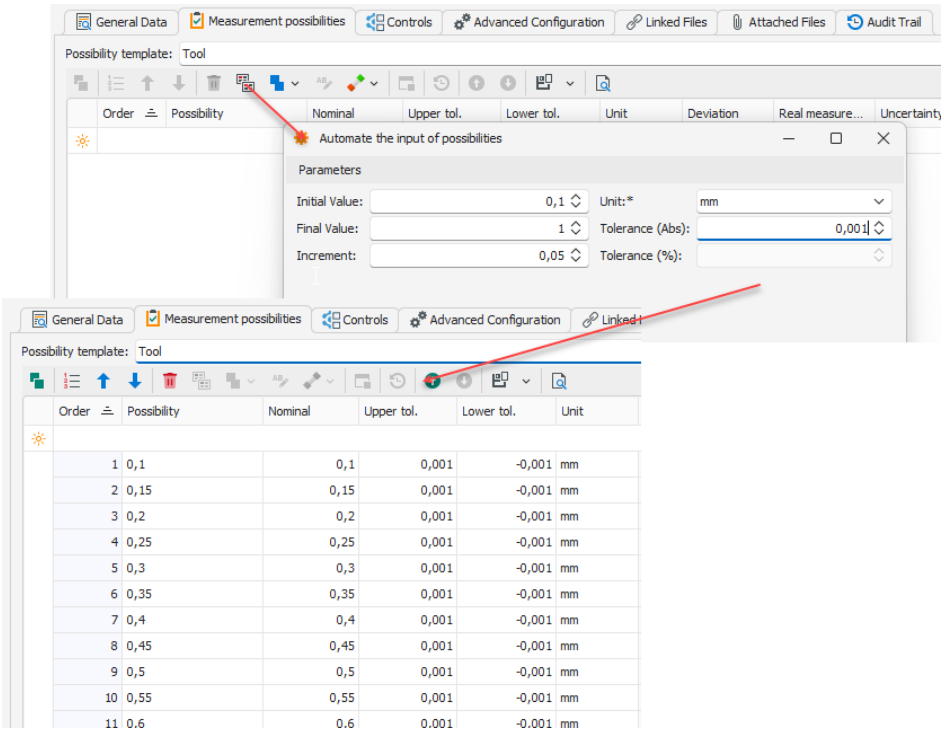
In these cases 0.0004 and 0.0005 are the slope of the line and 0.06 and 0.08, its value at origin. L is the maximum nominal.

With the new functionality we would enter these values as follows:

	Order	Possibility	Min. nominal	Max. nominal	Unit	Scale division	S.D. unit	MPE	MPE (Gradient)	U. Max	U. Max. (Gradient)	Uncertain
								Click here to add a new row				
	1	Exteriores	0	150	mm	0,01	mm	0,08	0,0005	0,06	0,0004	0,0
▷	2	Interiores	0	150	mm	0,01	mm	0,08	0,0005	0,06	0,0004	0,0
	3	Profundidad	0	150	mm	0,01	mm	0,08	0,0005	0,06	0,0004	0,0

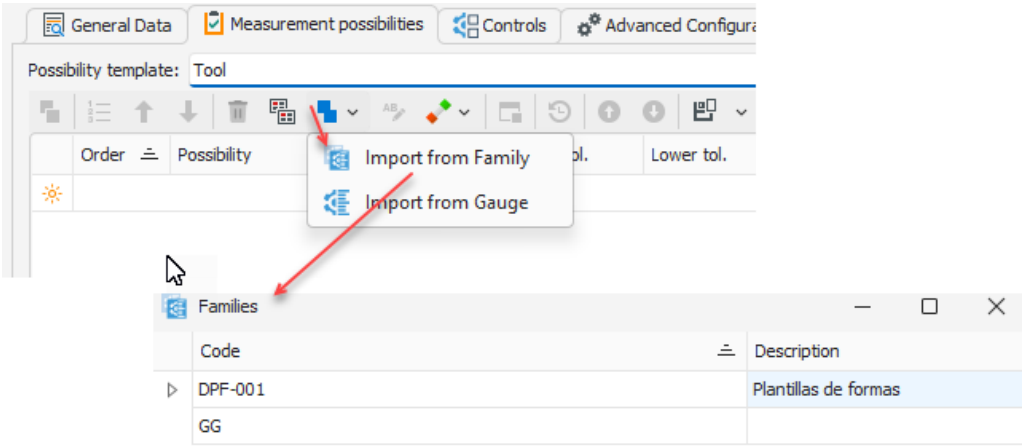
Automation of possibilities with a pattern

For tool sets with regular increments (e.g., feeler gauges from 0.1 to 1 mm in 0.05 mm intervals), it is now possible to enter all values automatically.



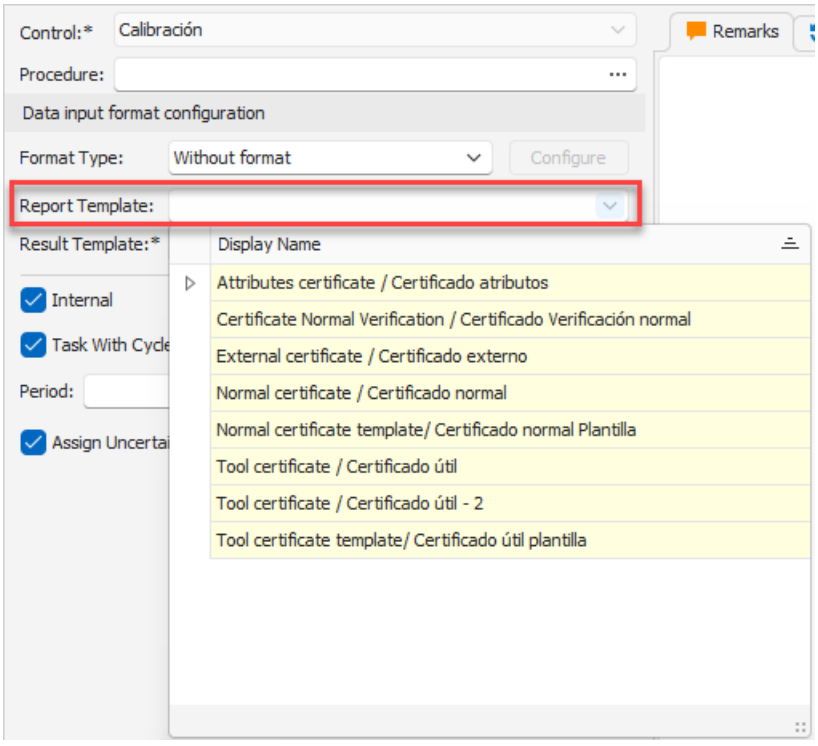
Copy possibilities between families and teams

It is possible to copy the measurement possibilities of a family or equipment to others, facilitating configuration and reducing management time.



Definition of Certificate Templates at the family level

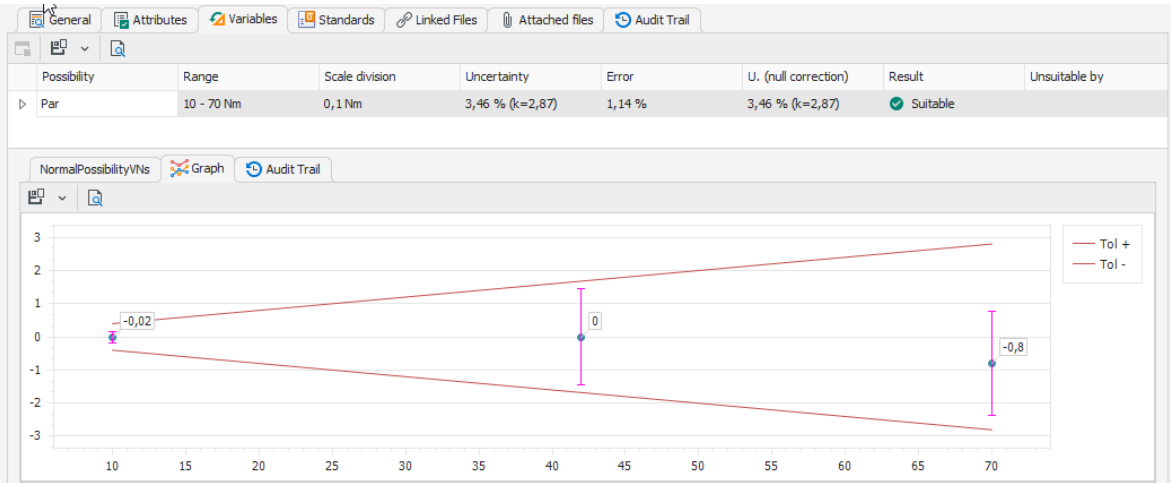
Specific certificate templates can now be assigned to each family, allowing certificates to be designed more closely to the needs of each type of equipment.



Data

Correction and uncertainty graph

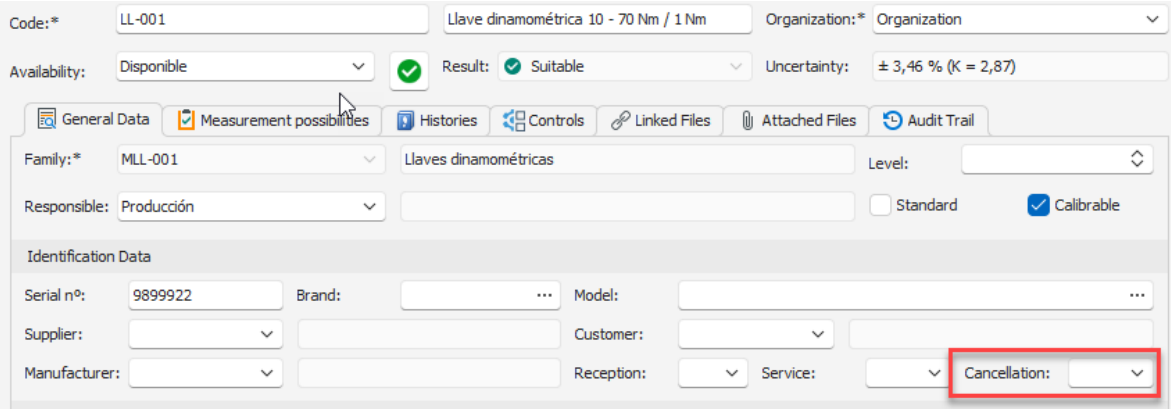
The "Normal" format now allows you to visualize the data input in a graph. For example, for a torque wrench, you can visually observe how the correction and uncertainty behave.



Termination date management

A specific field has been added to record the date of decommissioning of equipment, useful for generating reports such as "equipment decommissioned this year".

When a device is decommissioned, the date is automatically recorded. If the equipment is reactivated, the date is deleted.



Audit Trail Extended

This functionality is integrated in a payment module and offers:

- More configuration options to manage audit levels.
- Change log for deleted records.
- Electronic signature on the occasion of changes.

Note: Refer to the document "User Manual - Visual Factory Calibre Audit Trail extended FDA.pdf" for detailed information.

Integrity

- It is not allowed to delete teams that are pattern and are linked to other teams.

General functionalities

- Incorporation of the French language in the user interface.
- Upgrade to the latest versions of Microsoft .Net8 and DevExpress XAF 24.2 frameworks.
- Compatible with the SQL SERVER 2022 engine.
- Improved overall application performance.