**SIPSI News:** The Newsletter to the Users of SIP Benches

*No.2 - December 2019*

## Editorial

"SIPSI News" is a technical newsletter, close to the community of users of SIP benches. It returns in this 2$^{nde}$ edition with several very positive observations:

First observation: with more than forty SIP benches already retrofitted in the world, the SIPSI team is pleased to have met the technical challenge posed by the evolution of the electronics of these benches and to see the success in the eyes of the measurement experts.

Second observation: users do not hesitate to express their specific expectations and thus allow the SIPSI team to continue developing the solution in perfect alignment with the real needs of the field. Thank you all for these constructive exchanges!

This second newsletter will cover four topics:

- A modern and reliable solution for productivity, with the description of two SIPSI tools,
- SIPSI crosses the Atlantic Ocean,
- Expert testimonials,
- News on current and upcoming events.

Clémence Damay
SIPSI Ambassador at Cedarnet

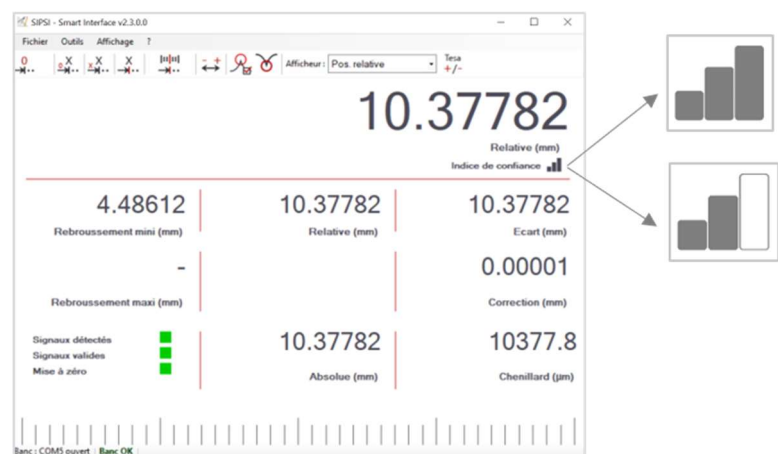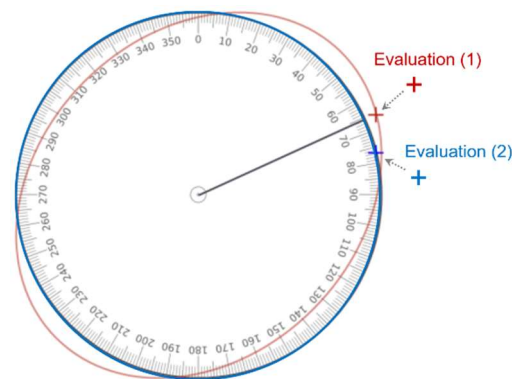## A modern and reliable solution for productivity

The SIPSI retrofit solution takes the side of offering optimized tools with and for the users of SIP benches. Several evolutions have been developed to this end:

- Improving installation efficiency by setting up self-calibration and remotely updates to facilitate the work of local partners and to ensure greater responsiveness when needed.
- Customisation of the SIPSI solution. For example, using a multiple foot-pedal to input measurements, customizing the data sent, interfacing with other management software...

Two other major functions have been developed recently and significantly improve measurement **performance,** user **comfort** and the **productivity** of SIP benches:

- **Function 1: Confidence Indicator**

Developed in 2019, this indicator is available from version 2.1 of the SIPSI software. It indicates the quality of the measurement interpolation and allows the user to check at a quick glance whether his measurement was done in the right conditions, with 3 bars guaranteeing an interpolation error of less than 0.1µm.

**A modern and reliable solution for productivity** - (Following the first page)

This indicator is defined by the combination of two evaluations represented by Lissajous curves, visible in the SIPSI software (window *"show measurement angle"*):



- o Evaluation of phase, amplitude and offset errors. The algorithm then verifies the match between the resulting Lissajous curve (red curve) and the time T real measurement (red cross);

- o Evaluation of the SIPSI correction in relation to the theory: the algorithm verifies the match between the SIPSI corrected measurement (blue cross) and the theoretical value (blue circle);

The Confidence Indicator therefore provides assistance in assessing measurement conditions and helps to ensure the quality of the measures taken.

- • **Function 2: Interfacing with TESATRONIC displays**

In order to meet a user demand, Cedarnet has made the SIPSI software (versions 2.2.0 and more) compatible with some digital displays of the TESA brand (range TT10 to TT80) and has even pushed the development to the integration of a specific correction to increase productivity.

With this new feature, the user no longer has the obligation to aim for the "zero of TESA" (reference effort to reach). He/she can now aim for a value close to this zero and find that the SIPSI software directly compensates the gap with the targeted value. This feature saves a lot of time for users who regularly handle such sensors, while ensuring repeatability and reliability of measurements.

⇨ *Contact Cedarnet for more information on software developments and updates.*

## SIPSI crosses the Atlantic

With the EMC qualification to the EN (Europe), FCC (USA) and ICES (Canada) standards, the SIPSI solution is now ready to cross the Atlantic Ocean.

After a deployment in Europe, a first installation was successfully completed in Canada in early November!

A demonstration tour will be held in 2020 on the American continent. Don't hesitate to contact us to be a part of it.

## Testimonials

Testimonial of Mr. TILLET- Production and Laboratory Manager of the TRESCAL Agency in Chatellerault.

"A SIP302M bench used by our laboratory showed a significant fidelity drift ; its counting electronics was obsolete and irreparable; this bench was therefore in danger of being decommissioned in the short term. We tested the SIPSI solution during a demonstration on our site and then we had it installed on our bench in 2019. After this retrofit we are satisfied because the fidelity of the measurements has become excellent again: at the calibration, we see an improvement of 0.2µm of the total error of accuracy and the standard deviation on 10 measures at two separate positions on the bench is 0.03µm or 0.05µm."

Find more testimonials from SIPSI partners and SIPSI users on the dedicated website:

https://siplinearmeasurementbench.com/fr/ref-fr/temoignages

- • **Cedarnet concludes its second demonstration tour at the beginning of 2020. If you would like a free SISPI demonstration on your bench, please email us at: contact@cedarnet.fr**
- • **Meet us soon at the CONTROL exhibition in Stuttgart from 5 to 8 May 2020 for our 2nd participation at this key event in the field of quality.**