CS-2400/CS-2500

Less complexity, more confidence in the haemostasis laboratory

Shaping the advancement of healthcare.

Challenges in haemostasis testing

In haemostasis, test results can point out major clinical issues, some of which can be life-threatening if not dealt with swiftly and accurately. Confidence in the subsequent clinical decision-making is therefore essential. You need equipment that performs reliably and produces results of consistent, high quality at all times.

You need to meet TAT demands and help patients as soon as possible, so the tests have to be performed fast – even with complex samples that require precise pre-analytical treatment. And as the industry evolves, the spectrum of test requests is increasing too. It's a challenging situation.

Quality in every aspect

Sysmex haemostasis solutions address these issues by bringing together best-in-class components – Sysmex analysers, and reagents and application protocols from its highly reputable suppliers Siemens and Hyphen BioMed. The strong technological performance both stabilises the routine and provides high consistency – the essential basis for reliable, accurate results and confident interpretation. This confidence is underpinned with our active support, service and expertise, both onsite and/or online.

You trust your skills – and you can rely on ours.

Your advantages

- Consolidates routine and specialised testing in a single analysis system
- Customisable safety: pre-analytic sample checks for interferences and over-/under-filling
- High-quality results based on advanced multi-wavelength technology
- Automated, high-accuracy platelet function testing by aggregometry
- Improved result quality for abnormal samples and increased walk-away time thanks to rule-based rerun & reflex testing
- Advanced inhibitor testing with cross-mixing tests
- Recognise and identify clotting disorders through clot waveform analysis*

*For research use only

The Sysmex CS-2400 and CS-2500 – benchtop excellence

All our CS-Series instruments consolidate and automate a wide range of coagulation tests in a single analyser – both routine and speciality testing – and use the latest multi-wavelength technology with rapid throughput.

The CS-2400 (open tube) and CS-2500 (with cap piercing) analysers feature pre-analytic sample checks and four detection methods simultaneously on a single platform – coagulation end-point, chromogenic kinetic analysis, turbidimetric immunoassay and automated platelet aggregation. They deliver up to 60 selectable parameters, making them particularly versatile and suitable for multi-functional laboratories with demanding diagnostic needs.

Peace of mind with difficult samples

Unsuitable samples can be a source of incorrect results. They also lead to extra time for repeated analysis. To make sure you can get correct results straight away, the CS-2400/CS-2500 checks all sample tubes for over- or under-filling and scans them for interferences caused by haemolytic, icteric or lipaemic conditions.

The multi-wavelength detector scan determines the most suitable measurement wavelength for each sample, greatly elevating the quality of the results. Results from unsuitable samples are flagged and can be accepted or rejected – the decision is yours, as you can define and set individual criteria for each parameter.

Figure 1 *Multi-wavelength technology principle.*
Dispersed light is transmitted by an optical fibre to the detector block. The reaction process is detected at five wavelengths using a multi-wavelength detection system. Measurement is performed by selecting the optimal wavelength for each measurement parameter. In the case of an abnormal waveform, reliable data is still provided by switching the primary and secondary wavelengths.

Making your lab life easier

The CS-2400/CS-2500 performs a wide spectrum of basic and more specialised testing, automatically and standardised. This lets you streamline your workflow without the need for other equipment or the extra knowledge and training that would be required otherwise.

Advanced reagent management ensures reagents are used more efficiently. Reagents can be loaded in any position at any time, even during the measurement process. Thanks to two-dimensional *in situ* barcode reading, automatic reagent identification and data input improve security and ease of use. The minimised dead volume helps you to reduce reagent waste, and the extended on-board reagent stability helps to cut costs in your lab.

With remote access capabilities, we can help you to proactively monitor your device, so as to minimise instrument downtime. This tailored maintenance helps to maximise instrument and workflow reliability.

Great diagnostic value

The CS-2400/CS-2500 delivers superior assay and extended calibration performance. It can also run speciality tests, including FXIII activity and platelet aggregation. This lets you consolidate primary and secondary haemostasis analytics in a single analyser.

To get the result quality you need, the analyser offers multiple patient sample dilutions for single coagulation factor analysis. Thanks to advanced photo-optical clot detection, measurements are made throughout the clot formation and the full clot signature can be displayed. To identify atypical *in vitro* clot reactions that may occur with haemophilia, sepsis or DIC patients, the analyser can also display derivatives of the clot formation curve*.

Automated, rule-based reflex testing increases diagnostic result quality since additional tests required for abnormal samples are triggered and performed automatically. You therefore get all the results you need with no additional intervention.

* For research use only

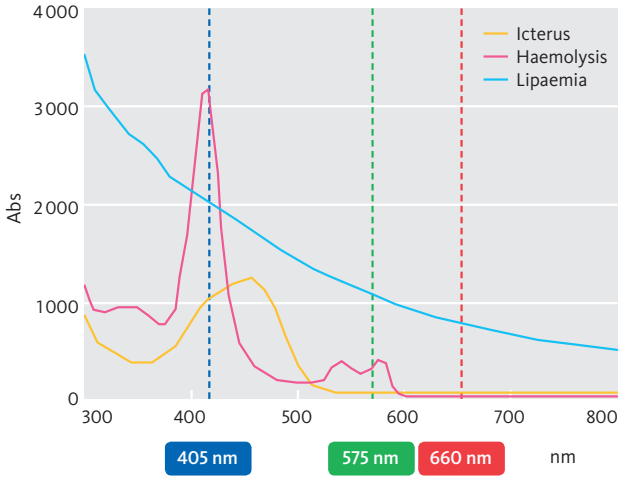

Figure 2 *HIL check principle. By performing pre-measurement photometry on the initial sample using the HIL detector, the system can display the haemolysis, icterus and lipaemia status as a flag. You can set thresholds for each flag and measurement parameter.*

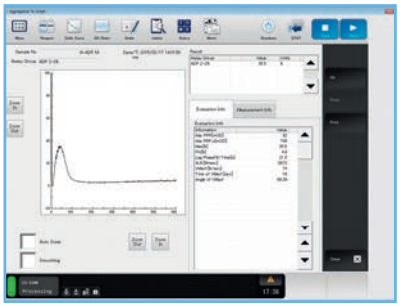

Figure 3 *Platelet aggregometry analysis with evaluation parameters and aggregation percentage curve*

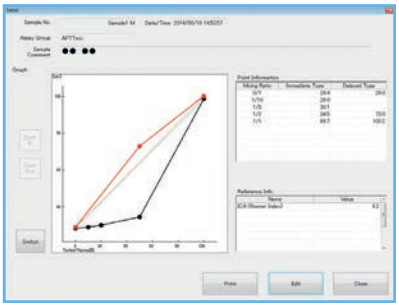

Figure 4 *Cross-mixing test display. To deal with these time-consuming and complex tests, the system performs the automatic dilution measurement, graph generation with superimposing the measurement points before and after incubation and ICA calculation. This allows visual, quantitative decisions and improves testing efficiency.*

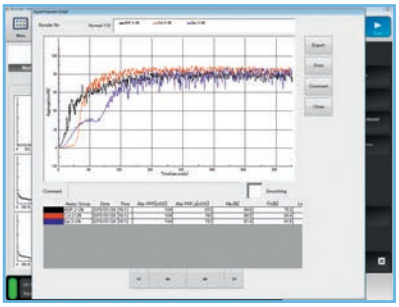

Figure 5 *Aggregometry result display with superimposed graphs*

The CS-2400/CS-2500 delivers superior assay and extended calibration performance

Key specifications

Models	CS-2400 (open tube), CS-2500 (cap-piercing)
Detection principles	clotting, chromogenic, immunologic, aggregation
Throughput	up to 180 tests/h (PT)
Wavelengths	340 nm, 405 nm, 575 nm, 660 nm, 800 nm
HIL check	available per assay
Sample volume check	available
Sample tube loading capacity	50 tubes
Detector wells	10 positions (4 for aggregometry)
Incubator wells	10 positions
Simultaneously available assays	60 assays
Reagent positions	40 positions for reagents/controls/plasma, 5 positions for buffers
Reagent cooling unit temperature	10 ± 2°C
Calibration curves	multi-lot management, 10 calibrations per assay, 10 calibrations per reagent lot
Stored test results	up to 10,000 samples
QC methods	Westgard multi-rule, L-J
Cross mixing	available (creation of mixing curve)
Aggregometry	available
Clot waveform analysis	available with 1st and 2nd derivatives (research use only)
Dimensions/weight (main unit)	775 x 685 x 895 (w x h x d, mm)/approx. 110 kg

Authorised representative (EC REP): Sysmex Europe GmbH
Bornbarch 1, 22848 Norderstedt, Germany · Phone +49 40 52726-0 · Fax +49 40 52726-100 · info@sysmex-europe.com · **www.sysmex-europe.com**

Manufacturer: Sysmex Corporation
1-5-1 Wakinohama-Kaigandori, Chuo-ku, Kobe 651-0073, Japan · Phone +81 78 265-0500 · Fax +81 78 265-0524 · **www.sysmex.co.jp**

You will find your local Sysmex representative's address under www.sysmex-europe.com/contacts

ZE000872.EN.C.09/19