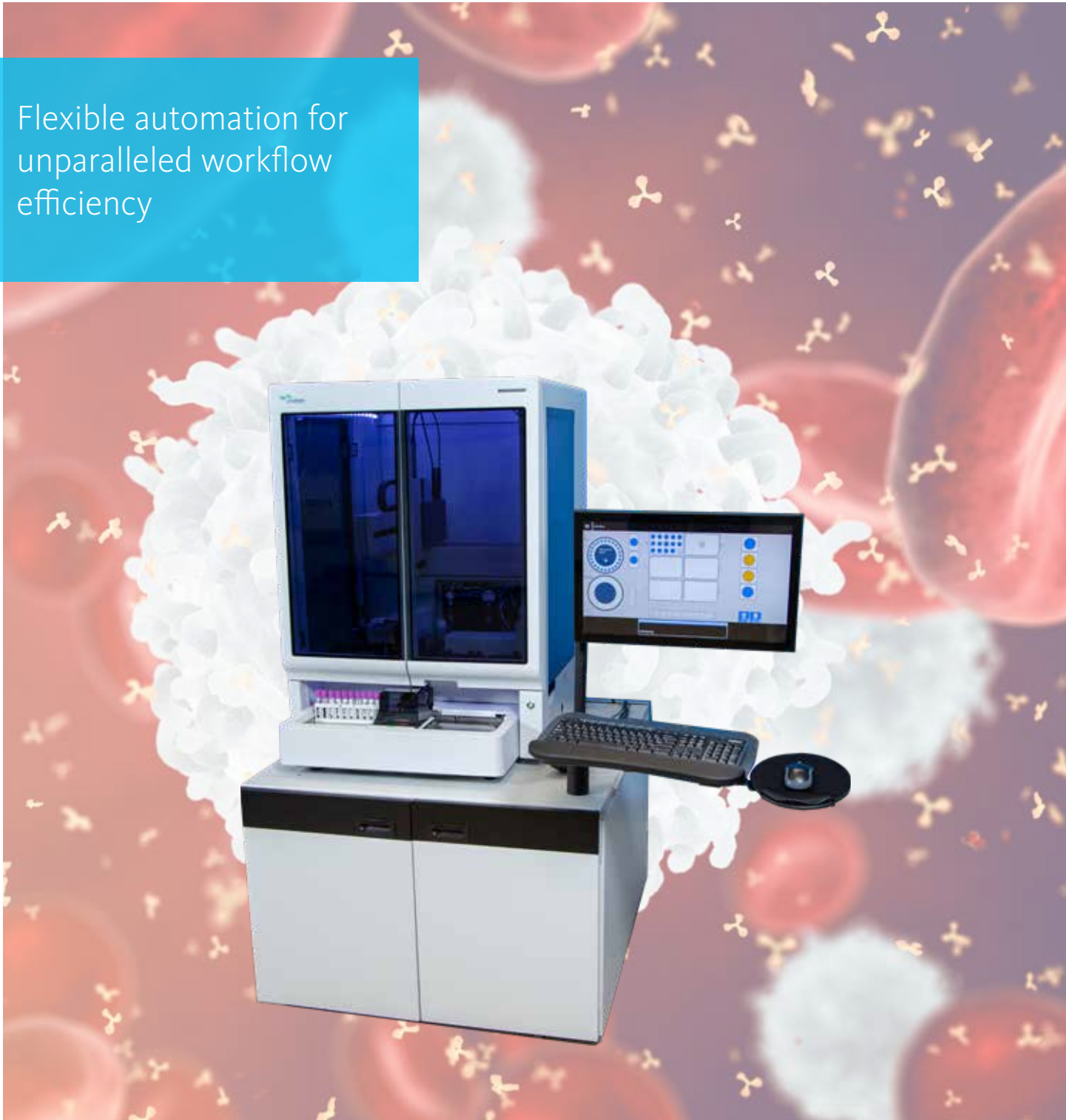


Flow Cytometry Sample Preparation System

PS-10

Flexible automation for
unparalleled workflow
efficiency



Unmatched Flexibility with Sysmex PS-10

High-capacity autosampler for reliable and safe specimen handling

- Use of standard Sysmex racks
- Up to 50 sample tubes loaded at a time, with additional racks loaded continuously
- Multiple integrated barcode readers enable mapping of samples to tube rotors; eliminating pre-analytical errors



Significantly enhanced laboratory processes

- Adaptable worklist creation
- Continuous sample introduction
- Efficient automation for high throughput operation
- Availability of two cooled racks to ensure reagent or cocktail stability
- Virtual elimination of operator-dependent variability
- Unparalleled flexibility, suitable for any existing laboratory procedures

The **Sysmex PS-10 Flow Cytometry Sample Preparation System** alleviates the primary sample preparation bottleneck in busy clinical flow cytometry laboratories and provides unparalleled flexibility for the creation of complex, laboratory-developed tests.

Meeting Today's Needs and Maximising Workflow Efficiency

- Test order via LIS speeds up sample processing
- Powerful tools allow for easily created custom tests, panels and procedures
- Reagent block, bulk reagent, test, panel and procedure information is stored for quick application access

Variables such as sample volume based on **WBC count, antibody volume, incubation time, lyse** and **buffer volumes** are all available for customisation. Removing the need for cumbersome pre-dilution of primary specimens.

Design elements that maximise workflow efficiency

- Dual pipetting probes decrease the individual steps required during sample preparation
- Robust, reliable cap piercing minimises operator exposure to potentially hazardous body fluids
- Automatic allocation of daughter tubes eliminates the need for manual labeling
- A single aspiration of blood or antibody allows multiple aliquots, saving time for multi-tube panels



The New Standard for Throughput of Routine, No-wash Assays



- Throughput in excess of 48 samples per hour, for no-wash assays
- Dual carousel/rotor configuration enables batch processing



- Continued sample processing during incubation and wash steps maximises efficiency
- Residual level monitoring for all reagents and waste container

Sysmex PS-10 flexible preparation processes

Custom procedures for sample preparation:

- Multiple bulk reagent bottles for lyse and buffer solutions allow for several reagent choices
- Easily accommodates lyse-wash, no-wash and intracellular staining procedures (For wash procedures, the PS-10 rotors are directly compatible with the Hettich Rotolavit-II-S Automatic Cell Washing Centrifuge)
- Rotors can be effortlessly transferred between PS-10 and centrifuge for required wash steps, virtually eliminating daughter tube handling and human errors when transferring tubes to and from a centrifuge for washing
- The Hettich Rotolavit-II-S is fully programmable for automatic wash cycles, decanting, and resuspension of cell pellets



Sample preparation and automated cocktailing in one system



*PS-10 racks holds up to 90 antibody reagents
Sysmex reagent vials are conveniently QR coded*

- PS-10 reagent blocks are colour-coded to conveniently accommodate a combination of Sysmex and other company's reagent vials
- Peltier-cooled locations keep antibody vial and reagent cocktail blocks at optimum temperature
- An automated cocktailing function is supplied for up to 90 reagent vials
- Four open vial positions are available for cell suspensions from bone marrow, lymph nodes or other fluids
- Removable reagent blocks containing anti-bodies can be conveniently refrigerated after use

High quality Sysmex reagents

All Sysmex reagents feature a convenient, readable QR code for automatic entry of reagent type, product code, lot number and expiry date.

The PS-10 is backed by Sysmex's commitment to provide the service and support needed by laboratories to meet the challenges of increasing demands. With Sysmex CyFlow Monoclonal Antibodies and the PS-10, Sysmex offers a new vision for Flow Cytometry.



**Sysmex PS-10
Flow Cytometry Sample
Preparation System**

FEATURE	DESCRIPTION
<p>System performance</p>	<ul style="list-style-type: none"> • Carryover: <ul style="list-style-type: none"> — Primary blood sample: <0.2% — Monoclonal reagent: <0.01% • Accuracy: <ul style="list-style-type: none"> — Sample: 20µL — 49µL +/-10% by volume — Sample: 50µL — 100µL +/- 5% by volume — Reagent: 4µL — 19µL +/-20% by volume — Reagent: 20µL — 100µL +/-7% by volume — Lyse: 500µL — 2000µL +/-3% by volume • Precision: <ul style="list-style-type: none"> — Sample: 20µL — 100µL CV 5.5% by volume — Reagent: 4µL — 19µL CV 5.15% by volume — Reagent: 20µL — 100µL CV 5.5% by volume — Lyse: 500µL — 2000µL CV 5.3% by volume • Throughput <ul style="list-style-type: none"> — 48 daughter tubes <64min, single-tube panel, lyse no-wash, includes 10min stain, incubation and 10min lyse incubation — 48 daughter tubes <52min, two-tube panel. Criteria as above - increase in speed due to dual cap piercing and multi-pipetting
<p>Programmable procedures</p>	<ul style="list-style-type: none"> • Lyse no wash, lyse-wash, pre-lyse (bulk), intracellular staining and custom sequences • Variables: sample volume, antibody volumes, cocktail volume, lyse volumes, buffer volumes, incubation time
<p>Sample and reagent volume ranges</p>	<ul style="list-style-type: none"> • Sample: 20µL—100µL, variable based on WBC count adjustment, either via Autosampler or open tube positions • Monoclonal antibodies: 4µL —100µL, either single clone vials or cocktail vials • Lyse A: 500µL or 1000µL for no-wash procedure • Lyse B: 1mL or 2mL for wash procedures • Buffers: 0 — 2mL for PBS • Intracellular fix and permeabilise: 100µL
<p>Reagent capacity</p>	<ul style="list-style-type: none"> • System fluid: (DI Hp) 9L • Waste: 9L • Lyse: 2 x 500mL • Buffers: 2 x 500mL • Fix and permeabilise reagents: 2 x 125mL • Monoclonal antibody positions: up to 90 standard vials <p><i>*Peltier cooling: 2°C — 8°C for up to 30 Sysmex standard and cocktail vials</i></p>
<p>Sample tube capacity</p>	<ul style="list-style-type: none"> • 50 primary sample tubes simultaneously via Autosampler • Up to 48 daughter tubes via 2 racks: 24 tube standard carousel or 12 or 24 position rotors
<p>Reagent blocks</p>	<p>Positions for up to 90 reagent vials</p>
<p>Weight</p>	<p>129kg (285lbs)</p>
<p>Dimensions</p>	<ul style="list-style-type: none"> • PS-10: 106.3cm H x 75.5cm W x 94cm D • Optional base: 70.6cm H x 100cm W x 114cm D • With monitor/keyboard: 132cm W
<p>Power Requirements</p>	<ul style="list-style-type: none"> • 100-240 VAC +/-10%, 50/60 Hz, 10 Amps
<p>Environment</p>	<ul style="list-style-type: none"> • Operating temperature: 18°C — 28°C • Operating relative humidity:15% — 80% non- condensing • Noise level: Standby mode <60dB • Run mode <75dB peak

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