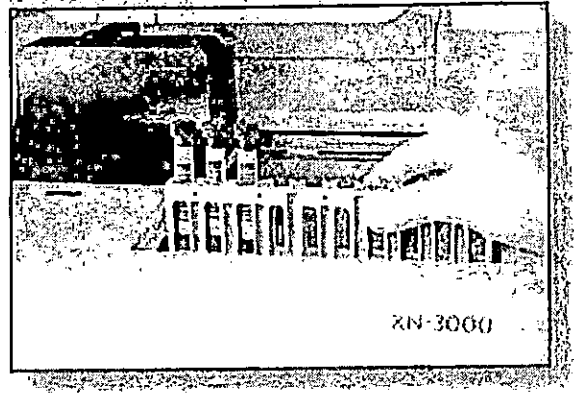
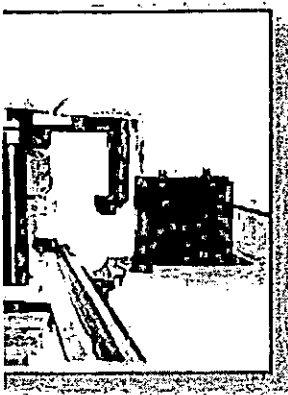


XN-3000



Unlimited possibilities offered by XN-3000 solution

At Sysmex, we provide solutions that not only matches your current needs but future ones as well. XN-3000 series partners your lab in terms of workflow efficiency, optimisation of performance and also strategise for the future.

Innovative technology

- Expanded clinical utilities based on renowned florescence flow cytometry for better patient management.

Workflow enhancement and productivity

- With user definable conditions for auto-rerun/reflex and smear staining capabilities, XN-3000 can improve the workflow in the laboratory.

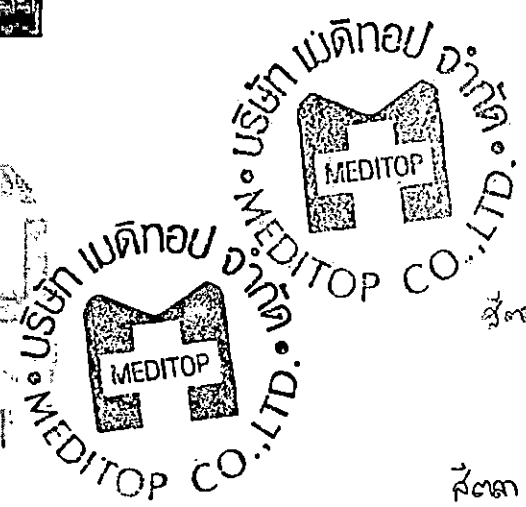
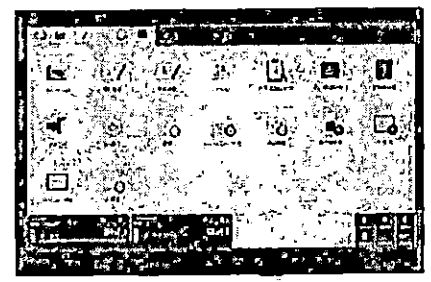
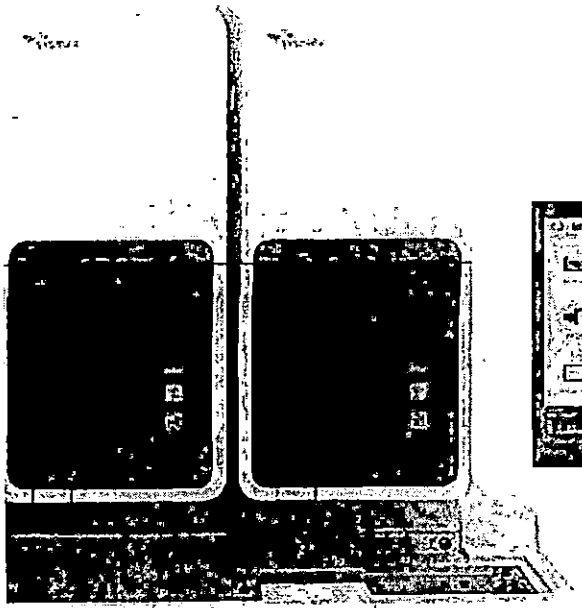
Catering to future needs

- Clinical applications can be added on the XN analysers to meet the evolving clinical needs of the laboratory.

Integration of digital morphology solution

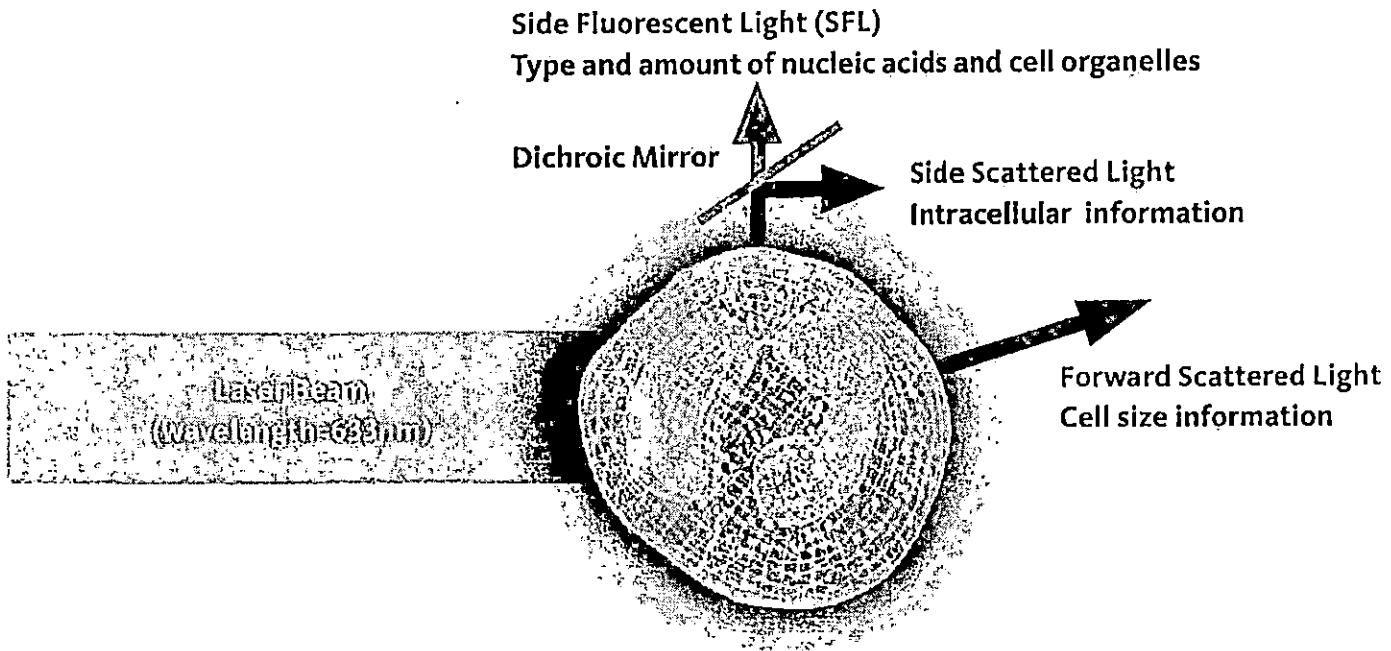
- XN-3000 can be integrated with a DI-60 for a seamless solution - from sample processing , slide & smear making to cells pre-classification using digital morphology

คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์
 ๑.ลงชื่อ.....ประธานกรรมการ
 ๒.ลงชื่อ.....กรรมการ
 ๓.ลงชื่อ.....กรรมการ



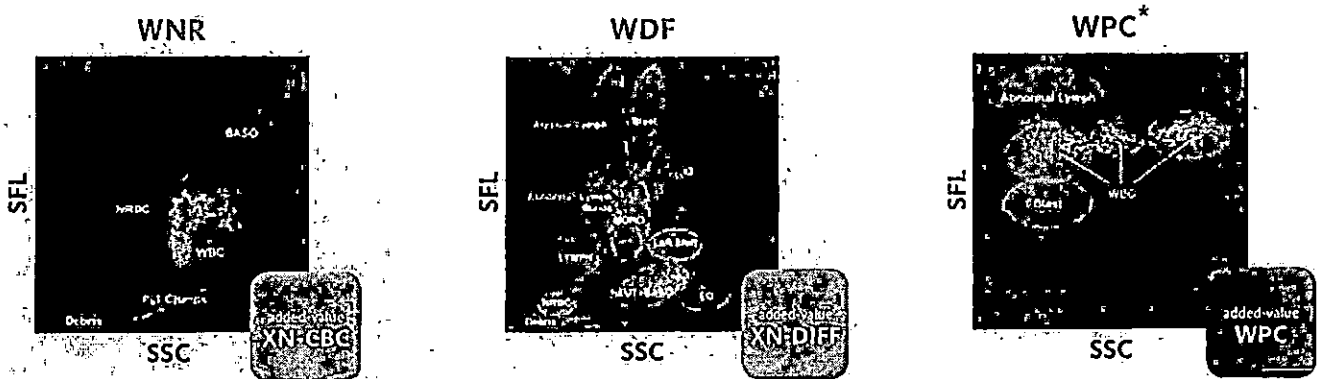
XN-3000 Core Technology

4.5 { The XN-Series uses the laser flow cytometry for counting of blood cells. Cellular characteristics of the cells are collected. These scattergrams are used for the classification of the WBCs, RBCs, PLTs cells as well as flagging of the abnormal population.



XN-3000 delivers diagnostic and medical values beyond the CBC

Standard applications



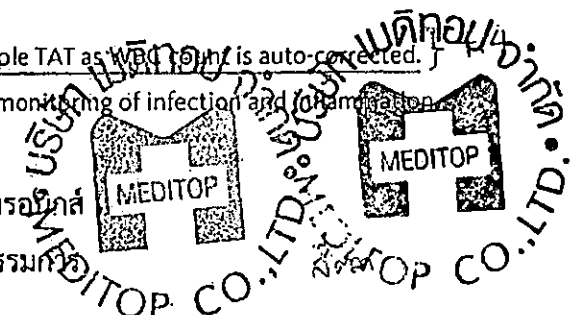
The following are available as a standard with every CBC+DIFF analysis:

- NRBC: NRBCs are directly measured for every CBC analysis. This improves sample TAT as WBC count is auto-corrected.
- IG: Standard 6th part differential including immature IG, aids in the prediction/monitoring of infection and inflammation.
- * WPC: Reducing smear reviews with highly-specific WBC flags.

* WPC channel is available only on XN-3000

คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์

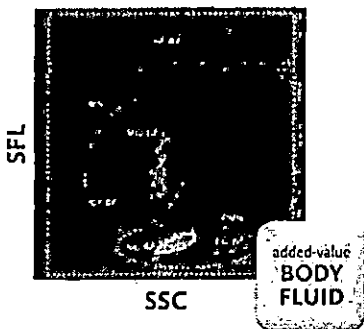
๑. ลงชื่อ..... ประธานกรรมการ
 ๒. ลงชื่อ..... กรรมการ
 ๓. ลงชื่อ..... กรรมการ



Optional applications

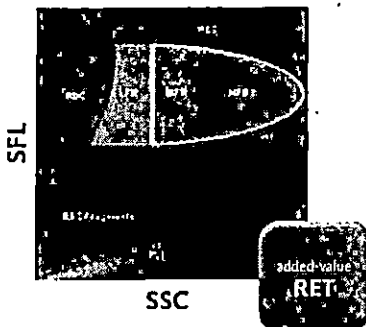
Extension with specific diagnostic functions can be done, providing additional and valuable clinical information. This information does not only give a more complete clinical picture but could be prognostic as well.

Body Fluid



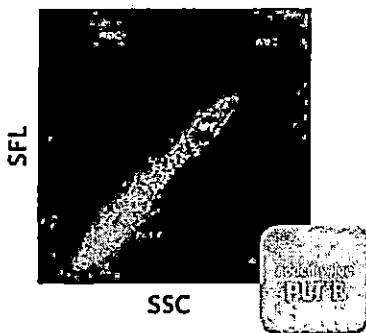
Automated 2-part differential body fluids analysis provides quick distinction between viral and bacterial infection. This allows immediate medical intervention. This dedicated mode of analysis is suitable for synovial, pleural, CAPD and CSF fluids.

RET**



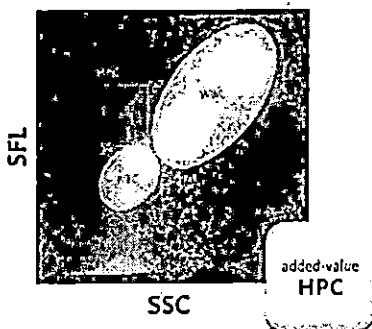
Reticulocyte haemoglobin (RET-He) and immature reticulocyte fraction (IRF) provides a quick snapshot of quality of erythropoiesis. These parameters help to differentiate between the types of anaemia. This allows clinicians to tailor the necessary treatment.

PLT-F



Fluorescent platelets (PLT-F) demonstrates excellent correlation with CD61/41 alongside with immature platelet fraction (IPF). An increase in IPF signifies platelet recovery. IPF can be used to allow optimal management of platelet transfusion.

HPC

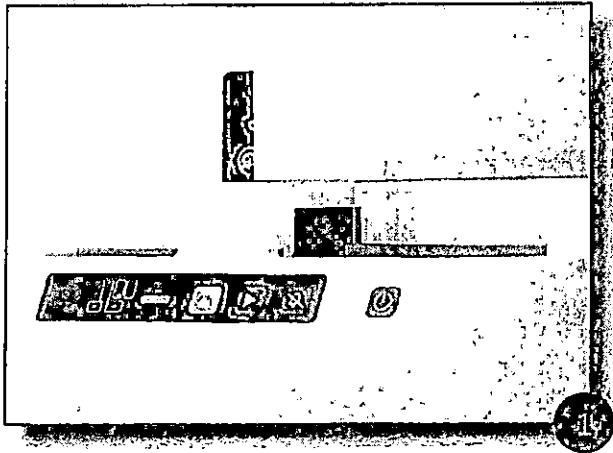


Inexpensive and rapid quantitation of human progenitor cell (HPC) in peripheral blood. This allows timely evaluation of PBSC harvest following myeloablative therapy in a variety of clinical conditions as well as a predictor of CD34+ stem cell yield.

** Available as a standard on XN-20

คณะกรรมการพิจารณาผลการประกวตราคาลีเล็กทรอนิกส์
 ๑.ลงชื่อ.....ประธานกรรมการ
 ๒.ลงชื่อ.....กรรมการ
 ๓.ลงชื่อ.....กรรมการ





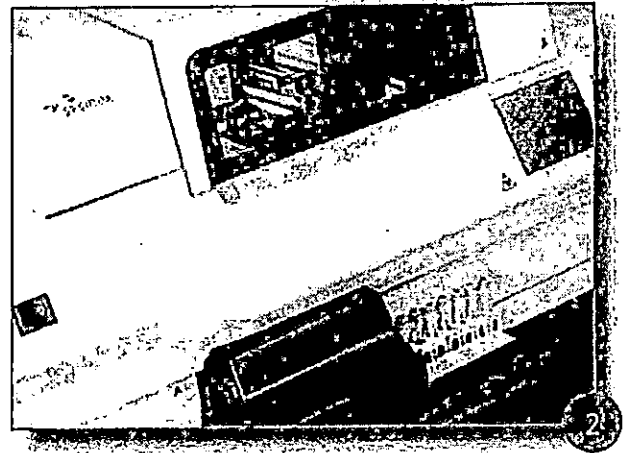
DI-60 - World's first integrated digital morphology solution (Optional)

DI-60, the world's first integrated digital morphology solution can be integrated to XN-3000 series following the SP-10. DI-60 performs WBC pre-classification, RBC pre-characterisation and platelet estimation.

- Reduces review time for differentials for higher productivity.
- Standardises your laboratory's differential results by reducing subjectivity.
- Enhances morphology skills with the proficiency software.
- Allows easier collaboration with clinicians with the remote review software application.



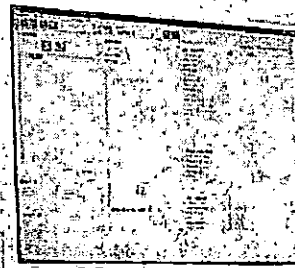
5/25



SP-10 - Fully automated slide maker and stainer

SP-10 is a fully automated slide maker and stainer which can be integrated to XN-3000 series. SP-10 allows:

- Standardisation of smear preparation by wedge method.
- Customisation of staining protocols including single or double stains.
- Preparation and staining up to 120 slides per hour. } 4.1



คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์
 ๑. ลงชื่อ.....ประธานกรรมการ
 ๒. ลงชื่อ.....กรรมการ
 ๓. ลงชื่อ.....กรรมการ

5/25

Challenging KPIs of the laboratories

Reducing sample turnaround time (TAT) is often a key performance indicator (KPI) for laboratories of all sizes. With faster access to patients' results, physicians are able to have a quick overview of patients' well-being and render necessary treatment without delays.

Having a lean and standardised sample processing workflow not only allows laboratories to meet the challenging TAT but also builds a 'peace of mind' working environment. With XN-3000, there is also greater economical savings since specific reagents and glass slides are only used when necessary.

Workflow comparison between 2 laboratories with different setup

Setup of laboratory A

- 2 standalone analysers
- Manual smearing and staining

Step	Description
1	Sample received by laboratory
2	Load samples into analyser 1
3	Load samples into analyser 2
4	Collect completed samples from analyser 1
5	Completed samples from analyser 2
6	Identify abnormal sample for repeat / additional analysis manually
7	Identify samples for smearing
8	Making of manual smears
9	Staining of slides
10	Drying of slides
11	Archive samples from analyser 1
12	Archive samples from analyser 2
13	Manual microscopy

Total steps: 13

Setup of laboratory B

- XN-3000 with integrated SP-10

Step	Description
1	Sample received by laboratory
2	Single loading of samples onto XN-3000, including auto-reflex of abnormal samples that requires repeated/additional analysis
3	Smears are prepared and stained automatically on SP-10 based on samples that fulfill the pre-defined smear conditions
4	Archive completed samples from XN-3000
5	Manual microscopy

Total steps: 5

With fewer steps involved, the chances of human related errors are significantly reduced. This allows the users to focus abnormal and challenging samples which require detailed data interpretation as well as slide review.

บริษัท เมดิทอป จำกัด
MEDITOP CO., LTD.

ส.๓๓

คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์

๑.ลงชื่อ.....*Dr*.....ประธานกรรมการ

๒.ลงชื่อ.....*hdm*.....กรรมการ

๓.ลงชื่อ.....*PO*.....กรรมการ

Specifications

Principles & Technologies

4.5	Fluorescent Flow Cytometry	WBC, Differential, NRBC, RET, IRF, PLT-F, IPF, HPC ² , 2 part differential for body fluid analysis
4.6	Hydrodynamic Focusing (DC Detection)	PLT-I (Impedance), RBC, HCT
4.7	Cyanide-free SLS Method	Haemoglobin

Hourly Throughput

XN-3000	up to 200 samples
SP-10	up to 120 smears
DI-60	up to 30 smears

4.1

Sample Aspiration Volumes

XN Series	Whole Blood/Body Fluid Mode: 88µL
	Pre-dilute Mode: 20µL
	HPC Mode: 190µL
SP-10	Sampler/Manual Closed Mode: 200µL
	Manual Mode (Micro-collection tube): 60µL

4.3

30 Standard Parameters

WBC, NRBC#, NRBC%, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-SD, RDW-CV, MicroR,¹ MacroR, PLT, PDW, MPV, PCT, P-LCR, NEUT#, NEUT%, LYMPH#, LYMPH%, MONO#, MONO%, EOSIN#, EOSIN%, BASO#, BASO%, IG#, IG%

16 Optional Parameters

RET#, RET%, IRF, LRF, MFR, HFR, RET-He, RBC-He, Delta-He, HYPO-He, HYPER-He, PLT-O (Optical), PLT-F (Fluorescent), IPF#, IPF%, HPC#²

4.2

Body Fluid Analysis

Sample Type	CSF, CAPD, Synovial and Serous fluids
7 Reportable Parameters	WBC-BF, MN#, MN%, PMN#, PMN%, TC-BF#, RBC-BF

4.8

Quality Control

Tri-level QC material for all parameters
Bi-level Body fluid QC materials

3.6

Staining Methods (SP-10)

Wright single stain, May-Gimesa, Wright-Gimesa

Note:
1. MicroR, MacroR, RBC-He, Delta-He, HYPO-He, HYPER-He are reportable from software version 21.00 onwards.
2. HPC# is available only for XN-20.



วิเศษ

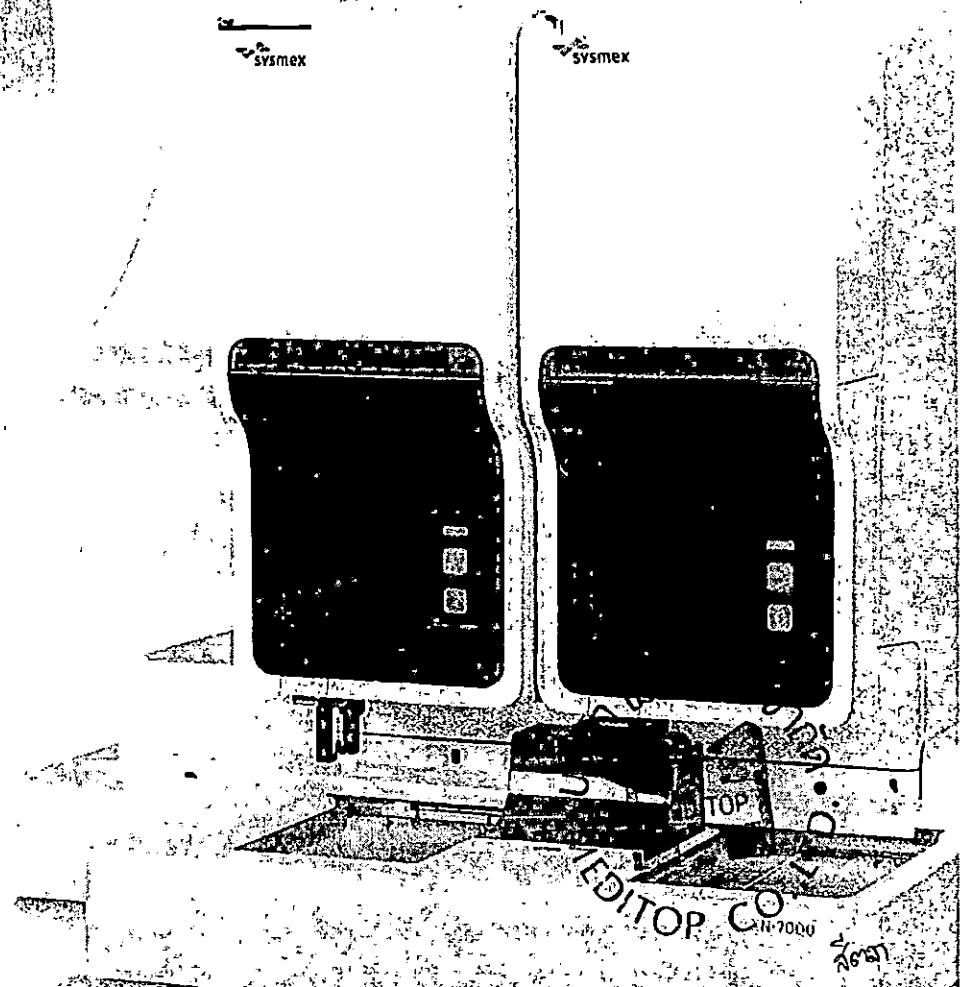
วิเศษ

คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์
 ๑.ลงชื่อ.....ประธานกรรมการ
 ๒.ลงชื่อ.....กรรมการ
 ๓.ลงชื่อ.....กรรมการ



XN-Series Automated Haematology Analysers
XN-1000 / 2000

4.1

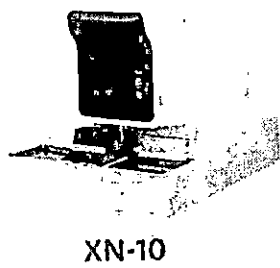


คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์
 ๑. ลงชื่อ..... ประธานกรรมการ
 ๒. ลงชื่อ..... กรรมการ
 ๓. ลงชื่อ..... กรรมการ

Smart and Compact Automation

XN-Series provides a comprehensive test menu including all Sysmex's advanced parameters, regardless of test volume or laboratory settings. Combining the analyser modules' broad capabilities in customisable configurations, the needs of both routine and specialised haematology testing are met.

The XN-Series comprise of 2 Analyser modules



XN-10

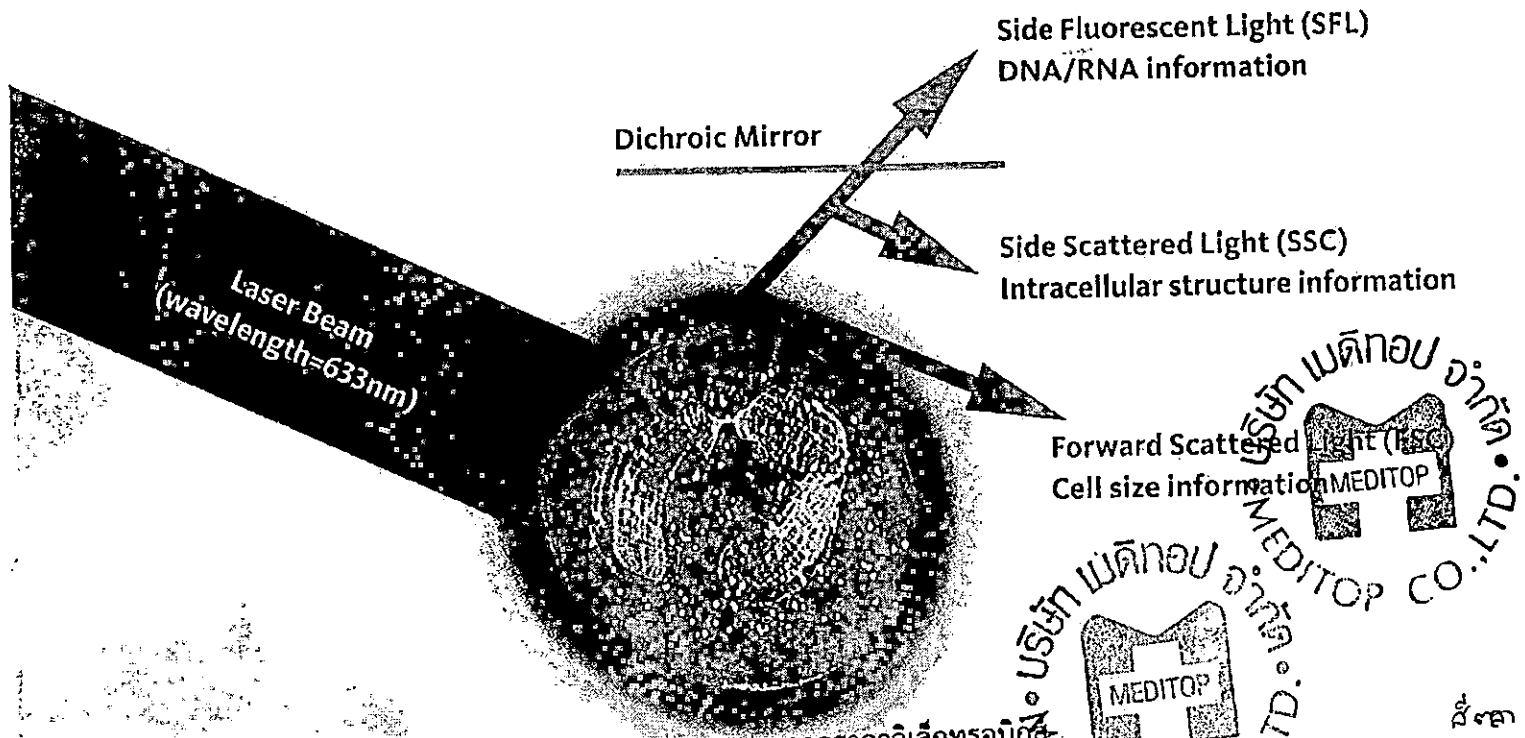


XN-20*

*White precursor cell (WPC) channel and Human Erythroid Cell (HEC) are available only in XN-20.

XN-Series Core Technology

The XN series utilise the laser flow cytometry for counting of blood cells. Depending on the cellular characteristics of the cells, different intensities of the signals are collected, and scattergrams of respective measuring channels are populated. These scattergrams are used for the classification of the cells as well as flagging of the abnormal population.

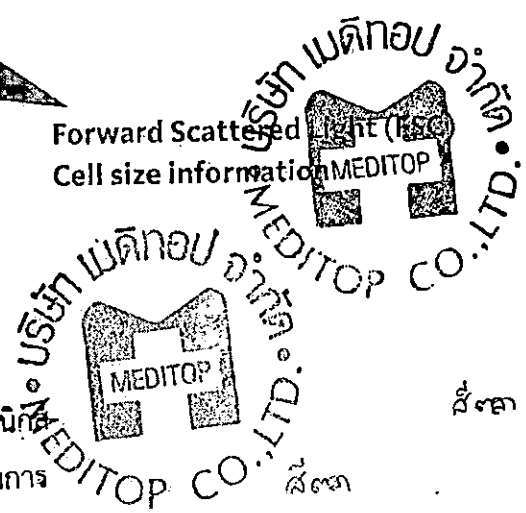


คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์

๑. ลงชื่อ.....ประธานกรรมการ

๒. ลงชื่อ.....กรรมการ

๓. ลงชื่อ.....กรรมการ



สี่สิบ

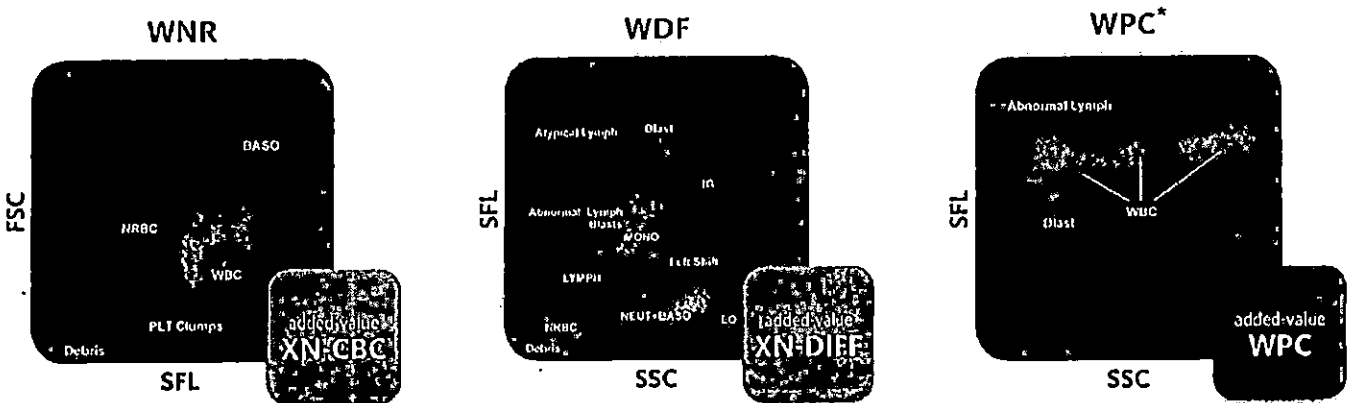
สี่สิบ

Advanced Parameters On XN-Series Provides Superior Diagnostic Values

The following advanced parameters are available as a standard:

- Corrected WBC with direct measurements of NRBCs for every CBC analysis } 4, 4
- 6 part differential, including immature granulocytes
- Highly specific flagging of WBC abnormal population in WPC channel, available only in XN-20 (Human progenitor cell, HPC enumeration is available on XN-20 with additional software activation)

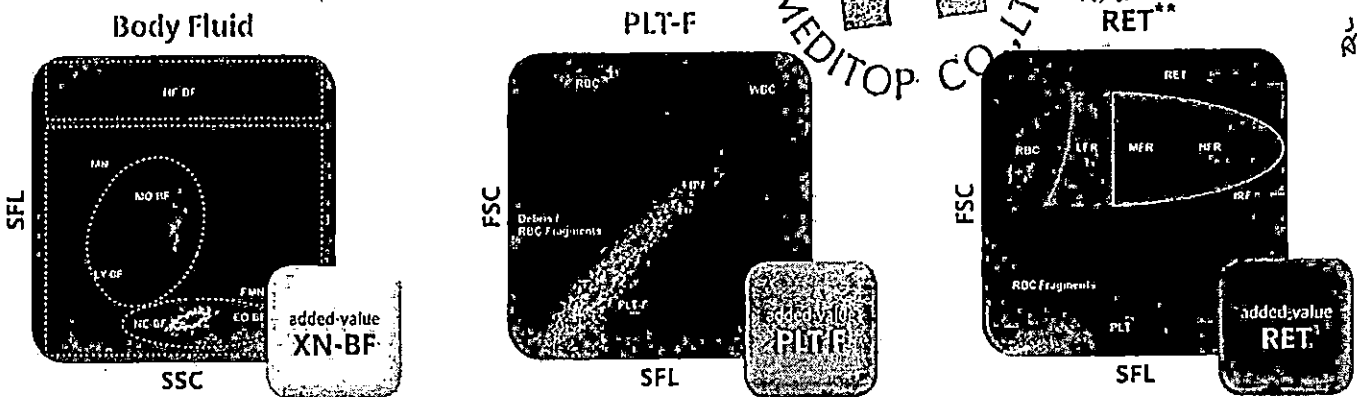
Standard applications



Extension with specific diagnostic functions can be done, providing additional clinical information as follows:

- Automated 2 part differential body fluid analysis
- Erythropoietic markers: Reticulocyte haemoglobin (Ret-He) and immature reticulocyte fraction (IRF)
- Fluorescent platelet (PLT-F) count that shows excellent correlation with CD61/41 alongside with thrombopoietic marker immature platelet fraction (IPF)¹

Optional applications



* WPC channel is available on XN-20 only.

** RET channel is a standard on XN-20.

¹ Reference: School AA, School AA, Oomes J, Van Pelt J. New fluorescent method (PLT-F) on Sysmex XN7000 hematology analyzer achieved higher accuracy in platelet counting. Am J Clin Pathol. 2013; 140(4):495-9.

คณะกรรมการพิจารณาผลการตรวจราคาอิเล็กทรอนิกส์

๑. ลงชื่อ..... กรรมการ

๒. ลงชื่อ..... กรรมการ

๓. ลงชื่อ..... กรรมการ

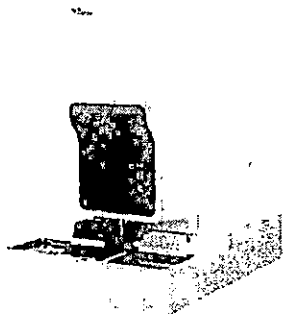
XN Standalone Series

There are 2 standalone XN configurations:

- XN-1000 (1 analyser)
- XN-2000 (2 analysers)

Within its small footprint, the standalone series delivers vast operational capabilities and clinical flexibility. These capabilities can be optimised for laboratories with lower daily workloads and wide clinical needs.

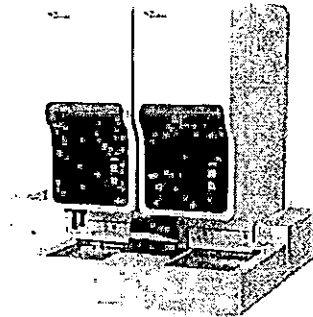
XN-1000-First step into full automation



XN-1000

- Hourly throughput of up to 100 samples
- Onboard decision rules with user-defined rerun/reflex capabilities
- Customisable clinical applications to cater to variable clinical needs

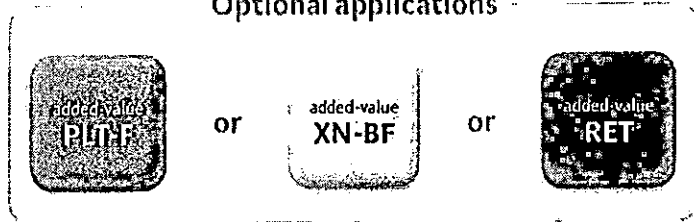
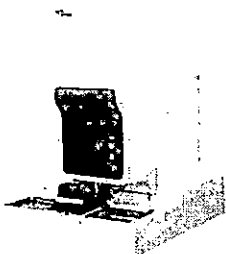
XN-2000-Workload optimisation



XN-2000

- Hourly capacity of 200 samples per hour
- Unique co-primary solution
- Automatic workload balancing between the 2 analysers
- Reagent sharing option is available

The Needs Of Tomorrow's Laboratory



Optional applications

XN-Series partners your laboratory through the future. Clinical applications can be added to existing standalone configurations when the clinical needs evolved. On top of this, XN-1000 can also be upgraded to a XN-2000 when the workload of the laboratory increases. A common software throughout the XN-Series also minimises the need for re-training. XN-Series fully caters for today's and future needs of the laboratory.

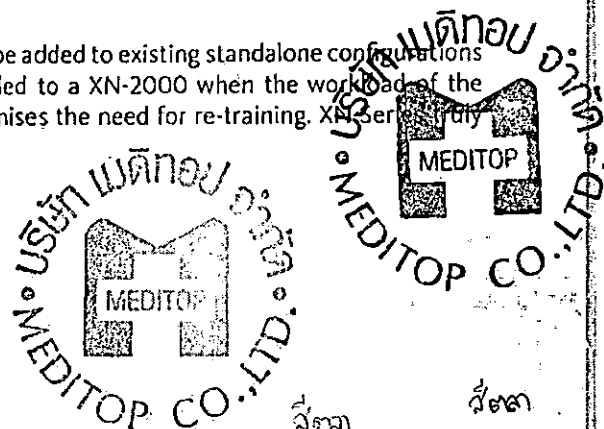
XN-Series, the automated haematology solutions for your laboratories.

คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์

๑.ลงชื่อ.....ประธานกรรมการ

๒.ลงชื่อ.....กรรมการ

๓.ลงชื่อ.....กรรมการ



Specifications

Principles & Technologies

Fluorescent Flow Cytometry:

WBC, Differential, NRBC, RET, IRF, PLT-F, IPF, HPC,
2 part differential for body fluid analysis

4.5

Hydrodynamic Focusing (DC Detection)

PLT-I (Impedance), RBC, HCT

4.6

Cyanide-free SLS Method:

HGB

4.7

30 Standard parameters

WBC, NRBC#, NRBC%, RBC, HGB, HCT, MCV, MCH,
MCHC, RDW-SD, RDW-CV, MicroR,¹ MacroR, PLT, PDW,
MPV, PCT, P-LCR, NEUT#, NEUT%, LYMPH#, LYMPH%,
MONO#, MONO%, EOSIN#, EOSIN%, BASO#, BASO%,
IG#, IG%

16 Optional parameters

RET#, RET%, IRF, LRF, MFR, HFR, RET-He, RBC-He,
Delta-He, HYPO-He, HYPER-He, PLT-O (Optical),
PLT-F (Fluorescent), IPF#, IPF, HPC#²

4.2

Blood Fluid Analysis

4.8

Sample Type:

CSF, CAPD, Synovial and Serous fluids

7 Reportable Parameters:

WBC-BF, MN#, MN%, PMN#, PMN%, TC-BF#, RBC-BF

Throughput (Whole Blood)

XN-1000: up to 100 samples/hour (max.)

4.1

XN-2000: up to 200 samples/hour (max.)

Sample Aspiration Volumes

Whole Blood: 88µL

Pre-dilute Mode: 20µL

Body Fluid Mode: 88µL

HPC Mode: 190µL

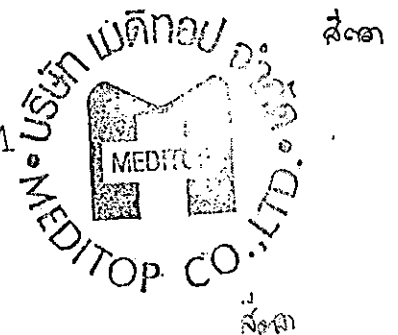
4.3

Quality Control

Tri-level QC material for all parameters

Bi-level Body fluid QC materials

4.11



คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์
1. MicroR, MacroR, RBC, He, Delta-He, HYPO-He, HYPER-He are reportable
from software version 21.00 onwards.

๑. ลงชื่อ..... ประธานกรรมการ

๒. ลงชื่อ..... กรรมการ

๓. ลงชื่อ..... กรรมการ



About Sysmex

Sysmex is a global market leader in the development and implementation of clinical diagnostic and health IT products and services for laboratories, hospitals and healthcare organisations.

We deliver comprehensive solutions in the field of clinical laboratory testing, including haematology, haemostasis, urinalysis, clinical chemistry, immunoassay system, life science and flow cytometry. Supplying products and services to customers in more than 150 countries, Sysmex is the market leader in haematology and coagulation instrumentation worldwide.

By working together with our customers and business partners, Sysmex is committed to our mission of shaping the advancement of healthcare.

คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์
ด.ลงชื่อ.....ประธานกรรมการ
บ.ลงชื่อ.....กรรมการ
ต.ลงชื่อ.....กรรมการ

Sysmex Corporation
1-5-1, Wakinohama-Kaigandori,
Chuo-ku, Kobe, Hyogo 651-0073, Japan
Tel +81 (78) 265-0500 Fax +81 (78) 265-0524
www.sysmex.co.jp

Sysmex Asia Pacific Pte Ltd
9, Tampines Grande #06-18,
Singapore 528735, Singapore
Tel +65 6221-3629 Fax +65 6221-3687
www.sysmex-ap.com

Sysmex India Pvt. Ltd
1002, Damji Shamji Business Galleria, 10th Floor, LBS
Marg, Kanjurmarg (West), Mumbai 400078, India
Tel +91 (22) 6112-6666 Fax +91 (22) 2577-6790
www.sysmex.co.in

PT Sysmex Indonesia
Cyber 2 Tower, 5th Floor, Unit E, Jl. HR. Rasuna Said,
Blok X5 No. 13, Jakarta Selatan 12950, Indonesia
Tel +62 (21) 3002-6688 Fax +62 (21) 3002-6699
www.sysmex.co.id

Sysmex (Malaysia) Sdn Bhd
11A & 15, Jalan PJS 7/21, Bdr Sunway,
47500 Subang Jaya, Selangor, Malaysia
Tel +60 (3) 5637-1788 Fax +60 (3) 5637-1688
www.sysmex.com.my

Sysmex (Thailand) Co., Ltd
18th Floor, Tonson Tower, 900 Ploenchit Road,
Lumpini, Pathumwan, Bangkok 10330, Thailand
Tel +66 (2) 032-2536 Fax +66 (2) 116-5396
www.sysmex.co.th

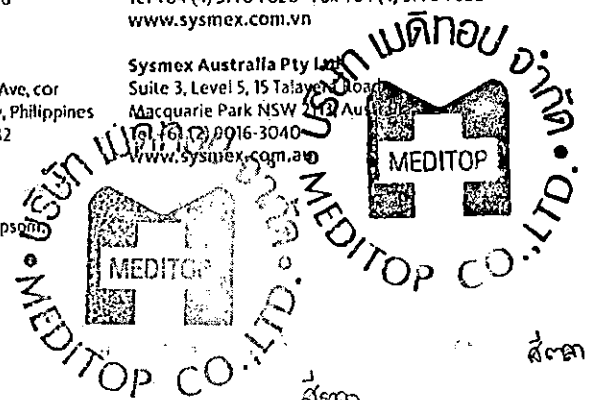
Sysmex Philippines Inc.
30th Floor MDC 100 Bldg. E, Rodrigues Jr. Ave, cor
Eastwood Ave, Bagumbayan, Quezon City, Philippines
Tel +63 (2) 621-2460 Fax +63 (2) 621-2432
www.sysmex.com.ph

Sysmex New Zealand Ltd
382 - 386 Manukau Rd, PO Box 26-085, Epsom
Epsom, Auckland 1344, New Zealand
Tel +64 (9) 630-3554
www.sysmex.co.nz

Sysmex Vietnam Co., Ltd
Unit 802, Centre Point Bldg, 106 Nguyen Van Troi St,
Phu Nhuan Dist, Ho Chi Minh City, Vietnam
Tel +84 (8) 3997-9400 Fax +84 (8) 3997-9405
www.sysmex.com.vn

Sysmex Vietnam Co., Ltd (Hanoi Branch)
Floor 10, Vinaconex Building, 34 Lang Ha St,
Dong Da Dist, Ha Noi, Vietnam
Tel +84 (4) 3776-7020 Fax +84 (4) 3776-7022
www.sysmex.com.vn

Sysmex Australia Pty Ltd
Suite 3, Level 5, 15 Tafelberg Road,
Macquarie Park NSW 2109 Australia
Tel +61 (2) 9916-3040
www.sysmex.com.au



Follow the steps below to replace the reagent.

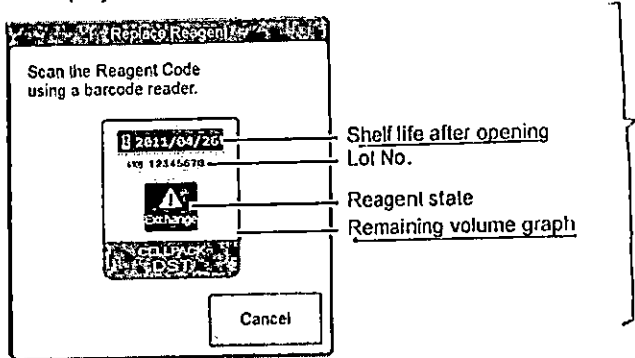


1 Display the RU-20 Maintenance menu.

(>P.282 "RU-20 Maintenance menu")

2 Click [Replace Reagent].

The following dialog box appears and displays the remaining level of CELLPACK DST reagent.



RU-20 [Replace Reagent] dialog box

3.1

Shelf life after opening	Display the shelf life of the reagent after opening. This is not displayed if the reagent has not been registered. When the shelf life after opening has expired, it displayed in white letter on a red background.
Lot No.	Displays the lot number of the reagent.
Reagent state	Displays the remaining reagent as a percentage. When the reagent runs low, the background becomes yellow.
Remaining volume graph	Displays the remaining volume of the reagent as a graph. This is not displayed if the reagent has not been registered, or if the reagent has run out.



3 Remove the cap from the new reagent container.

Check that the reagent has not expired.

คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์
 ๑.ตั้งชื่อ.....ประธานกรรมการ

4 Input the reagent code (barcode).

Input by barcode scanning

Scan the reagent code (barcode) on the outer box of the input by barcode scanning

Scan the reagent code (barcode) on the outer box of the input by barcode scanning

Scan the reagent code (barcode) on the outer box of the input by barcode scanning

Scan the reagent code (barcode) on the outer box of the input by barcode scanning

Scan the reagent code (barcode) on the outer box of the input by barcode scanning

Scan the reagent code (barcode) on the outer box of the input by barcode scanning

Scan the reagent code (barcode) on the outer box of the input by barcode scanning

Scan the reagent code (barcode) on the outer box of the input by barcode scanning

๒.ตั้งชื่อ.....กรรมการ
 ๓.ตั้งชื่อ.....กรรมการ

Reagent Code	.....
Reagent Code	.....
Reagent Code	.....
Reagent Code	.....
Reagent Code	.....
Reagent Code	.....
Reagent Code	.....
Reagent Code	.....
Reagent Code	.....
Reagent Code	.....
Reagent Code	.....
Reagent Code	.....

ผู้ดูแล

By scanning the barcode, the registration

8.1.2 Types of quality control

The following types of quality control methods exist. Use the appropriate method according to your needs.

QC methods using control material

- **X-bar Control:** The control blood is analyzed twice in succession, and the average of the 2 results is used as the control data.
- **L-J Control:** Takes the data from a single analysis of control blood and uses it as the control data.

QC using normal samples

X-barM Control: This program calculates a weighted average of batches of normal patient samples (usually 20) and plots the resulting value as control data. The number of samples can be set to any number.

8.1.3 About the timing of QC analysis

Quality control is performed in order to monitor an instrument's performance over time. XN CHECK is the quality control material used to monitor the performance of the XN analyzer. Quality control should be run according to licensing agency regulations. It should be noted that for troubleshooting purposes, additional control runs may be necessary.



Note:

You can periodically display a message to prompt the user to perform quality control tasks (quality control alarm).

คณะกรรมการพิจารณาผลการตรวจวิเคราะห์ค่าไอเล็กทรอนิกส์

๑.ลงชื่อ.....ประธานกรรมการ

๒.ลงชื่อ.....กรรมการ

๓.ลงชื่อ.....กรรมการ

8.1.4 Quality control materials

When performing X-bar control or L-J control, use dedicated control blood.

Types of control blood

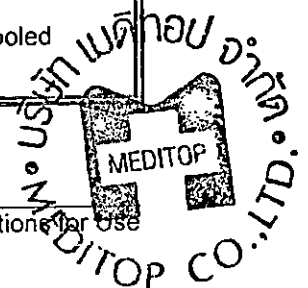
- XN CHECK Level 1
- XN CHECK Level 2
- XN CHECK Level 3
- XN CHECK BF Level1
- XN CHECK BF Level2

3.6



Information

- Only use the specified control blood. Control blood is specially designed to the analysis technology of the instrument.
- To execute the quality control using an external QC sample or a residual sample (pooled blood), set the [Material] to [Other].



Chapter 15 Technical Information

This chapter explains technical information such as specifications and principles

15.1 Performance/specifications



Note:

Channels and analysis parameters are specified depending on the connected analyzer.
For details, see Chapter 1 (►P.12 "Chapter 1: 1.3 Analysis parameters")

Operating Environment (Ambient temperature)	15 to 30°C (same with the temperature of the supplied reagent)
Operating Environment (Relative humidity)	20 to 85%
Storage Condition (Transportation)	Ambient temperature: -10 to 60°C Relative humidity: 20 to 95% (no condensation) Atmospheric pressure: 70 to 106 kPa
Dimensions	Width: 2,000 mm Height: 1,074 mm (XN-3000), 921 mm (XN-3100) Depth: 902 mm (XN-3000), 1,083 mm (XN-3100)
Total weight	Approx. 279 kg (XN-3000), Approx. 320 kg (XN-3100)
Pneumatic unit dimensions	Width: 280 mm Height: 400 mm Depth: 355 mm
Pneumatic unit weight	Approx. 17 kg
Power supply	Analyzer (XN-10, XN-20) AC100 to 240 V (50 / 60 Hz) } 4.16 Sampler AC100 to 240 V (50 / 60 Hz) Pneumatic unit AC100 to 117 V (50 / 60 Hz) AC220 to 240 V (50 / 60 Hz)
Power consumption	Analyzer (XN-10, XN-20) 270 VA or less Sampler 130 VA or less Pneumatic unit 50 Hz: 230 VA or less (100 - 117 V), 220 VA or less (220 - 240 V) 60 Hz: 280 VA or less (100 - 117 V), 250 VA or less (220 - 240 V)
Noise level	60 dB or less Excludes sounds during rinse cup discharge, shifting/discharge of sample racks, and clamping/release of sample tubes, and alarm sounds
Laser class	Class I (IEC60825-1:2007)
Protection type	Class I
Safety standard	IEC61010-1:2001, IEC61010-2-011, IEC61010-2-101:2002

คณะกรรมการพิจารณาผลการประกวดราคาอิเล็กทรอนิกส์
 ๑. ลงชื่อ..... ประธานกรรมการ
 XN-3000/XN-3100 Instructions for Use
 ๒. ลงชื่อ..... กรรมการ
 ๓. ลงชื่อ..... กรรมการ

