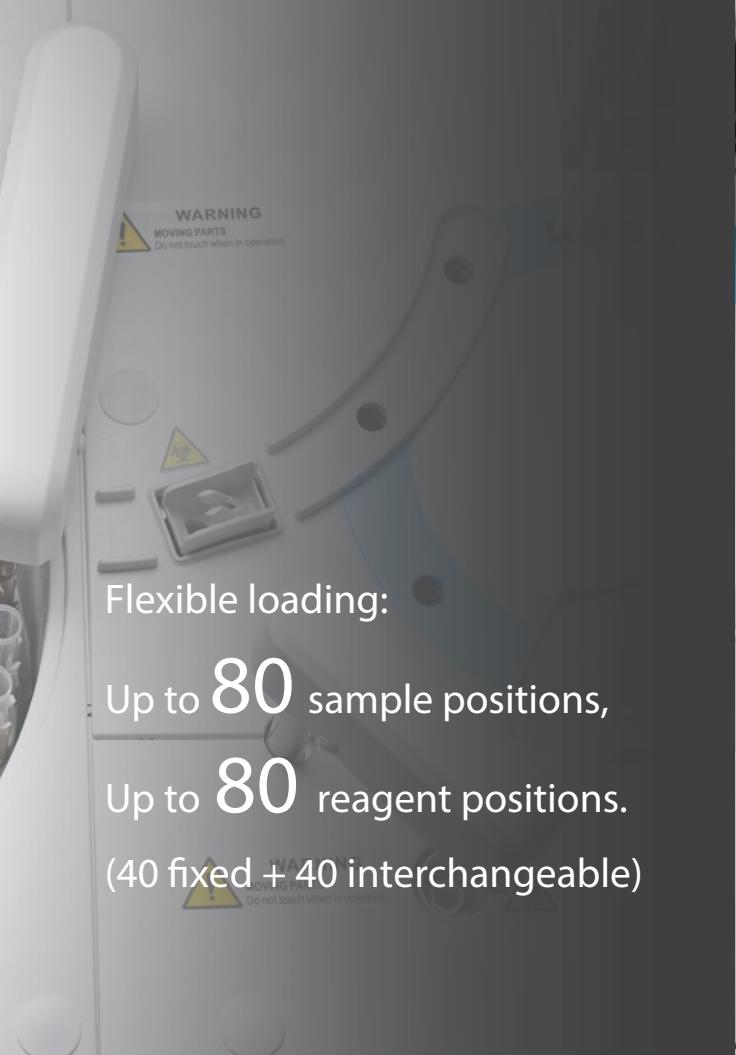
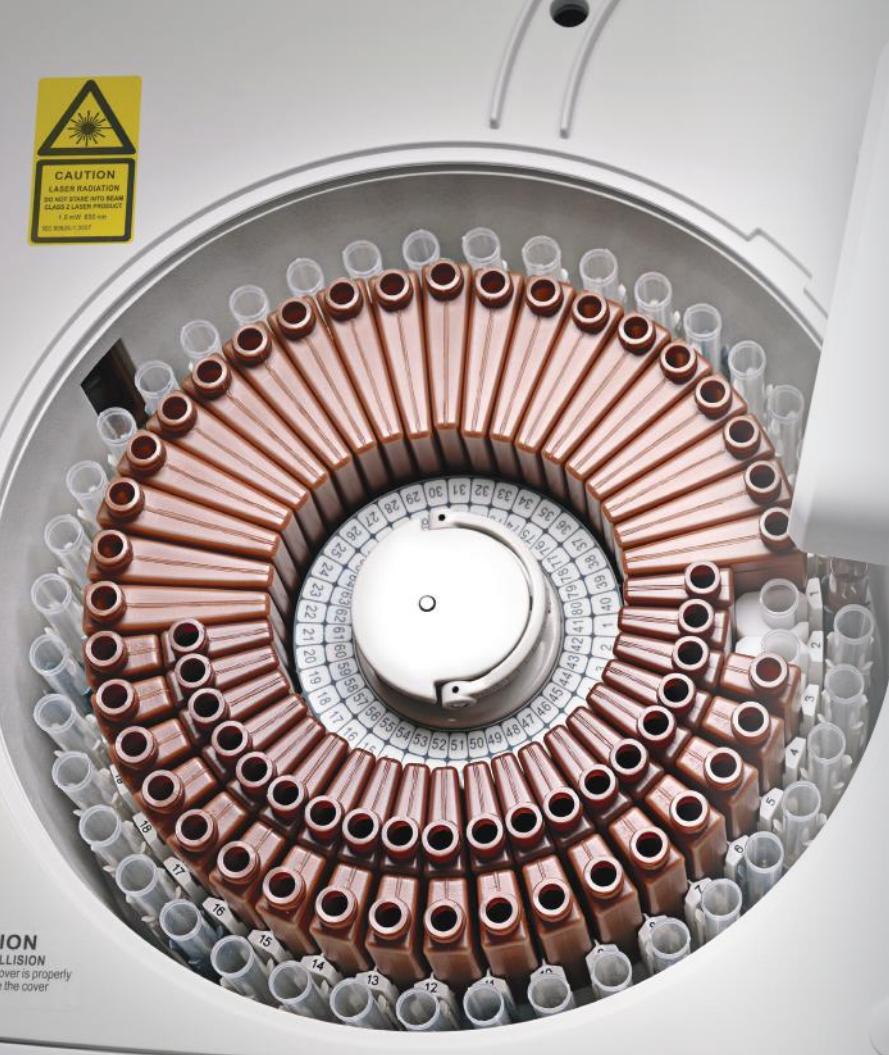


mindray

BS-240

Clinical Chemistry Analyzer



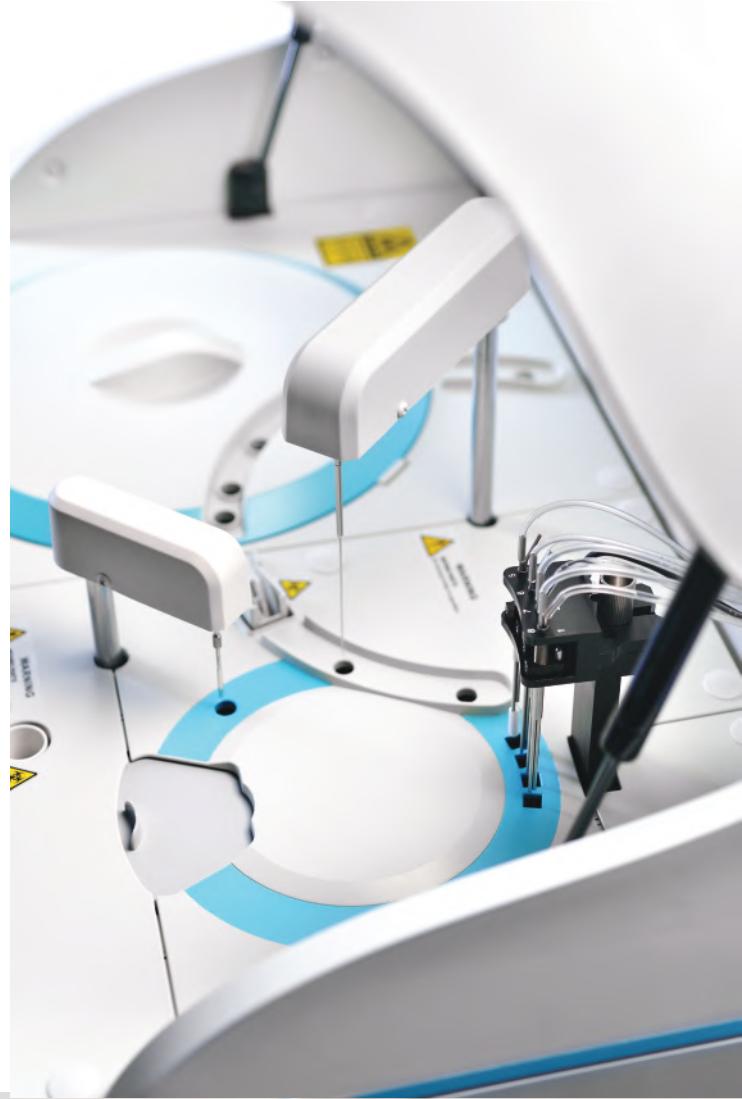


Smart-Sampling Technology

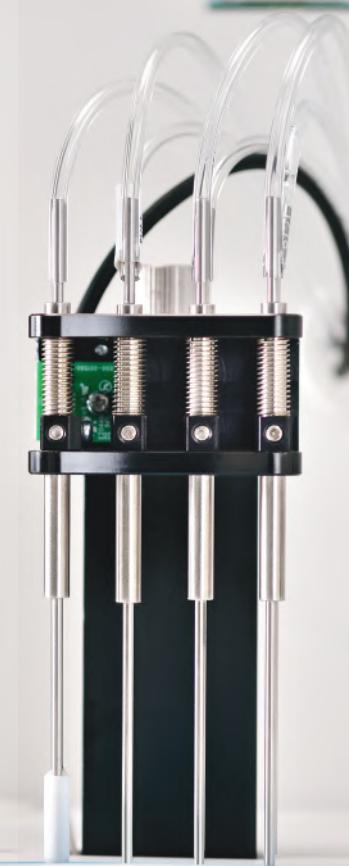
Automatic hemolysate
preparation for
HbA1c test



100 μ l
minimum reaction volume



Upgraded auto-washing system
ensures low carryover and low water
consumption.



BS-240

Clinical Chemistry Analyzer

Compact Size with Robust Functions



Independent mixing bar



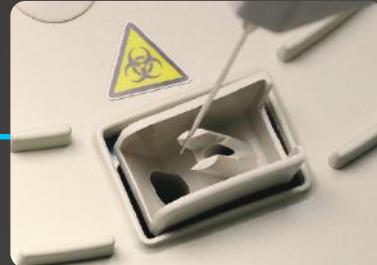
Built-in barcode reader



Intelligent software with user-friendly interface



Step-by-step maintenance guide



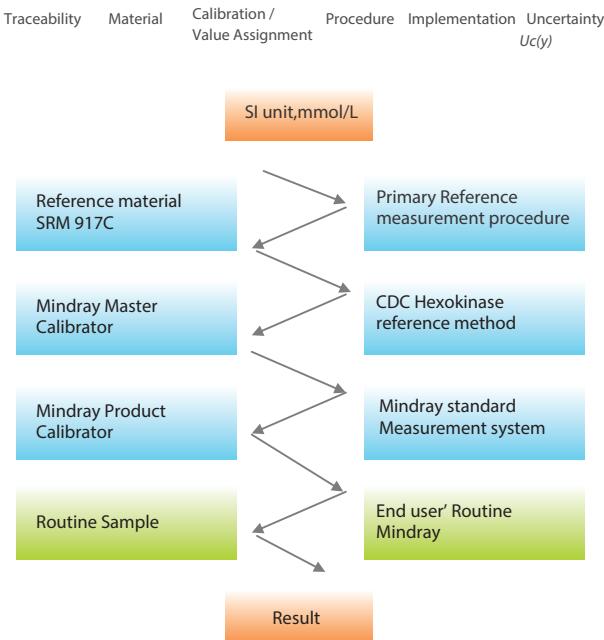
Waterfall probe cleaning

BS-240

Complete traceability process

Complete calibration hierarchy and traceability chain are based on ISO standard (EN/ISO17511) from reference system to routine measurement system.

Traceability chain of Mindray measurement system (Glu)

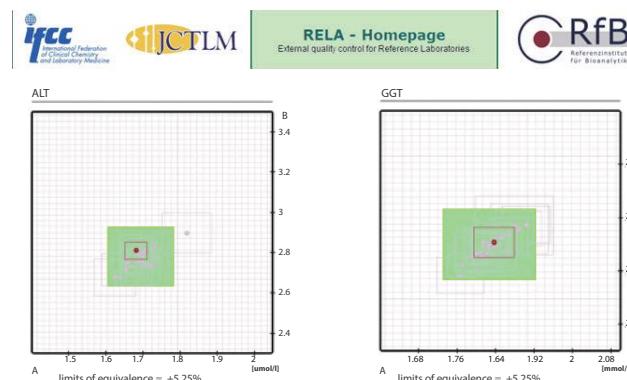


External quality assurance for reference measurement

Mindray participates in RELA (External quality control for reference laboratory) and CAP (College of American Pathologists external quality control).

EQA for Mindray Reference laboratory——RELA

Mindray reference laboratory has passed RELA for 6 consecutive years.



More RELA results please refer to: www.dgkl-rfb.de/81

All the items Mindray participate RELA

ALT AMY ALP CK GGT GLU LDH TB TP UA UREA

EQA for Mindray Testing System——CAP

Mindray testing system has passed CAP for 6 consecutive years.

EVALUATION ORIGINAL		C-B 2013 Chemistry									
		CAP #:			Subspecialty :			Test Results			
Regulated Analyte	Test Event	Score	%	Test Event	Score	%	Test Event	Score	%	Current Event Performance Interpretation	
ALT	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Albumin	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Alkaline Phosphatase	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Amylase	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
AST	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Bilirubin, Total	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Calcium, Total	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Chloride	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Cholesterol, Total	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Cholesterol, HDL	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Creatine Kinase	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Creatinine	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Glucose	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Iron, Total	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
LD	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Magnesium	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Potassium	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Sodium	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Protein, Total	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Triglycerides	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Urea Nitrogen	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful
Uric Acid	C-C	5/5	100	C-A	5/5	100	C-B	5/5	100	Satisfactory	Successful

Reagent menu

Hepatic Panel

Alanine Aminotransferase (ALT)
Aspartate Aminotransferase (AST)
Alkaline Phosphatase (ALP)
 γ -GlutamylTransferase (γ -GT)
Direct Bilirubin (D-Bil) DSA Method
Direct Bilirubin (D-Bil)VOX Method
Total Bilirubin (T-Bil) DSA Method
Total Bilirubin (T-Bil)VOX Method
Total Protein (TP)
Albumin (ALB)
Total Bile Acids (TBA)
Prealbumin (PA)
Cholinesterase (CHE)
 α -L-fucosidase (AFU)
5'-nucleotidase (5'-NT)

Cardiac panel

Creatine Kinase (CK)
Creatine Kinase-MB (CK-MB)
Lactate Dehydrogenase (LDH)
 α -Hydroxybutyrate Dehydrogenase(α -HBDH)
High sensitive C-reaction protein(HS-CRP)

Inorganic & Anemia

Iron (Fe)
Ferritin (FER)
Transferrin (TRF)
Calcium (Ca)
Magnesium (Mg)
Phosphate Inorganic (P)
Unsaturated iron binding capacity (UIBC)
Glucose-6-phosphate dehydrogenase (G6PD)

Renal Panel

Urea (UREA)
Creatinine (CREA) Modified Jaffé Method
Creatinine (CREA)Sarcosine Oxidase Method
Uric Acid (UA)
Carbon dioxide (CO₂)
Microalbumin
 β 2-Microglobulin (β 2-MG)
Cystatin C (CysC)
Retinol binding protein(RBP)

Lipid Panel

Total Cholesterol (TC)
Triglycerides (TG)
HDL-Cholesterol (HDL-C)
LDL-Cholesterol (LDL-C)
Apolipoprotein A1 (ApoA1)
Apolipoprotein B (ApoB)
Lipoprotein(a) [Lp(a)]

Immune Panel

Immunoglobulin A (IgA)
Immunoglobulin G (IgG)
Immunoglobulin M (IgM)
Complement C3 (C3)
Complement C4 (C4)

Rheumatism Panel

C-reactive protein (CRP)
Rheumatoid Factor (RF)
Antibodies Against Streptolysin O (ASO)

Lung Panel

Adenosine Deaminase (ADA)
Angiotensin Converting Enzyme(ACE)

Diabetes Panel

Glucose (Glu) GOD-POD Method
Glucose (Glu) HK Method
Hemoglobin A1c (HbA1c)
Fructosamine (FUN)
 β -Hydroxybutyrate(β -HB)

Pancreatitis Panel

α -Amylase (α -AMY)
Lipase (LIP)

Technical Specifications

System function	ISE Module (optional)
Automatic, Discrete, Random Access, Bench-top	Measuring K+, Na+, Cl-
STAT sample priority	Mixing Unit
Throughput: Up to 200 tests/hour, up to 400 tests/hour with ISE	Independent mixing bar
Measuring principles: Absorbance photometry, Turbidimetry, Ion Selective Electrode technology	Cuvette Washing: Washing station with pre-warmed detergent and water
Methodology: End-point, Fixed-time, Kinetic, optional ISE, Single/Dual/ reagent chemistries, monochromatic / bi-chromatic	Optical System
Original system pack reagent ready to use	Light Source: Halogen-tungsten lamp
Close system and open system is optional	Wavelength: 8 wavelengths, 340nm、405nm、450nm、510nm、546nm、578nm、630nm、670nm
Reagent/Sample Handling	Absorption range: 0~4.0 Abs (10mm conversion), resolution 0.0001Abs
Reagent/Sample tray: 80 positions for reagents and 40 positions for samples in 24-hour refrigerated compartment (2~12°C)	Stray Light 5.6Abs
Reagent volume: 10~250µl, step by 0.5µl	Control and Calibration
Sample volume: 2~45µl, step by 0.1µl	Calibration modes: Linear (one point, two points and multi-points), Logit-Log 4P, Logit-Log 5P, spline, exponential, polynomial, parabola
Reagent/Sample probe: Liquid level detection, vertical collision protection and inventory checking, reagent pre-warming	Control Rules: X-R, L-J, Westgard multi-rule, Cumulative sum check, twin plot
Probe cleaning: Automatic washing for interior and exterior Carry over < 0.05%	Operation Unit
Automatic sample dilution: Pre-dilution and post-dilution	Operation system: Windows 8
Internal bar code reader (optional)	Interface: RS-232
Used for sample and reagent programming	Working Conditions
Be applicable to various bar code systems of Codabar、ITF (Interleaved Two of Five)、code128、code39、UPC/EAN、Code93	Power Supply: 200~240V, 50/60Hz, ≤1000VA or 100~130V, 60Hz, ≤1000VA
Capable to communicate with LIS in bi-directional mode	Dimension: 690 mm (length) ×580 mm (depth) ×595 mm (height)
Reaction System:	Weight: 79 kg
Reaction rotor: Rotating tray, containing 40 cuvettes	Water Consumption: ≤ 4 L/H
Cuvette: Reusable, optical length 5mm	
Reaction volume: 100~360µl	
Operating temperature: 37°C	
Temperature fluctuation: ± 0.1°C	