

### Sample Distribution Module

Sample loading/offloading  
Support 2 sample baskets in use simultaneously;  
up to 300 samples can be loaded or offloaded each time,  
buffer area contains 290 sample positions

Loading Design  
Continuous sample loading and offloading; prior delivery for  
STAT samples

Distribution Speed  
Up to 100 racks/hour

Sample tube  
Height: 68.5-100mm Diameter: 12-16mm

Cuvette  
φ14X25mm, 0.5ml & 14X25mm, 2ml, or φ12X37mm, 2ml

### Chemistry Module

Throughput 2000 tests/hour  
Measuring Principles Colorimetry, Turbidimetry and ISE method  
Methodology End-point, Fix-time, Kinetic, optional ISE  
Reagent Carousel 140 positions, refrigerated compartment  
Onboard chemistries Chemistry: 67; ISE: 3; Serum Index: 3  
Reagent Volume 10-200μl, with increment of 0.5μl  
Sample Carousel 140 sample positions

Sample Volume Chemistry: 1.5-25μl, with increment of 0.1μl;  
ISE: 22μl  
Reaction Volume 80μl-200μl  
Clot Detection Yes

### Immunology Module

Throughput Up to 480 tests/hour  
Principle Chemiluminescence Immunoassay based on  
enhanced ALP-AMPPD method  
Reagent Disk 36 reagent positions, continuous loading,  
real-time mixing for magnetic particles  
Reagents Volume Immunology reagent: 20-135μl, with  
increment of 1μl  
Sample diluent 10-200μl, with increment of 1μl  
Reagent pack 50 tests/pack, 100 tests/pack  
Sample Volume 10-200μl, with increment of 1μl  
Sample/Reagent Probe Steel Probe, liquid level detection,  
clot detection, collision protection

Dimension  
SDM 800mm\*1165mm\*930mm (W\*D\*H)  
Chemistry Module 1580mm\*1165mm\*1445mm (W\*D\*H)  
Immunology Module 1445mm\*1165mm\*1145mm (W\*D\*H)

Weight  
Total Weight 1380 kg

Power  
Total Power 7300VA

## SAL 9000

### Serum Automation Modular System



# SAL 9000

## New Generation of Serum Analysis Line

Mindray aims to provide one total solution for clinical lab to make In-vitro Diagnostics more automatic and intelligent. This year, with years of investment and research, Mindray launch the new generation of Serum Automation Line, SAL 9000.

SAL 9000 Automatic Modular System delivers high throughput by integrating Mindray's CL-6000i Chemiluminescence Immunoassay System, BS-2000 Chemistry Modular System and new sample processing module SPL 2000. With patented automatic serum analysis design, SAL 9000 not only helps you optimize the management of lab space and manpower, it also offers highly reliable test results.



### Promote the zooming of laboratory efficiency



Integrated laboratory space



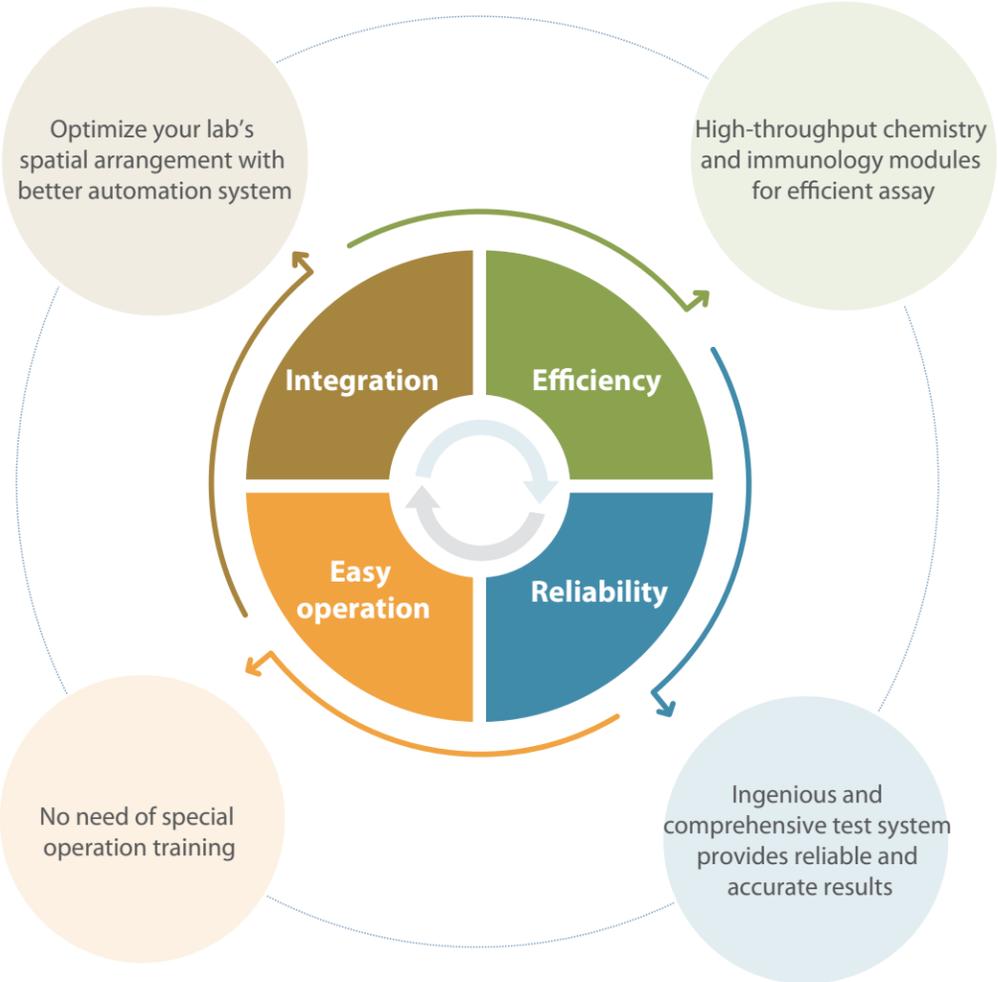
High-efficiency chemistry & immunoassay modules



Reliable and authentic test results



Smart and easy-operating system



# Intelligent Modules Integration

BS-2000 Chemistry Module

CL-6000i Immunology Module

SPL Sample Processing Module



Enhanced carry-over prevention program for high sensitive tests

Triple lanes design with designate STAT passing lane

Internal delivery buffer area with up to 290 sample positions

Patented Sample Rack Basket design to provide safe and easy load/offload

Specialized STAT sample delivery with 32-second response

### Powerful SPL Sample Distribution Module

- Patented double-layer & basket delivery design, up to 600 sample positions
- Continuously loading of single or multiple samples
- Independent STAT lane, 32s quick response
- Intelligent samples distribution for maximum module efficiency



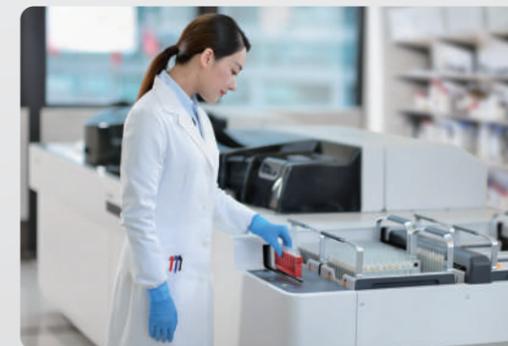
### CL-6000i Immunology Model

- High throughput of 480tests/hour, first result in 17 minutes
- 36 reagents positions with continuously loading/offloading
- Uniquely designed buffer disk to reduce cuvette jam
- Fully automated maintenance, lighten the workload
- Precise 4-phase magnetic separation



### BS-2000 Chemistry Module

- Constant test speed of 2000T/H
- 140 reagent positions with continuously loading/offloading
- Refrigerated sample carousel, 140 sample positions
- Intelligent real-time monitoring system
- Complete traceability detecting system



### Integrated Serum Analysis Line

- Simplify laboratory flow
- Reduce turn-around time
- Improve laboratory efficiency and optimize manpower allocation
- Reduce manual error rate



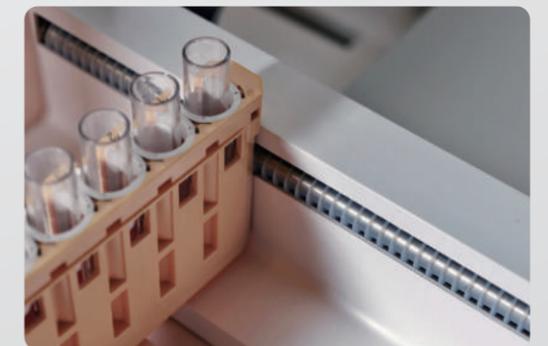
### Fit the clinical usage

- Patented design of sample basket to ensure safe transportation
- Up to 300 samples can be loaded and offloaded simultaneously



- STAT sample delivery, 32s quick response

- Flexible sample delivery, no limitation of sample amount



# Reliable Test Result Based on Unique Design

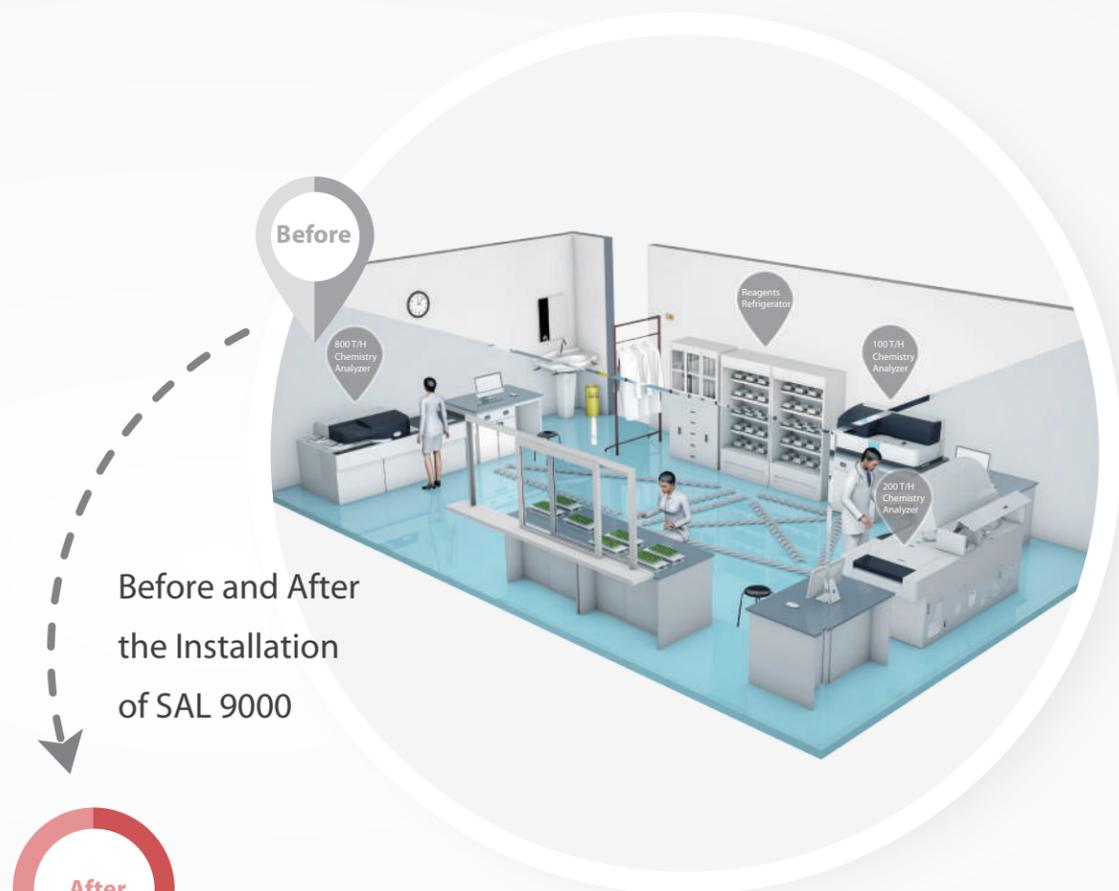
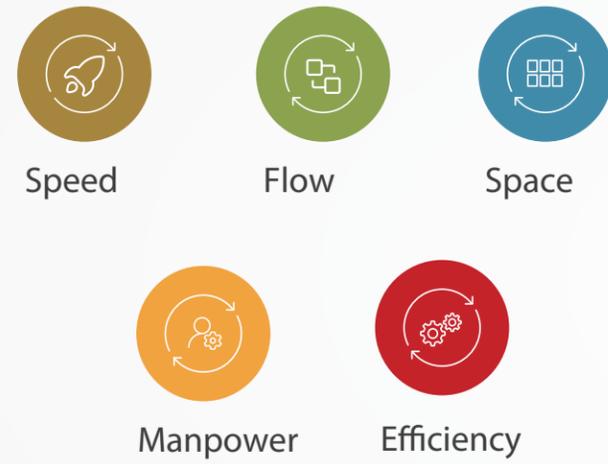
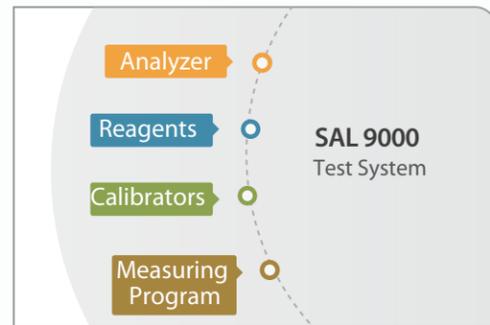
· Wiper washing technology, enhance efficiency and minimize carryover



· Priority for high sensitive tests, reduce cross contamination



· Comprehensive test system, provide accurate result



Before and After the Installation of SAL 9000



# Flexible Combination

## SAL 9000 provides serum analysis with ultra high throughput

By integrating BS-2000 and CL-6000i, Mindray offers what you want

## Update to SAL 9000

For current BS-2000 or CL-6000i customer, directly upgrading to SAL 9000 is available

## SAL Family

Mindray provides SAL 6000 and SAL 9000, covers the daily need of different customers



# Test Menu

### Hepatic Panel

Chemistry  
ALT  
AST  
GGT  
ALP  
TP  
ALB  
BIL-T  
BIL-D  
TBA  
CHE  
PA  
AFU

Immunology  
HBsAg  
Anti-HBs  
HBeAg  
Anti-HBe  
Anti-HBc  
Anti-HCV  
HBeAg quantitative\*  
Anti-HBc IgM\*  
PIIINP  
CIV  
LN  
HA

### Renal Panel

Chemistry  
UREA  
UA  
Crea  
CO2  
Cys-C  
MALB  
RBP  
β2-MG  
TPUC  
Immunology  
ACTH  
DHEA-S  
Cortisol

### Electrolyte

Chemistry  
K  
Na  
Cl  
Ca  
Mg  
P  
Fe

### Fertility

Immunology  
Total β-HCG  
FSH  
LH  
Prolactin  
E2  
E3  
TESTO  
PROG  
Free testosterone\*  
17-OH PROG\*  
SHBG\*  
AMH\*

### Lipid & Cardiac Panel

Chemistry  
TG  
TC  
LDL-C  
HDL-C  
ApoA1  
ApoB  
Lp(a)  
HS-CRP  
LDH  
α-HBDH  
CK  
CK-MB  
MYO  
D-Dimer  
  
Immunology  
CK-MB  
Myoglobin  
Troponin I  
BNP  
Renin  
Aldosterone

### Anemia Panel

Chemistry  
FER  
UIBC  
TRF  
G6PD  
  
Immunology  
Ferritin  
Vitamin B12  
Folate  
RBC Folate

### Bone Metabolic

Immunology  
Intact PTH  
Calcitonin  
Vitamin D total

### Tumor Marker

Chemistry  
AFU  
  
Immunology  
CEA  
AFP  
CA125  
CA15-3  
CA19-9  
FPSA  
TPSA  
NSE  
CYFRA 21-1  
CA72-4  
PG I  
PG II  
SCCA  
HE4  
ProGRP  
CA50  
CA242

### Diabetes

Chemistry  
Glu  
HbA1C  
β-HB  
FUN  
  
Immunology  
Insulin  
C-peptide

### Thyroid

Immunology  
FT3  
FT4  
T3  
T4  
TSH  
Anti-TG  
Anti-TPO  
Tg  
rT3  
TRAB\*

### ToRCH

Immunology  
Toxo IgG\*  
Toxo IgM\*  
Rubella IgG\*  
Rubella IgM\*  
CMV IgG\*  
CMV IgM\*  
HSV-1/2 IgG\*  
HSV-1/2 IgM\*  
HSV-1 IgG\*  
HSV-1 IgM\*

### Inflammation Panel

Chemistry  
RF  
ASO  
CRP  
C3  
C4  
IgA  
IgG  
IgM  
IgE  
  
Immunology  
PCT

### Others

Chemistry  
AMY  
LIP  
ADA  
ACE  
  
Immunology  
HIV Combo  
Anti-TP (Syphilis)  
Angiotension I\*  
Angiotension II\*  
PAPP-A\*  
Free β-HCG\*  
hGH\*  
IGF-1\*

\* Under development

