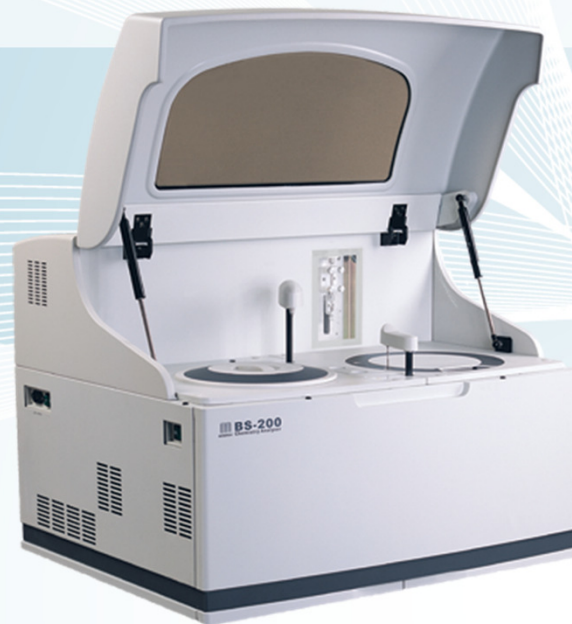


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## BS-200 Chemistry Analyzer

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- **BS-200 Snapshot**
- **Features & Benefits**
- **Who Benefits Most from the BS-200**





## Product Summary

- More than **4,000** units sold worldwide
- Small bench-top footprint (34x28x25 inch)
- Broad test menu to meet your wide needs for chemistry testing
- Unsurpassed reliability, i.e., MTBF greater than twelve months
- Excellent performance, great correlation results with Hitachi 917 and AU400



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# Product Fact Sheet

- Discrete, random access, automated
- Up to **330** tests per hour with ISE
- **40** positions for samples and **40** positions for reagents
- Reversed optic system with **8** wavelengths: 340-670nm
- Built-in ISE module and internal sample/reagent bar code reader
- On-board reagent refrigeration
- Bi-directional LIS interface
- Unlimited storage of test results and QC files, supporting Windows 7/Vista/XP/2000
- Automatic probe cleaning, liquid level detection, depth adjustment and disposable cuvettes ensures minimal carryover
- Probe collision protection and reagent pre-heating
- Micro sample and reagent consumption



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# Simple Design, Robust Features

## Reagent/Sample Disk

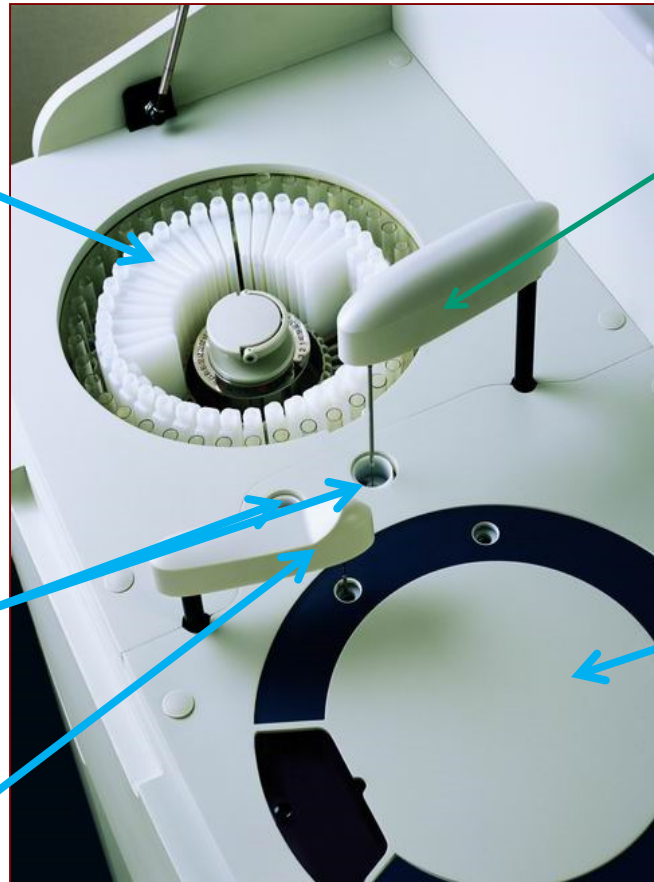
- 40 positions for reagents and 40 for samples
- 24 hour non-stop on-board reagent refrigeration
- Optional multiple disks
- Freedom of programming assays and samples/STAT/QC/Cal at any position you want

## Wash Wells

- Wash the mixing bar and probe after every movement

## Independent Mixer

- Mixing reagents and sample



## Reagent/Sample Probe

- Liquid Level Detection
- Auto Depth Adjustment
- Reagent/Sample Pre-heating
- Auto Wash (Inside/Outside)
- Probe Collision Protection
- Minimal Sample Volume (3 $\mu$ l~45 $\mu$ l)

## Reaction Chamber

- Disposable cuvettes to eliminate carryover
- Excellent temperature control
- Minimal reaction volume  $\leq 180\mu$ l to save reagents
- Lamp life 2,000 hours
- 8 wavelengths

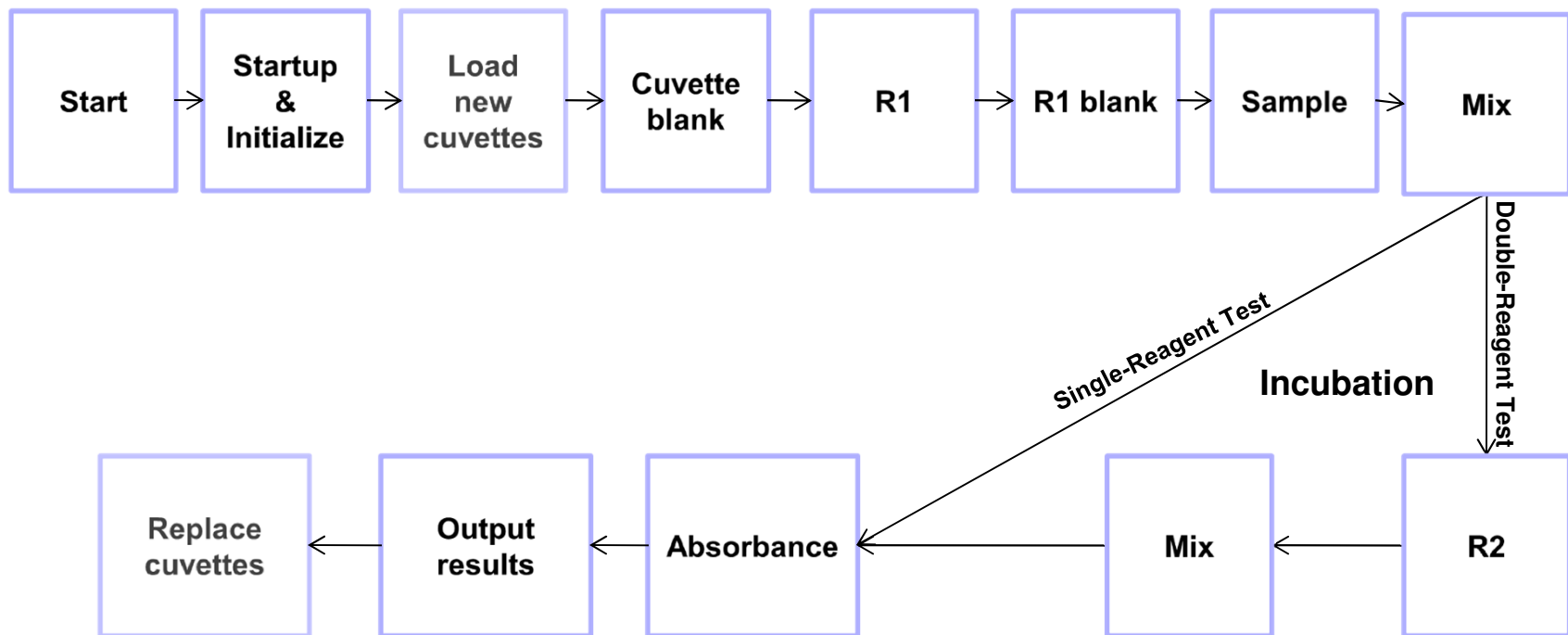


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# General Work Flow of BS-200



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# Test Menu

## 28 Barcoded Reagents

Albumin	BUN (Urea Nitrogen)	Fructosamine	autoLDL™
Alkaline Phosphatase	Calcium	γ-Glutamyl Transferase	Lipase
ALT	Carbon Dioxide	Glucose Hexokinase	Magnesium
Amylase	Cholesterol	Hemoglobin A1c	Phosphorus
AST	Creatine Kinase	autoHDL™	Protein – Total
Bilirubin – Direct	Creatinine	Iron – Total	Triglycerides
Bilirubin – Total	CRP(hs)	Lactate Dehydrogenase	Uric Acid

## 13 Highly Complex Open Channel Reagents

Alcohol	HDL – Mg/Dex
Ammonia	Homocysteine
Creatinine Enzymatic	Lactate
CK-MB	Lp(a)
Glucose Oxidase	Microalbumin
G6PD	Microprotein
HDL – PEG	

## 16 Highly Complex Drugs of Abuse

6-Acetylmorphine	Ethanol
Amphetamine	Methadone
Barbiturate	Methadone Metabolite (EDDP)
Benzodiazepine	Methamphetamine
Buprenorphine (Suboxone)	Opiates
Cannabinoid (THC)	Oxycodone
Cocaine Metabolite	Phencyclidine
Ecstasy (MDMA)	Propoxyphene



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## Designed with a busy lab in mind

- Discrete, random access and automated sample processing
- User-friendly software, supporting Windows 7/Vista/XP/2000
- High throughput for a compact size (330 tests/hr w ISE)
- 40 positions for samples, 40 for reagents, and additional virtual and physical sample/reagent disk
- No fixed position for sample, STAT, control, or calibrator
- Zero daily maintenance: visual checking only
- Auto QC function



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# Designed with a busy lab in mind

- STAT sample priority

Sample Information

No.	1	—	1	Position	1	Patient	
Type	Serum		Bar Code			<input checked="" type="checkbox"/> STAT	

- Internal barcode readers for both samples and reagents ensures positive sample and reagent identification
- On-board reagent refrigeration with 24-hour non-stop cooling allows greater reagent on-board stability
- Dual switches allow 24-hour reagent refrigeration while turning off other on-board mechanisms



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- 
- Diagram illustrating a sample probe with internal and external washing. The probe is shown inserted into a container, with labels for 'Sample', 'probe', 'Clot', and 'Internal and external washing'.



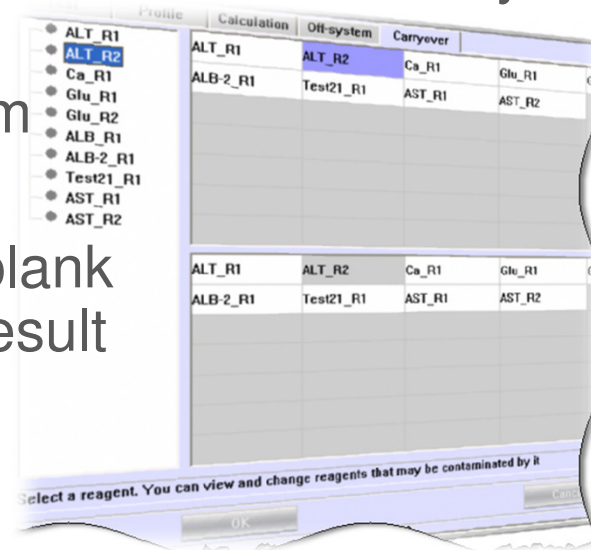
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## High performance safeguards the integrity of patient results

- Stable temperature control for both reagent and reaction chambers
- Highly accurate motors and syringes: 3 - 45ul sample volume in 0.5ul increments for accuracy and precision
- Carry-over avoiding program
- Independent Mixer
- Automatic cuvette and R1 blank checking to ensure accurate result



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## **High performance safeguards the integrity of patient results**

**What do these features mean to your customer?**



**Safe Operation**

**Accurate Results**

**Elimination of Contamination**



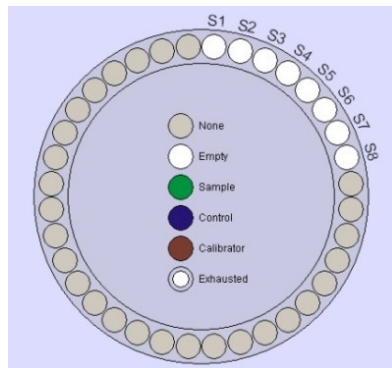
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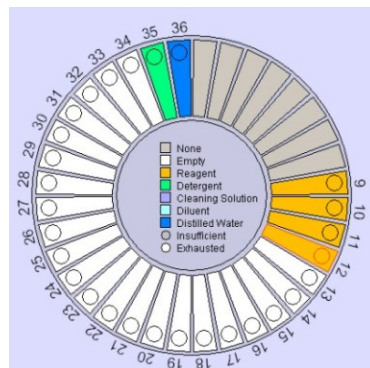


# State-of-the-Art Technology & Design

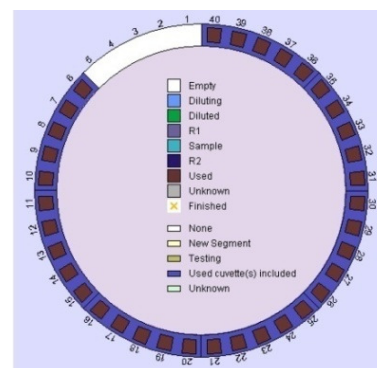
- User-friendly software, supporting Windows Vista/XP/2000
- Real-time Monitoring
  - Dynamic display of running status and sample info
  - Real-time monitoring of residual reagent volume
  - Optimized calibration curve



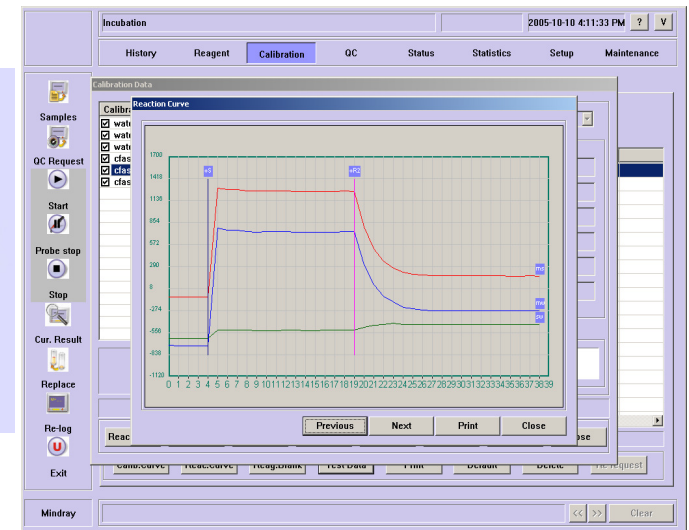
Sample Wheel



Reagent Wheel



Test Running Status



Reaction Curve



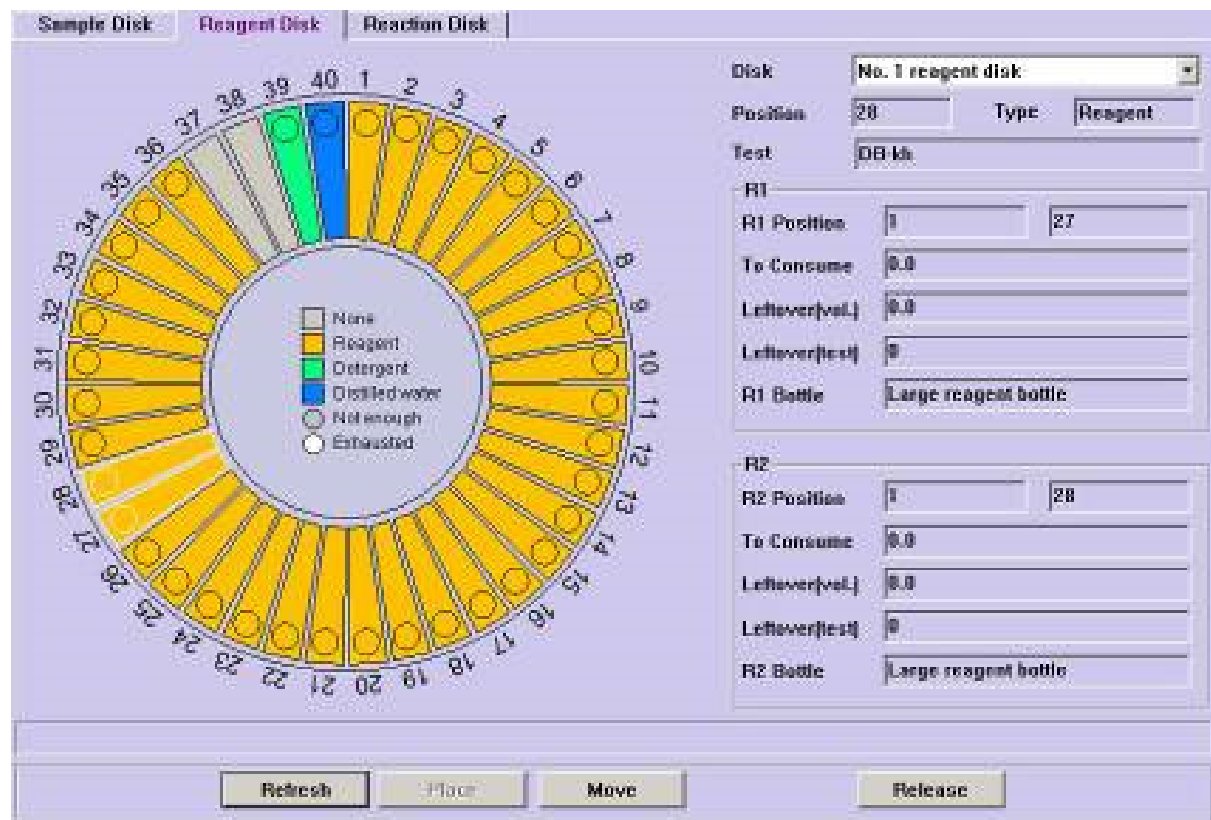
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# State-of-the-Art Technology & Design

- Example: Reagent Monitoring Screen



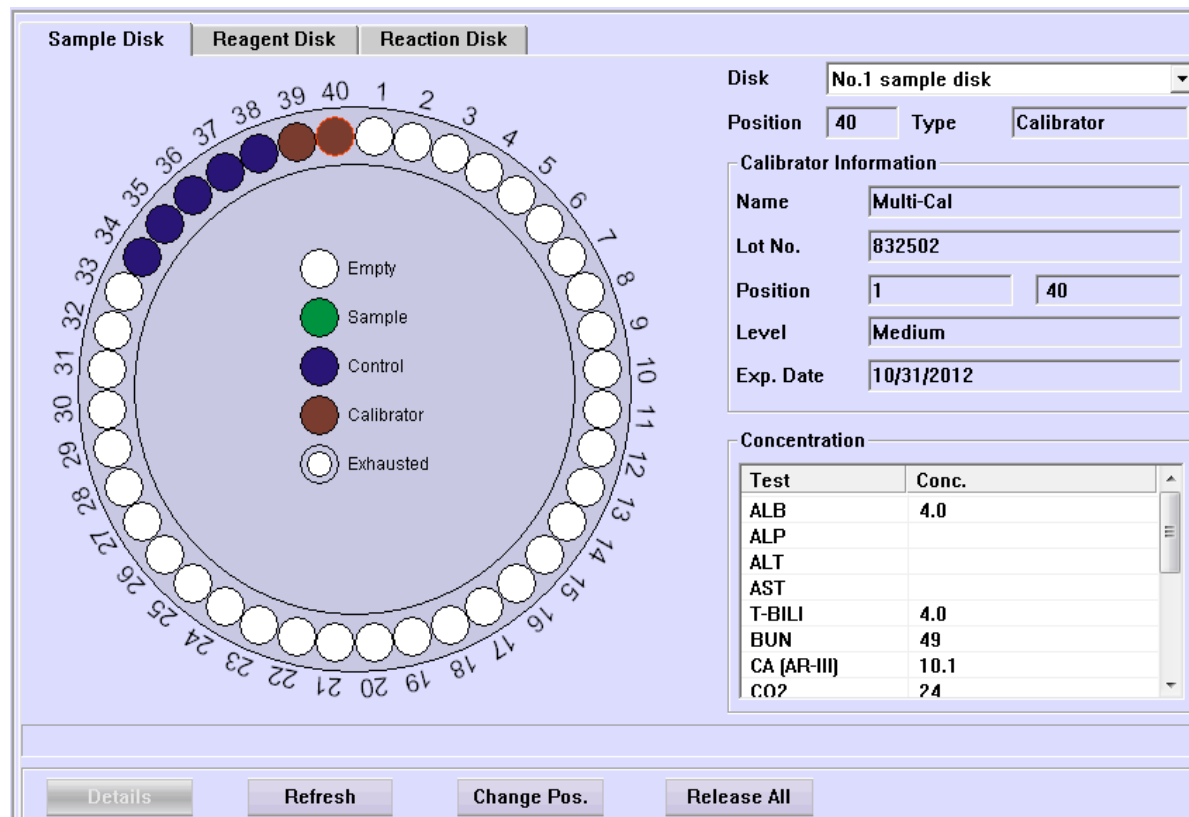
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# State-of-the-Art Technology & Design

## ■ Example: Sample Monitoring Screen



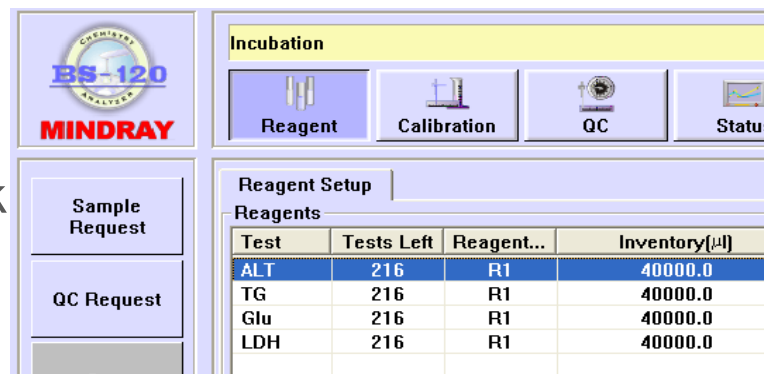
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# State-of-the-Art Technology & Design

- Auto QC
- Auto dilution and pre-dilution of sample and calibrator
- Auto rerun of abnormal results
- Auto print-out after sample run
- Allows easy programming of batch work
- QC on profiles
- Up to 10 programmable disks
- Customization of calculation formula, i.e., microalbumin/creatinine
- Unlimited storage of test results and QC files
- Built-in Online Operation Manual in Operational Software
- An instrument that “talks” to you
- Audible alarm (volume adjustable)
- Many more ...



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## Significant Cost Savings

- Low-cost instrument with same features and precision available on high-end analyzers
- Quality low-cost reagents
- Minimum reaction volume:  $\leq 180\mu\text{l}$
- Low-cost cuvettes: costs for cuvette cleaning agents, distilled water or lost time waiting for washing is eliminated
- Low-maintenance instrument
- Long-life lamp (2,000 hours)
- 6-month electrodes shelf-life guarantee



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## Who Benefits Most from the BS-200

- Extreme low-cost in relation to its throughput and state-of-the-art features - a viable and profitable solution for labs with annual test volumes of 30,000 to 125,000 tests
- A broad test menu fits the needs of general chemistry labs and specialty labs, i.e., pain management, drugs of abuse, immunoprotein testing, etc.
- POLs or small hospitals with less than 125,000 tests/year
- POLs with test volumes too small to afford other analyzers
- Departments of some large hospitals who want to spin off from the central lab and have their own in-house chemistry analyzer dedicated for one or more specialty tests, i.e. glucose, special proteins, etc.



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**Thank You**

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