

Where Convenience Begins

BEP® 2000 Advance System

SIEMENS

Answers for life.

BEP 2000 Advance System

The BEP 2000 Advance System meets the demands for a high level of automation in this millenium. The requirements for the next generation of MTP-systems are included as well as newly developed unique software features. The well known and proven BEP concepts for GMP/GLP (good manufacturing practice/good laboratory practice) are consequently integrated in the BEP 2000 Advance System.

Integrated primary tube handling

The initial loading of up to 100 primary tubes (independent from the diameter) can be increased up to 200 primary tubes using the reloading option. Predilution of samples to be tested with Enzygnost[®] and Novagnost[®] reagents can be performed automatically.



Convenience from the beginning

Designed for integration into your laboratory workflow, the BEP 2000 Advance System offers a samplein/result-out process with online connection to your host computer. The new, specially designed front cover allows easy access to the individual components.

Disposable tips to eliminate carryover

The analyzer uses 2 different sizes of disposable tips ($300 \ \mu L$ and $1100 \ \mu L$) for single and multishot dispensing. Specific hardware and software components designed and developed solely for the BEP 2000 Advance have resulted in a patent application to eliminate the cross contamination of samples.



Microplate loading

- Automated processing of up to 4 test plates in one run
- Microplate barcode identification option
- Continuous loading capability of plates, samples, tips and reagents

Sample and reagent loading

- Automatic barcode identification of samples and reagents
- Vertical and horizontal reagent barcode reading
- Up to 200 primary sample tubes loadable*
- Liquid level sensed reagent inventory
- Removable ready-to-use reagent racks designed to hold all original Siemens Enzygnost and Novagnost reagents

Washing of test plates

- 8 channel washer manifold with special aspiration/dispensation needles
- Washing of round and flat bottom plates
- Adjustable dispensation speed
- Single strip washing (definable soak time)



Powerful features for your benefit

Supply unit

- 4 different washer bottles (2 x 1L and 2 x 2L) on board
- Level sensing of all bottles

Dispenser

- Clot detection during sample processing
- Disposable tips eliminate carry over
- Automated predilution of samples
- Mixing of samples and reagents
- Controlled high precision dispensing
- Liquid level sensing

Incubation and photometric reading

- 8 incubators: 4 incubators for incubation at room temperature (RT) and 4 independant incubators each adjustable from RT to +50°C
- Incubation condition control
- Controlled shaking
- Photometric endpoint and kinetic reading







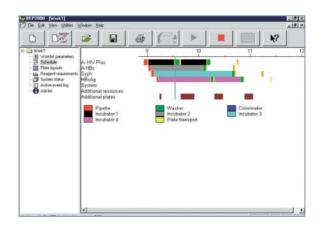
Intuitive easy-to-use software

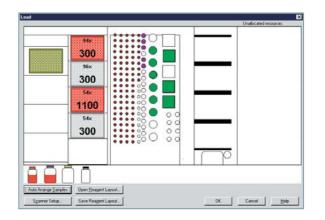
Graphical user interface at operator level

- Comprehensive scheduler to optimize your workflow
- The included QC program displays any control in a Levy Jennings chart
- The Load Screen depicts the arrangement of barcode identified samples, microplates and reagents as well as wash-buffer and disposable tips
- Maximum flexibility in protocol programming

Software features

- Archiving of results by worklist and patient result report
- Complete event log and inprocess control
- Bidirectional host communication with ASTM specification or ASCII-format
- On board system validation and self test
- Complete lot management to optimize kit handling
- Single Point Quantification (α -method)
- Various quantitative and qualitative evaluation modes (various standard curves)
- Error/crash recovery and restartfunction





Ready for the future

Safety first

Only a complete system of specially matched components can ensure maximum safety for your results. This safety level is maximized by:

- Positive sample and reagent identification
- Optimized and validated assay protocols for all Enzygnost and Novagnos reagents
- Controlled high precision dispensing
- Clot detection during sample aspiration
- Disposable tips eliminate carry over
- Automated reagent volume check according to the worklist
- Full process control and documentation of individual processing steps
- Automatic sample predilution and distribution
- Insufficient sample detection recorded

High throughput

Workflow optimization in your laboratory

- Automated processing of up to 4 testplates (up to 360 reports) in one run
- Continuous loading of samples and reagents
- Combination of up to 4 assays on one microplate optimizes the throughput
- Removable ready-to-use reagent racks

Easy to use

Operator friendly automation and minimum hands-on time

- The preprogrammed maintenance scheme and a self test function at startup make the BEP 2000 Advance a user friendly and efficient laboratory instrument
- A fully automated validation procedure checks the correct function of all processor modules

Flexible system

• Available Enzygnost and Novagnost assays allow easy adaptation to specific laboratory needs

> Siemens offers the complete solution for blood donor screening, diagnostic laboratories, universities and hospitals, ensuring an outstanding level of safety, security and automation.

> In combination with the scientific knowledge, Siemens is your competent partner in the diagnosis of infectious diseases.

Siemens - competence in diagnostics

A comprehensive portfolio of infectious disease diagnostics to fit to your needs

Pathogen	Related Disease	Test kit						
		Antigen	lg Total	lgG	lgM	lgA	Enzygnost	Novagnost
Bacteria							ĺ	İ.
Borrelia species	Borreliosis (Lyme disease)						Enzygnost Borreliosis/IgM	
Borrelia species	Borreliosis (Lyme disease)						Enzygnost Lyme link VIsE/IgG	
Bordetella pertussis	Whooping cough							Novagnost Bordetella pertussis
	Brucellosis							
Brucella abortus								Novagnost Brucella
Chlamydia pneumoniae	Pneumonia/Arteriosclerosis							Novagnost Chlamydia pneumoniae
Chlamydia trachomatis								Novagnost Chlamydia trachomatis
Corynebacterium								
diphtheriae	Diphtheria							Novagnost Diphtheria toxin
Helicobacter pylori							Enzygnost Anti-Helicobacter pylori II	
Mycoplasma pneumoniae	Pneumonia							Novagnost Mycoplasma pneumoniae
Treponema pallidum	Syphilis						Enzygnost Syphilis ¹	
Clostridium tetani	Tetanus							Novagnost Tetanus toxin
Fungi								
Candida albicans	Candiasis							Novagnost Candida albicans
canala distants	carratable							The rag nest canada ansicans
Parasites								
Trypanosoma cruzi	Chagas Disease							Novagnost Chagas
Echinococcus species	Echinococcosis Hydatidosis							Novagnost Echinococcus
Entamoeba histolytica	Amoebiasis							Novagnost Entamoeba histolytica
Leishmania infantum	Leishmaniosis							
			-					Novagnost Leishmania
Schistosoma mansoni	Bilharziosis							Novagnost Schistosoma
Manual Hamatitia								
Virus - Hepatitis	Llamatitia D	2						
HBV (HBs)	Hepatitis B	-					Enzygnost HBsAg 5.0 ¹	
HBV (HBs)	Hepatitis B						Enzygnost Anti-HBs II ¹	
HBV (HBc)	Hepatitis B						Enzygnost Anti-HBc monoclonal ¹	
HBV (HBc)	Hepatitis B						Enzygnost Anti-HBc/IgM	
HBV (HBe)	Hepatitis B						Enzygnost HBe monoclonal	
HAV	Hepatitis A						Enzygnost Anti-HAV	
Virus - Retrovirus								
HIV	AIDS						Enzygnost Anti-HIV 1/2 Plus ¹	
HIV	AIDS						Enzygnost HIV Integral II ¹	
Virus								
Adenovirus								Novagnost Adenovirus
Dengue Virus	Dengue (hemorrhagic fever)							Novagnost Dengue
Epstein Barr Virus	Infectious mononucleosis						Enzygnost Anti-EBV	
Epstein Barr Virus								
(capsid antigen)	Infectious mononucleosis							Novagnost EBV-VCA
Epstein Barr Virus								
(nuclear antigen)	Infectious mononucleosis							Novagnost EBV-EBNA
Influenza A Virus	Flu							Novagnost Influenza A
Influenza B Virus	Flu							Novagnost Influenza B
Measles Virus	Measles						Enzygnost Anti-Measles Virus	Novagnost Measles
Parainfluenza 1-3 Virus	Flu							Novagnost Parainfluenza 1-3
Parotitis Virus	Parotitis					-	Enzygnost Anti-Parotitis Virus	Novagnost Mumps
Parvovirus B 19	Fifth disease							Novagnost Parvovirus B19
	Thur disease							
Respiratory Syncytial								Novagnost RSV
Virus Tick Porpo Enconhalitic						-		Novagnost KSV
Tick Borne Encephalitis	Tisla Dama - Franciska litis				L			
(TBE) Virus	Tick Borne Encephalitis						Enzygnost Anti-TBE Virus (IgG, IgM)	N
VZV							Enzygnost Anti-VZV	Novagnost VZV
T- DCU								
ToRCH	Taurala and a dia						Francisco est Terre a la consecio	
Toxoplasma gondii	Toxoplasmosis		-				Enzygnost Toxoplasmosis	
Rubella	Rubella, German measles						Enzygnost Anti-Rubella Virus	
CMV	Cytomegaly						Enzygnost Anti-CMV/ IgG + IgM ¹	
CMV	Cytomegaly						Enzygnost Anti-CMV	
HSV-1	Oral Herpes							Novagnost HSV-1
HSV-2	Genital Herpes							Novagnost HSV-2
HSV	Herpes						Enzygnost Anti-HSV	Novagnost HSV-1/2
147								
Worms								
Ascaris lumbricoides	Ascariasis							Novagnost Ascaris lumbricoides
Taenia solium	Cysticercosis							Novagnost Taenia solium
								Novagnost Toxocara canis
Toxocara canis Trichinella spiralis	Toxocariasis Trichinosis							Novagnost Trichinella spiralis

Enzygnost ELISA Assay Novagnost ELISA Assay Enzygnost and Novagnost ELISA Assay

¹ Assays available for Quadriga BeFree System ²Neutralization test available Status: 03/2008 Siemens Healthcare Diagnostics, the leading clinical diagnostics company, is committed to providing clinicians with the vital information they need for the accurate diagnosis, treatment and monitoring of patients. Our comprehensive portfolio of performance-driven systems, unmatched menu offering and IT solutions, in conjunction with highly responsive service, is designed to streamline workflow, enhance operational efficiency and support improved patient care.

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