



# **SAETTA 200**

# Random Access Analyzer

# Especially designed for:

Small to medium laboratories • Veterinary laboratories • Enology Urgency departments • Special routine • Back-up in big laboratories Operating rooms • Close or open systems • Improving cost efficiency



#### **COMPANY PROFILE**

GIESSE DIAGNOSTICS is a family owned business company specialized in the production of in vitro diagnostics medical devices. It is an independent enterprise which was founded in Rome, Italy on 1978.

In the beginning we started the production of general chemistry reagents introducing some innovative products which would be later followed by Immunoturbidimetry, Serology and Coagulation reagents.

The quality of **GIESSE DIAGNOSTICS** products is constantly improved by innovations in: Production process, analysis, documentations and services.





During the years, several investments have been done in order to improve the quality management systems which nowadays comply with the following standards:

#### UNI EN ISO 13485:2012 - UNI EN ISO 9001:2008

Moreover our in vitro diagnostic medical devices are in conformity with European Union Directives 98/79/CE.

Our long lasting tradition, together with courageous entrepreneurship characterizes our company.

We are opened to new International challenges which we will face by our good service and capabilities.

Thanks to our efforts towards an always innovative production we became one of the quality market leaders in Italy and in many other countries around the world.

Our quality control management guarantees that all products are submitted to rigorous and analytical tests which are performed at **GIESSE DIAGNOSTICS** internal laboratories.





Products deliveries convey with all customers needs and safety protocols.

Our products are available in our Brand Kit / Bulk / Custom made to fulfill all your needs.

Our willing of continuous growth and business expansion, lead us to invite you to visit our website for joining our group trying our complete diagnostics line and the new SAETTA 200 analyzer.

## **DIAGNOSTICS LINE**

Stable Liquid reagents available in many sizes, Personalized packaging, Bulk manufacturing, Customized labelling, Bulk powder format, Vials size optimization on customers request.

CLINICAL CHEMISTRY	IMMUNOTURBIDIMETRY	SEROLOGY	COAGULATION
ACID AND PROSTATIC PHOSPHATASE	ALPHA 1 ANTITRYPSIN	ASO	APTT
ALBUMIN SL	ALPHA 1 GLYCOPROTEIN ACID	CRP	FIBRINOGEN
ALKALINE PHOSPHATASE SL (DGKC)	ANTITHROMBIN III	IM	PT
ALKALINE PHOSPHATASE SL (IFCC)	APO A1	RF	CALCIUM CHLORIDE
ALPHA AMILASE SL	APO B	RPR CARBON	KAOLIN
ALT/GPT-SL	ASO-Q	TPHA	IMIDAZOLE BUFFER
AMMONIUM SL Monoreagent NEW!	C3	WAALER ROSE	D-DIMER
AST/GOT-SL	C4	VDRL	
BILIRUBIN DIRECT SL	CERULOPLASMIN		CALIBRATORS & CONTROLS
BILIRUBIN TOTAL (B) SL	CRP-Q		Coagulation Calibrator
CALCIUM ARS SL	CYSTATIN C	CONTROLS	Control Plasma N
CALCIUM OCPC SL	D-DIMER <b>NEW!</b>	Positive	Control Plasma P
CHLORIDE SL	FERRITIN	Negative	Fibrinogen Calibrator
CHOLESTEROL HDL DIRECT SL NEW!	HAPTOGLOBIN		
CHOLESTEROL HDL PEG 6000 SL	Hba1C (DIRECT GLYCATED)		IMMUNOENZYMATIC
CHOLESTEROL LDL PVS	IgA		25-OH VITAMIN D
CHOLESTEROL LDL DIRECT SL NEW!	IgE		
CHOLESTEROL TOTAL SL	IgM		
CHOLINESTERASE SL (DGKC)	IgG		WASHING SOLUTIONS
CK-MB SL	LIPOPROTEIN(A)		FOR CLINICAL CHEMISTRY
CK-NAC SL	MICROALBUMIN		ANALYZER; HEMATOLOGY
COPPER SL	MICROGLOBULIN B2		
CREATININE SL	MIOGLOBIN		
CREATININE SL (4+1) NEW!	PREALBUMIN		
DIBUCAINE NUMBER SL	RF-Q		HITACHI DEDICATED
FRUCTOSAMINE SL (4+1)	TRANSFERRIN		REAGENTS
GAMMA GT SL (SZASZ-TRIS)			Series 704-717-902-911-912
GAMMA GT IFCC			Modular P
GLUCOSE SL	CALIBRATORS & CONTROLS		
HOMOCYSTEINE SL <b>NEW!</b>	General Proteins Calibrators		
IRON CAB SL	General Proteins Controls		KONELAB DEDICATED
IRON F	Specific Calibrators & Controls		REAGENTS
LACTATE Lyophilized			Series 20-T30-T60
LDH-p SL			
LIPASE SL			OLYMPUS AUCC
MAGNESIUM SL			DEDICATED REAGENTS
MICROPROTEINS B SL			Series AU400-480-600
PHOSPHORUS UV SL			640-2700-5400
POTASSIUM NEW!			
SODIUM NEW!			HAR DEDICATED
TOTAL PROTEINS SL			ILAB DEDICATED
TRANSFERRIN SL (TIBC-LIBC)			REAGENTS
TRYGLYCERIDES SL			Series 300-600-900
UREA LIV SI			
UREA UV SL URIC ACID SL			
ZINC SL			
ZINC 3L			
CALIBRATORS AND CONTROLS			
Precise Norm Control			
Precise Path Control			
Clinical Chemistry Calibrator			
Calibrator & Control CK-MB & CK-NAC			
Calibrator & Controls HDL & LDL			

SAETTA 200 performes both Clinical Chemistry and Immunoturbidimetry. This compact and fully automated analyzer, is especially suited for medium and small-size laboratories. With the capability of performing 200 tests per hour and its capacity to handle urgencies and the random flow of incoming samples, SAETTA 200 is the ideal choice for points of care, clinics, operating rooms

and urgency departments.

#### SAMPLING ARM

Inner and outer probe washing Needle stroke sensor Capacitive level detector Reagent preheat

#### ON BOARD REAGENTS

Up to 30 bottles. Removable and refrigerate rack Close or open system.

#### **SAMPLETRAY:**

Removable sample tray 60 or 40 positions for tubes or cups STAT samples loading allowed at any time

#### **COST EFFICIENCY:**

80 washable single BIONEX cuvettes Long life use ~25000 tests before change it. Precision diluter syringe Low water consumption Cuvette quality automatic check

#### MAINTENANCE:

Very easy maintenance

 $\label{thm:continuous} Simple\,access\,and\,maintenance\,of\,hydraulic\,pumps\,system.$ 

8 peristaltic pumps.

Replaceable neoprene cassette.

Time life, volume, flow rate info by software.

2 vacuum pumps

1 Pinch valve

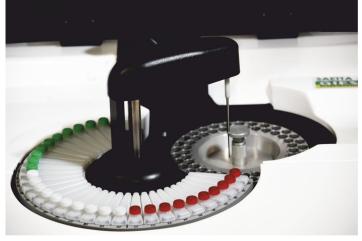
#### **WASH STATION**

8 Steps washing sequence cuvettes 6 needles dispensing 6 needles aspiration

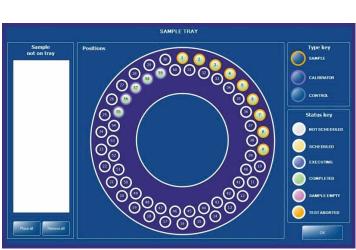
- Results available 8 minutes after sample tube insertion
- Sample dilution: run-time predilution in reaction tube.
- Automatic standards predilution
- Easy PAUSE request to add samples and reagents, automatic recovery from empty reagent bottles
- Extends the range of kinetic tests through a dynamic processing of the readings. Reduce the rerun of out-of range tests.
- Table of incompatible methods: automatically shifts the run of a test to avoid contamination from an incompatible reagent.
- Assay calibration before or during routine. Repeat calibration to recover tests if calibration failed.
- Endpoint, kinetic, fixed time, turbidimetric assays. Monochromatic or bi-chromatic readings. Reagent blank and sample Blank.
- Automatic management of multiple bottles of the same reagent.
- QC: Levey-Jennings graphics, Westgard rules monitoring.
- Automatic Start-up and Shut-down

With its unique design and friendly layout SAETTA200 software completely merges with the analyzer philosophy. Although the interface permits an incomparable efficiency, it has been developed trying to be as simple as possible. With it's new work structure optimized on a random access approach it permits the operator to really save time and to work in an extremely time efficient manner.

The configuration of the command structure, controlled by a hierarchy of easily identified icons, permits the comprehension of SAETTA's working functions at a glance.







### **SOFTWARE FEATURES**

Control/support: Remote Instrument / software online control through Internet connection

Test Methods: Unlimited number of methods – 40

active methods

Worklist/samples: Unlimited /sample patient ID codes.
Power/External Pc: Standard VDE/USB Ethernet LAN
Connection/Host-lis: Standard ASTM ASCII protocol

Online software support

Software designed for Touch-screen use.

#### LIST OF DEDICATED APPLICATIONS

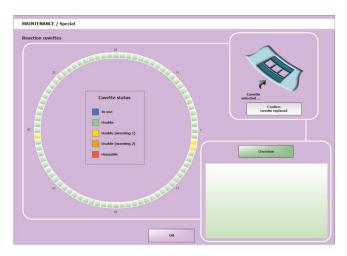
The SAETTA 200 has all parameters set based on GIESSE DIAGNOSTICS reagent kits given below:

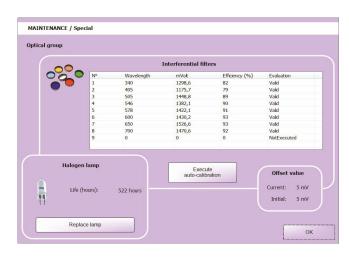
CODE	PRODUCT	METHOD
SA3117	ACID AND PROSTATIC PHOSPHATASE	Hillman
SA0027	ALBUMIN SL	BCG
SA4096	ALKALINE PHOSPHATASE SL (DGKC)	DGKC
SA4183	ALKALINE PHOSPHATASE SL (IFCC)	IFCC
SA5503	ALPHA AMILASE SL	CNP-G3
SA4193	ALT/GPT-SL	IFCC
SA0017	AMMONIUM UV Monoreagent <b>NEW!</b>	Glutamate dehydrogenase
SA4181	AST/GOT-SL	IFCC
SA0032	BILIRUBIN DIRECT SL	Jendrassik/Grof
SA0037	BILIRUBIN TOTAL (B) SL	Diazo/Tensides
SA0030	CALCIUM ARS SL	Arsenazo III
SA0014	CALCIUM OCPC SL	OCPC
SA0020	CHLORIDE SL	Mercuric Thiocyanate
SA0026	CHOLESTEROL HDL DIRECT SL NEW!	Direct
SA0056	CHOLESTEROL HDL PEG 6000 SL	Peg 6000
SA0023	CHOLESTEROL LDL PVS	PVS
SA0025	CHOLESTEROL LDL DIRECT SL NEW!	Direct
SA0035	CHOLESTEROL TOTAL SL	Trinder CHOD-POD
SA0016	CHOLINESTERASE SL (DGKC)	Butyrylthiocholine
SA0082	CK-MB SL NEW!	Kinetic UV
SA0018	CK-NAC SL	DGKC-IFCC
SA3119	COPPER SL	3,5-Di-Br-PAESA
SA0060	CREATININE SL (1+1)	Jaffé modified
SA0066	CREATININE SL (4+1) NEW!	Jaffé modified
SA0029	DIBUCAINE NUMBER SL	For Cholinesterase SL
SA5531	FRUCTOSAMINE SL (4+1)	NBT
SA4196	GAMMA GT SL (SZASZ-TRIS)	Szasz-Tris
SA4076	GAMMA GT (SZASZ-TRIS) Powder	Szasz-Tris
SA4057	GLUCOSE SL	Trinder GOD-POD
SA5539	HOMOCYSTEINE SL <b>NEW!</b>	Enzymatic
SA4075	IRON CAB SL	Chromazurol B
SA0089	IRON F	Ferene
SA6752	LACTATE Lyophilized	Enzymatic colorimetric
SA4161	LDH-p SL	UV-DGKC
SA5721	LIPASE SL	Colorimetric
SA0290	MAGNESIUM ARSENAZO SL	Arsenazo
SA0074	MICROPROTEINS B SL	Colorimetric-Pyrogallol Red
SA0031	PHOSPHORUS SL	UV
SA0236	POTASSIUM <b>NEW!</b>	Enzymatic
SA0237	SODIUM <b>NEW!</b>	Enzymatic
SA0046	TOTAL PROTEINS SL	Biuret
SA0022	TRANSFERRIN SL (TIBC-LIBC)	Saturation
SA0073	TRYGLYCERIDES SL	Trinder GPO-POD
SA4063	UREA 2 COLOR SL	Enzymatic-Colorimeric
SA4170	UREA UV SL	Urease-GLDH
SA4050	URIC ACID SL	Trinder Uricase-POD
SA10233	ZINC SL	

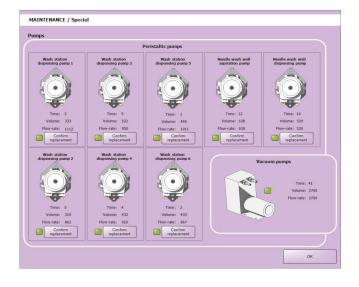
#### **IMMUNOTURBIDIMETRY**

	IMMUNUNCIURDIDIMEIRI	
SA6702	ALPHA 1 ANTITRYPSIN	Turbidimetry
SA6703	ALPHA 1 GLYCOPROTEIN ACID	Turbidimetry
SA6704	ANTITHROMBIN III	Turbidimetry
SA6717	APO A1	Turbidimetry
SA6718	APO B	Turbidimetry
SA7731	ASO-Q	Latex Turbidimetry
SA6707	C3	Turbidimetry
SA6708	C4	Turbidimetry
SA6705	CERULOPLASMIN	Turbidimetry
SA7732	CRP-Q	Latex Turbidimetry
SA7797	CYSTATIN C	Latex Turbidimetry
SA6737	D-DIMER <b>NEW!</b>	Turbidimetry
SA6719	FERRITIN	Latex Turbidimetry
SA6709	HAPTOGLOBIN	Turbidimetry
SA6738	HbA1c (DIRECT GLYCATED)	Latex Turbidimetry
SA6711	lgA	Turbidimetry
SA6726	lgE	Turbidimetry
SA6710	lgG	Turbidimetry
SA6712	IgM	Turbidimetry
SA6730	LIPOPROTEIN(A)	Latex Turbidimetry
SA6740	MICROALBUMIN	Latex Turbidimetry
SA6743	MICROGLOBULIN B2	Latex Turbidimetry
SA6727	MIOGLOBIN	Turbidimetry
SA6715	PREALBUMIN	Turbidimetry
SA7733	RF-Q	Latex Turbidimetry
SA6716	TRANSFERRIN	Turbidimetry









# SAETTA 200

Random Access Analyzer

#### TECHNICAL SPECIFICATIONS

**REAGENTS TRAY** Removable rack

30 bottles, 50ml or 25 ml (up to 1500 ml total)

**SAMPLES TRAY** Removable tray, 60 numbered positions.

Tubes of 12-13mm, 5-7ml/cups of 0.5-1.5ml (Optional) Removable try, 20+20 numbered positions, 20 tubes of 12-16mm/20 cups (3.5ml type)

**CUVETTE ROTOR REACTION CELLS**  80 Washable cuvettes which allow up to 35000 test per rotor. Optical path 6mm, 210-350µl

reaction volume. Temperature sensor.

Safety thermostat.

**SAMPLING** 1 sampling needle ,110 mm needle stroke

Capacitive liquid level detector ARM

Needle shock sensor

**DILUTER** Long life plunger Syringe capacity, 368 µl SYRINGE

Syringe resolution, 0.14 µl

**WASH STATION** Needles: 6 Dispensing, 6 Aspiration, 1 Cleaning 8 Steps washing sequence for each cuvette

**HYDRAULIC** 8 self-priming peristaltic pumps (life 1000 hrs)

**SYSTEM** with replaceable neoprene cassette (life 550 hrs)

2 vacuum pumps Pinch valve Manifold

Containers with level sensor and safety connections Water 20I - Cleaning Solution 2I -

Waste 201

1 halogen lamp (6V-10W) with extended UV **OPTICAL** 

emission

2 focusing lenses, optical glass; 10 position filter disk: 8 position provided with interference filters of 340, 405, 505, 546, 578, 600, 650, 700 nm wavelengths. 1 free position and 1 solid position for dark reading.

Direct reading reaction cuvettes, 6mm

path ±2nm

On peak wavelength, band pass of ±10nm.

Photoelectric detector, signal amplifier **PHOTOAMPLIFIER** 

Response range, 340 nm to 900 nm Photometric range 0 to 2.5 Abs

Linearity ±0.5% full scale; Precision: 0.5 CV% Stability: daily reader offset, less than 1% drift per

CONTROL Real-time multitasking microprocessor based

control

Easy access to the electronics

**EXTERNAL** Minimum requirements Intel Pentium IV family **COMPUTER** 

2 GHz, 20Gb HD, 512 Mb ram, CD/R Monitor 17" 1280x1024 resolution, Keyboard and mouse USB port Windows® 7 with .NET framework 4.0 LAN port for LIS host communication

External Printer, A4

SIZE/WEIGHT Height: 45 (17.7 in), Depth: 61 (24.1 in)

Width: 63 (24.8 in)

**POWER SUPPLY** 240/100 Vac, 50/60 Hrz, single phase with ground Independent on-off switch for refrigerated reagent

plate

Fuse compartment / fuses: 2 Amo @ 230 Vac,

4 Amp@ 115 Vac

Power consumption: less than 200 VA Ground resistance: less than 0.1 Ohm Leakage current: less than 2.5 mA

#### **OPERATION FEATURES**

200 Test/Hour in single reagent mode Maximum incubation +reading time: 638 seconds **MEASUREMENT** 

Carry-over, lower than 15 parts per million Typical precision, endpoint 2.0 CV% / kinetic

2.0CV%

**TEST RUNS** Random/Urgent

TYPES OF TESTS Endpoint, Bichromatic endpoint, Differential

**Endpoint** 

Differential endpoint sample blank, Fixed Time,

Kinetic

CALIBRATION Reagent blank subtraction, 1 to 8 standard per test

method

Linear: factor, linear, linear regression (standard

repetitions)

Non linear (3 interpolation types): cubic-spline,

poly-linear and logit-log four parameters Free standard / control position on all the sample plate. Results can be recalculated while changing

factor or curve.

**REACTION** Reaction volume 210-350 µl

Volume: sample 2 – 300 µl; reagent 5-350µl Precision:1.5 CV% at 2µl; 1 CV% at 4µl **PIPETTING** 

Mixing by sample needle upon dispensation

**SAMPLE** In-needle dilution if allowed by method's sample

volumes

DILUTION Automatic pre-dilution in a reaction cuvette up to

1.100

The start-up procedure is daily run: self test, reader offset of optics, wash and check of all START-UP

cuvettes.

**NEEDLE** Sample needle washed internally and externally WASHING

with system solution after every operation

**TEMPERATURE** Reagent refrigeration, around 15°C below room

temperature

CONTROL reaction cells, heating unit can be set from R.T. up

to 45 °C.

**MAINTENANCE** Procedures programmed by component life

counters.

**PRINTING** Single test, complete sample, work sheet, method

and QCs Automatic sample reports upon test

completion if requested.

### CONNECTIONS

**POWER** 

**REPORTS** 

Standard VDE removable power cord

**EXTERNAL PC** 

**USB** port

HOST/LIS Ethernet LAN (samples, work list, results)

Standard ASTM ASCII protocol



لاب مارکت • مستلزمات معملية

• کیمـــاویــ • أحــهــــ • صيانــة

01096411333

بنها - عمارة ٢ غرب الاستاد - بجوار كنتاكي - خلف نقابة الاطباء ومطعم الرشيدي