

Anexa nr. 46 Analizator biochimic automat 300 teste, cu sistem de tip deschis

Specificarea tehnică solicitată	Specificarea tehnică deplină ofertată, model Selecta Mach5 (Elitech Group/Olanda)
<p>Analizator biochimic, automat 300 teste, cu sistem de tip deschis Cod 150220</p> <p>Descriere Analizator automat destinat analizelor biochimice cu sistem deschis de reactivi.</p> <p>Sistem analitic automat cu calculator integrat sau exterior (procesor, monitor, tastatura+mouse)</p> <p>Tip de lucru continuu</p> <p>Tip sistem deschis</p> <p>random acces</p> <p>Capacitatea (teste/oră) ≥ 300 (teste fotometrice, fără modulul ISE)</p> <p>Posibilitatea efectuării analizelor urgente da</p> <p>Tipul dispozitivului staționar</p> <p>Tip probă Ser și plasmă, urină</p> <p>sînge întregu / hemolizat</p> <p>CSF (lichid cefalo-rahidian)</p> <p>Tip diluare automat</p> <p>Sistem de spălare total automat (cuvă, ac, sistem de dozare da</p> <p>Program control al calității da</p> <p>Compartiment reactivi cu răcire</p> <p>Rotor cu încălzire pentru probe cu termostat la 37 grade C</p> <p>Cuvă pentru probe reutilizabil da, (indicați ciclurile posibile de reutilizare)</p> <p>Regimuri de măsurare Cînetic da</p> <p>Mono și bi-cromatic da</p> <p>Imunoturbidimetrc da</p> <p>Controlul cantității de reagent rămas da</p> <p>Semnalizare lipsă reagent și probă da</p> <p>Sistemul de dozare Reagenții Utilizarea a minim 2 metodici: mono și bireagent</p> <p>Volumul reagentului programabil cu pasul 1 μl</p> <p>Sistemul de dozare Cu sensor de obstacol</p> <p>Alimentarea 220 V, 50 Hz</p>	<p>Analizator biochimic, automat 300 teste, cu sistem de tip deschis Cod 150220</p> <p>Descriere Analizator automat destinat analizelor biochimice cu sistem deschis de reactivi.</p> <p>Sistem analitic automat cu calculator integrat (procesor, monitor, tastatura+mouse), <i>pag. 4 Selectra Mach5 Brochure</i></p> <p>Tip de lucru continuu - CONTINUOUS REAGENT AND SAMPLE LOADING, <i>pag. 4 Selectra Mach5 Brochure</i></p> <p>Tip sistem deschis – da, <i>pag. 4 Selectra Mach5 Brochure</i></p> <p>random acces – da <i>pag.4 Selectra Mach5 Brochure</i>.</p> <p>Capacitatea (teste/oră): 340 to 680 photometric TPH/m2 (teste fotometrice, fără modulul ISE), <i>4 Selectra Mach5 Brochure</i>;</p> <p>Posibilitatea efectuării analizelor urgente da – STAT capability - pag. 4 Selectra Mach5 Brochure</p> <p>Tipul dispozitivului staționar – da, benchtop, pag. 4 Selectra Mach5 Brochure</p> <p>Tip probă Ser și plasmă, urină – da, pag. 4 Selectra Mach5 Brochure</p> <p>sînge întregu / hemolizat - pag. 4 Selectra Mach5 Brochure;</p> <p>CSF (lichid cefalo-rahidian) - pag. 4 Selectra Mach5 Brochure;</p> <p>Tip diluare automat: automatic onboard dilution, <i>pag. 4 Selectra Mach5 Brochure</i></p> <p>Sistem de spălare total automat (cuvă, ac, sistem de dozare da</p> <p>Program control al calității, da</p> <p>Compartiment reactivi cu răcire, da</p> <p>Rotor cu încălzire pentru probe cu termostat la 37 grade C</p> <p>Cuvă pentru probe reutilizabil da, (indicați ciclurile posibile de reutilizare) – 10000 cicluri</p> <p>Regimuri de măsurare Cînetic da</p> <p>Mono și bi-cromatic da</p> <p>Imunoturbidimetrc da</p> <p>Controlul cantității de reagent rămas da</p> <p>Semnalizare lipsă reagent și probă da</p> <p>Sistemul de dozare Reagenții Utilizarea a minim 2 metodici: mono și bireagent</p> <p>Volumul reagentului programabil cu pasul 1 μl, da</p> <p>Sistemul de dozare Cu sensor de obstacol, da</p> <p>Alimentarea 220 V, 50 Hz, da</p>



Clinical Systems

CERTIFICATE

Sergiu Sorocovici

has successfully completed the

Selectra Mach5. Make Work Flow

14/01/2022

Issued date

A stylized, handwritten signature in dark blue ink, likely belonging to Maurice Verdaasdonk.

Maurice Verdaasdonk
Vice President Clinical Systems



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Selectra Mach5: Basic Application Specialist Training

14/01/2022

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Maurice Verdaasdonk
Vice President Clinical Systems

A logo icon for ELITechGroup, consisting of three green hexagons of varying sizes arranged in a cluster.

ELITechGroup
EMPOWERING IVD





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CERTIFICATE

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03/04/2022

Issued date

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Maurice Verdaasdonk
Vice President Clinical Systems

The ELITechGroup logo, featuring a stylized green and blue geometric shape to the left of the text "ELITechGroup".

ELITechGroup
EMPOWERING IVD

REGISTRUL DE STAT AL DISPOZITIVELOR MEDICALE

Введите текст для поиска...

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DM000306836	ANALIZATOR BIOCHIMIC AUTOMAT		SELECTRA MACH5	6004-301	Olanda	ELITECHGROUP B.V.	GBG-MLD S.R.L.	Rg04-000110	17-05-2021



EU Declaration of Conformity



ELITechGroup B.V.
Van Rensselaerweg 4
6956 AV Spankeren
The Netherlands

declares under sole responsibility that the product indicated below (including all accessories) and to which this declaration relates, conforms to the provisions of:

- Regulation 2017/746 of the European Parliament and of the Council of 5 April 2017 on *In vitro* diagnostics medical devices ("IVD Regulation")
- Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("RoHS2 Directive"), including Commission Delegated Directive (EU) 2015/863 of 31 March 2015 amending Annex II to Directive 2011/65/EU of the European Parliament and of the Council as regards the list of restricted substances ("RoHS3").

It is certified that this product is registered in accordance with the requirements of above-mentioned EU Regulations/Directives and carries the CE-marking.

Catalogue number	Description	GTIN
6004-301	Selectra Mach5	0 3661540 60054 8

Product	Multiple clinical chemistry analyzer IVD, laboratory, automated
SRN	TBD
Risk Class	A
GMDN code	56676
Accessories	See Annex

Product classification

As per Article 48, section 10 the products are categorized as class A device ("self-declaration").

Conformity assessment procedure

In accordance with:

- Article 18 of the IVD Regulation
- Article 4 of the RoHS2 Directive

Spankeren, January 2021


M.A.S.V.E. Verdaasdonk
Managing Director



EU Declaration of Conformity



List of applied (harmonized) standards

	Standard version	Description	Tested / certified by
Safety	IEC 61010-1:2010, AMD1:2016	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements	UL
	IEC 61010-2-010:2014	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-010: Particular requirements for laboratory equipment for the heating of material	
	IEC 61010-2-051:2015	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-051: Particular requirements for laboratory equipment for mixing and stirring.	
	IEC 61010-2-101:2015	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-101: Particular requirements for in vitro diagnostic (IVD) medical equipment	
	UL 61010-1	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1. General requirements	UL
EMC	IEC 61326-1:2012	Electrical equipment for measurement, control and laboratory use - EMC requirements – Part 1: General requirements	DEKRA
	IEC 61326-2-6:2012	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 2-6: Particular requirements – In Vitro diagnostic (IVD) medical equipment	
Quality systems	ISO 13485:2016	Medical devices—Quality management systems—Requirements for regulatory purposes.	LRQA



EU Declaration of Conformity



Annex – List of IVD accessories

Catalogue number	Description	GTIN
3201-019	Precision Test Solution	0 3661540 60042 5
6004-338	Drying Block Set	0 3661540 60470 6
6004-351	Cuvette rotor set (3 pieces)	0 3661540 60043 2

Certificate of Approval

This is to certify that the Management System of:

ELITechGroup B.V.

Van Rensselaerweg 4, 6956 AV Spankeren, The Netherlands

has been approved by Lloyd's Register to the following standards:

ISO 13485:2016

Approval number(s): ISO 13485 – 00020722

This certificate is valid only in association with the certificate schedule bearing the same number on which the locations applicable to this approval are listed.

The scope of this approval is applicable to:

Design, development and manufacturing of clinical chemistry analyzers, contract manufacturing of erythrocyte sedimentation rate analyzers and warehousing of erythrocyte sedimentation rate tubes for the in vitro diagnostic investigation of samples of human origin.



Paul Graaf

Chief Operating Officer, Management Systems, MSIS

Issued by: Lloyd's Register Nederland B.V.

for and on behalf of: Lloyd's Register Quality Assurance Limited



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Certificate Schedule

Location	Activities
ELITechGroup B.V. Van Rensselaerweg 4, 6956 AV Spankeren, The Netherlands	ISO 13485:2016 Design, development and manufacturing of clinical chemistry analyzers, contract manufacturing of erythrocyte sedimentation rate analyzers and warehousing of erythrocyte sedimentation rate tubes for the in vitro diagnostic investigation of samples of human origin.
ELITechGroup B.V. Kanaaldijk 90, 6956 AX Spankeren, The Netherlands	ISO 13485:2016 Design, development and manufacturing of clinical chemistry analyzers, contract manufacturing of erythrocyte sedimentation rate analyzers and warehousing of erythrocyte sedimentation rate tubes for the in vitro diagnostic investigation of samples of human origin.



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Clinical Systems



selectra
-MACH5
Make work flow

Selectra Mach[®]5

An innovative benchtop solution to match your laboratory's needs now and into the future

- Quality and sturdiness – synonymous with the Selectra brand
- Maximum efficiency through consolidation of routine and special testing
- The accuracy required to help clinicians provide the best patient outcomes
- Economical benchtop solution

Now, how can Selectra Mach[®]5 add additional value for your clinical chemistry laboratory?

Choose your next benchtop system wisely

When choosing the right solution for your clinical chemistry laboratory, features that directly impact your laboratory's productivity will be critically important.

You will look for the best option to complete your workload with the existing or even less resources.

Simply making side by side comparisons of published technical specifications does not provide the critical information for your unique situation.

An integrated approach, that combines the critical productivity elements in a benchtop system, provides the additional insight required to make your work flow.

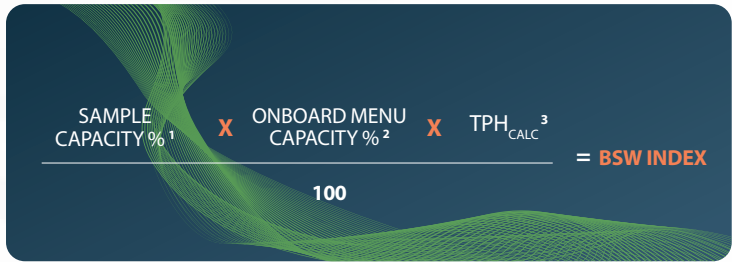


An integrated approach to benchtop system efficiency: The Benchtop System Workflow Index™

Efficient workflow depends on much more than a system's published specifications



The higher the BSW Index™, the more efficient the workflow in your laboratory



- 1 Sample Tray Capacity divided by the capacity needed to perform your daily workload.
- 2 Onboard Menu Capacity divided by the capacity needed to load your complete routine test menu.
- 3 Calculated theoretical Tests Per Hour performing your typical daily workload.

How the BSW Index works

The BSW Index assesses the overall workflow in a lab by incorporating three productivity elements of the benchtop system.

In short, it is a measure of benchtop speed (“calculated Tests Per Hour”) combined with measurements of benchtop-staff interactions during instrument operating time.

The higher the BSW Index, the more efficient the workflow in your laboratory

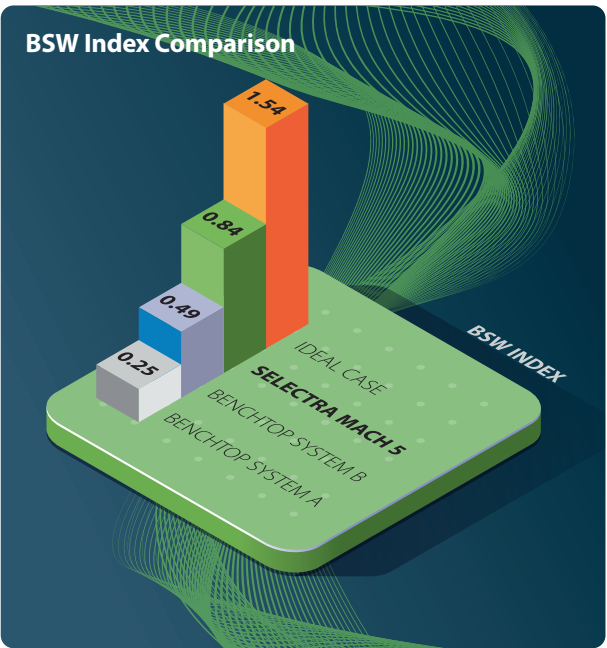
Let's look at the following scenario:

A routine clinical chemistry laboratory needs a new benchtop clinical chemistry system. Demand is expected to grow to 300 samples/day, requiring a menu of 40 parameters³, with an average of 12 tests/sample. The laboratory is operational 12 hours/day.

A “top 3” of benchtop systems is selected, based on published specifications meeting the current and future productivity needs: Selectra Mach5, Benchtop system A and Benchtop system B.

To determine which system will be most efficient, the BSW Index for all 3 systems is calculated.

Conclusion: for this laboratory, the Selectra Mach5 would be the best fit.



The values for the Ideal Case and the 3 selected instruments are displayed in the table below:

Top 3 selected Benchtop Systems:	SELECTRA MACH5	SYSTEM A	SYSTEM B	IDEAL CASE¹
SAMPLE CAPACITY	83	40	50	110 (C²)
ON BOARD REAGENT CAPACITY³	68	50	100	100 (B)
CALCULATED TPH (based on cycle time values)	314	270	216	300
BSW INDEX	0.84	0.25	0.49	1.54

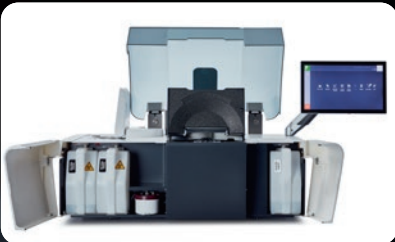
1. The Ideal Case is calculated by selecting the maximum score for each efficiency element, from all the instruments used in the comparison, and the desired throughput (in this case 300 Tests Per Hour).

2. Instrument C has the most optimal sample capacity but, because of insufficient throughput, did not make the short list.

3. Reagent positions required for the selected menu for non-ELITech Systems are based on publicly available information. For the Selectra Mach5, 70 reagent positions are required for the selected test menu.

Make work flow with **Selectra Mach®5**. A new approach to benchtop system efficiency

Other key features of the Selectra Mach®5



System completeness: Unlike many other systems, Selectra Mach®5 has everything included in the system, minimizing footprint. A built-in computer system including touchscreen monitor enabling better cyber security. An integrated supply of system liquid, simplifying system handling for the operator, or, in other words, optimizing human-system interventions.



Water usage: Selectra Mach5 has an onboard water capacity of 10L and typically uses up to 2.5L/h. The system is designed to perform efficiently, therefore both the water and waste containers can be replaced without interrupting the analytical process.



Photometric module: The unique photometers of Selectra Mach5 are LED-based and have a significantly longer life span than the halogen lamp in lamp-based photometers used in many other clinical chemistry systems. Moreover, the LED photometric cartridge technology provides more flexibility and adaptability for future assay developments, as up to 16 individual LED photometer cartridges with a specific wavelength can be accommodated (12 included as standard).

GENERAL SPECIFICATIONS

INSTRUMENTS	
SYSTEM	Fully automated, random access, benchtop clinical chemistry system with STAT capability
COUNTRY OF ORIGIN	Netherlands
DIMENSIONS	105 cm (w) x 70 cm (d) x 65 cm (h)
WEIGHT	110 Kg
OPERATING ENVIRONMENT	Between 15-32 °C; 30-85 % relative humidity (non condensing); and up to 3,000 m above sea level
INTEGRATED PLATFORM	Instrument with inbuilt PC, software, reagents, calibrators, controls and consumables
ANALYSIS MODES	Quantitative, Semi-Quantitative and Qualitative
ASSAY TYPES	Quantitative Kinetic Rate, Fixed Point Rate, End Point; Semi-quantitative; and Qualitative (cut-off)
ASSAY TECHNOLOGIES	Colorimetric (UV-Visible spectra), Turbidimetric

TEST MENU	
PROGRAMMABLE TESTS	1,000
ON BOARD REAGENT CAPACITY	Up to 65 Bar Code Readable (BCR) positions, cooled at 8 ± 4 °C
ON BOARD TEST CAPACITY	At least 39 Parameters when using ELITechGroup system reagents
SYSTEM REAGENT MENU	At least 40 CE marked system reagents
USE OF THIRD PARTY REAGENTS	Yes, capability of running third party assays not available from ELITechGroup

WORK FLOW	
PRIMARY TUBE SAMPLING	Primary- tube diameter ranging from 12 to 16 mm and a height ranging from 75 to 100 mm
CONTINUOUS REAGENT AND SAMPLE LOADING	Yes, samples and reagents, via dedicated sample and reagent access covers (maximum pause time for sample of 2 minutes)
ON BOARD SAMPLE CAPACITY	85 sample positions. 65 BCR and 20 auxiliary positions (inner ring)
THROUGHPUT RANGE (PHOTOMETRICS)	250 to 500 photometric TPH
THROUGHPUT /M²	340 to 680 photometric TPH/m²
TIME TO FIRST RESULT (PHOTOMETRICS)	< 5 minutes when using ELITech system reagents (assay dependent)
STAT LOADING	Utilising pause function, so no interruption to tests already in progress
AUTOMATIC REPEAT TESTING	Yes, automatic onboard dilution of out of range results
WALK AWAY TIME	Up to 4 hours using ELITechGroup system reagents
VALIDATED SAMPLE TYPES	Serum, Plasma, Whole Blood and Urine (assay dependent)
SAMPLE INTEGRITY	Sample clot detection
SAMPLE AND REAGENT IDENTIFICATION	Inbuilt BCR for risk free loading of samples and reagents

SYSTEM CONTROL	
OPERATING SYSTEM	Windows 10 based operating system
USER COMMANDS	15.6 inch capacitance Touch and Swipe screen, resolution 1366 x 768 pixels and widescreen (16:9) aspect ratio
APPLICATIONS	Automatically downloaded from 2D barcode on IFU with handheld BCR
CONTROL AND CALIBRATOR DATA	Automatically downloaded from 2D barcode on IFU with handheld BCR
STATUS DISPLAY	Instrument status, time for completion are displayed in real time
START UP PROCEDURE	System can be programmed for automated start up outside routine hours to prevent interruptions to workflow
SHUT DOWN PROCEDURE	System can be programmed for automated shut down outside routine hours to prevent interruptions to workflow
STORAGE CAPACITY	256 GB solid state hard disk

OPERATOR SAFETY	
ACCESS WHEN OPERATING	Cover open /closed detection. Transparent instrument cover, so moveable parts are visible during operation
MAIN COVER	Open/Closed detection
SAMPLE COVER	Open/Closed detection
REAGENT COVER	Open/Closed detection
CUVETTE ROTOR COVER	Open/Closed detection
NOISE EMISSION	Balanced noise criterium at NCB-58; Sound pressure 58 dB(A)max. when in use

REGULATORY COMPLIANCE	
IVD MEDICAL DEVICES	CE-marked in accordance with EU IVD Regulation 2017/746
ROHS	CE-marked in accordance with EU Directive 2011/65/EU
SAFETY	Tested and certified according to: IEC 61010-1:2010 (incl. AMD1:2016), IEC 61010-2-010:2014, IEC 61010-2-051:2015, IEC 61010-2-101:2015
ELECTROMAGNETIC COMPATIBILITY	Tested and certified by DEKRA according to: IEC 61326-1:2012, IEC 61326-2-6:2012





Selectra Solutions



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Selectra Mach is a registered trademark of ELITechGroup B.V.
BSW Index is a trademark of ELITechGroup B.V.
Selectra Mach5 product specifications are subject to modification to ensure the highest quality of performance over the life of the product. Availability may be subject to regulatory requirements. Please contact your local representative or email sales.ecsnl@elitechgroup.com for information on the availability of this product in your area.

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