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Client:	MR MedNuc SRL		
Quotation Number:	15524	Date:	20/06/2022
Job Number:	IN1289	Date:	23/08/2022

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ADDITIONAL:

Payment Terms:

50% / 40% / 10%

Other: please specify

Penalty Clause Yes / No

Please specify:

Blue Book Completion:

Signed	<i>[Signature]</i>	Date	28/2/23
Verified	<i>[Signature]</i>	Date	28/2/23

Quotation

To: MR MedNuc SRL
 35, Av. du Bourgmestre Jean Neybergh
 1090, Bruxelles
 Belgium

VAT Reg No: BE 0758590379

Quotation Date: 23/08/2022
Quotation Reference: 15524
Customer Ref: Raoul Mutejanya
Account Ref. MED010
Quotation Validity: 17/09/2022

Quantity	Product Code	Product Description	Unit Price €	Net Price €
ABCA2 IRMS Breath Test Instrument				
1	20602	Complete Sercon ABCA2 system High performance, high sample throughput IRMS for 13C breath tests. Including 240 place XYZ autosampler and gas box. Includes 70101-1 - ABCA2 spares kit - filament, copper gaskets, source tool kit, pump oil, 100 12 ml Exetainer vials, tubing and needle. Including Windows based PC	61,875.00	61,875.00
1	SI1767	CVL505 - Barcode Reader Bar code reader for error free sample loading, secure patient identification and GLP compliance.	1,500.00	1,500.00
1	CIP	Estimated CIP - Destination Airport	500.00	500.00
1	INST	Installation and start up training at Customer's site 2 days	5,100.00	5,100.00
1	WARR2	2 year warranty		

*** The price quoted does not include any local taxes or duties**
 See separate document for terms and conditions

Delivery: within 90 days of receipt of order

Payment Details:-

50% with order, 40% on delivery and 10% on installation
 Payment is required within 30 DAYS of invoice date by bank transfer.
 All bank transfer charges are the responsibility of the customer.
 Intra-community supply, subject to VAT in the country of acquisition.

This quotation is issued in Euro

Total Net Amount	€	68,975.00
Total VAT Amount	€	0.00
Order Total	€	68,975.00

Sercon Bank Details:-

National Westminster Bank, 36 High Street,
 Nantwich, Cheshire CW5 5GA U.K.
 IBAN: GB14NWBK60721013806831
 SWIFT/BIC: NWBKGB2LXXX

A: MR MedNuc Srl
35, Av. du Bourgmestre Jean Neybergh
1090 Bruxelles
Belgique

VAT Reg No: BE 0758590379

Date Devis: 20/06/2022
Référence Devis: 15524b
Réf Client: Mr Raoul Muteganya
Réf. Compte: **MED010**
Validité Devis: 20/09/2022

Quantité	Code Produit	Description Produit	Prix Unitaire €
1	20602	ABCA2 220-240 VOLTS (E) Inclus Passeur automatique XYZ 240 positions et boîte de gestion des flux gazeux pour la mesure du ratio $^{13}\text{C}/^{12}\text{C}$ du CO_2 dans l'air expiré. Nouvelle colonne chromatographique : permet l'analyse d'un échantillon en moins de 90 secondes Kit de démarrage de consommables ABCA2 70101-1 : filament, joints en cuivre, kit d'outils source, huile de pompe, 100 x 12 ml Tubes Exetainer, tubes et aiguille de remplacement Station de Données sous Windows et Imprimante incluses	61.875,00
1	SI1767	Lecteur de code-barres - pour chargement échantillons sans erreur, identification patient sécurisée et conformité GLP	1.500,00
1	WARR	Deux ans de garantie, pièces, main d'œuvre et déplacement inclus (hors consommables)	0,00
1	INST	Installation et Formation au Démarrage (deux jours)	5.100,00
1	CIP	Frais de transport estimés – Aéroport de destination	500,00

Ce devis est établi en Euros
Montant Net en € 68.975,00
TVA en € 0,00
Montant Total en € 68.975,00

Le tarif indiqué n'inclut pas les taxes d'importation et taxes locales (TVA) éventuelles

Modalités de Règlement:-

- 50% du total à la commande, 40% du total à la livraison, 10% du total à l'installation.
- Paiement à 30 jours, date de facture par virement bancaire. Frais bancaires éventuels à la charge du client.

Délai de livraison :

- 90 jours à réception de la Lettre de Crédit

Coordonnées bancaires Sercon:-

National Westminster Bank, 36 High Street,
Nantwich, Cheshire CW5 5GA U.K.

Euro: IBAN: GB14NWBK60721013806831
BIC: NWBKGB2LXXX

BON POUR ACCORD
Dr MUTEGANYA

OPTION : Contrats de Maintenance Préventive et Corrective après l'année de garantie initiale

BON POUR ACCORD

Référence	Description Produit	Prix Net €
SERVISIT	Contrat de Maintenance Préventive, main d'œuvre et déplacement inclus (hors consommables). Une visite par an (deux jours) est prévue au titre du contrat.	5.550,00
SERV	Contrat de Maintenance Préventive et Corrective, pièces, main d'œuvre et déplacement inclus (hors consommables). Une visite par an (deux jours) est prévue au titre du contrat.	11.800,00
ADVTRAIN	Formation sur Site Avancée (trois jours). Réalisée en suivant l'installation	3.500,00

Tarif et Descriptif des consommables du système ABCA2

Référence	Description	Prix Net €
SC0028	Filament 20-20 pk/1	215,00
SC0032	Joint en Cuivre 64mm Pk/5	29,00
SC0033	Joint en Cuivre 38mm Pk/5	21,00
SC0068	Exetainers 12ml pk/1000	400,00
SI730	Aiguille de prélèvement CETAC pour ABCA	130,00
SC0063	Huile de Pompe Edwards - Ultra grade 15 - 1L	32,00

BON POUR ACCORD

Nota bene : Ces consommables sont systématiquement remplacés au cours des contrats de maintenance préventif
Les tarifs ci-dessus sont soumis à modification, sauf accord contractuel.

OPTION : Accessoires d'installation

PAS D'ACCESSOIRES

Référence	Description Produit	Prix Net €	Qté	Total Net €
SI1901	Manomètre de régulation deux étages à 6 ports	200,00	2	400,00
SI1884	Tube de raccordement en Cuivre, rincé et nettoyé, 1/8"ODx0.065"ID, 15.24 mètres	75,00	1	75,00
SI1229	Raccord Male 1/8 OD x 1/4 IPTM en acier inox	12,00	1	12,00
ISO1-15	Bouteille C-10 avec 5% Dioxyde de Carbone (δ13C = -15 per mil vs VPDB)	1.000,00	1	1.000,00
ISO1-25	Bouteille C-10 avec 5% Dioxyde de Carbone (δ13C = -25 per mil vs VPDB)	1.000,00	1	1.000,00
ISOREG	Manomètre de régulation à deux étages pour bouteille C-10; avec connecteur Swagelok 1/16"	850,00	2	1.700,00

Dr. MUTEGANYA Rowan
[Signature]



Sercon Limited
Unit 3B Crewe Trade Park
Gateway, Crewe
CW1 6JT U.K.
Company Registration No.: 4290072

Phone: +44 (0) 1270 580008
Fax: +44 (0) 1270 252310

www.sercongroup.com
VAT No.: 771 1100 74

3 - MACHINE SPECIFICATION

Client:	MR MedNuc SRL		
Quotation Number:	15524	Date:	20/06/2022
Job Number:	IN1289	Date:	23/08/2022

Ref No.	Product Description	Required
HS2022 (continuous flow)		
20402/1	HS2022 Ref Gas + P Mag	
20402/2	HS2022 Ref Gas + E-Mag	
20402/3	HS2022 Ref Gas + Hd Collector + E-Mag	
20402/4	HS2022 Ref Gas + Hd Collector+E-Mag+Trap Loop	
20501	Hd Collector Assy	***
50101/2	Trapping Loop Assy	
70201-1	70201-1 Analyser spares kit – Included	
EA Units		
10202/11	iso-EArth	
10202/13	iso-EArth+	
10202/14	iso-Earth HT Furnace Upgrade	
10202/15	Iso-Earth (Without Autosampler)	
11802/1	Earth+PC	
11802/2	EArth+Clarity+PC	
70501-1	Consumables for C and N for Combustion Only	
70501-11	Simultaneous CNS Consumables Kit (approx. 10000 analysis)	
70501-3	Sample Prep Kit (Inc.)	
70501-4	GSL Combustion and Gas C & N Start Up Kit	
70501-5	Simultaneous NCS Consumables Kit	
70501-6	C&N Combustion Only Consumables Kit (approx. 5000 samples)	
70501-8	Simultaneous CNS Consumables Kit (approx. 5000 samples)	
70601-1	Sulphur Start Up Kit (Inc. with Sercon EA Systems)	
70601-2	Sulphur Consumables Kit for 1000 Samples	
70601-4	Sulphur Consumables Kit (approx. 5000 Samples)	
70801-2	Pyrolysis Consumables Kit-Low temp for Solids	
71701-1	Sub Microgram Nitrogen Analysis Start Up Kit	
SI2040	PN150 Pneumatic Autosampler with one no.50 pos, carousel	
SI2345	ME Micro Balance	
SI2737/A	Sercon 50 Position Autosampler Assy	
SI2789	Extra 50 Position Carousel	
SI2744	Automatic Liquid Sampler 15 Position	
SI2743	Liquid Sampler Mounting Plate	
Headspace Equilibration		
10202/10	XYZ Gas Sampling Control Box	
10302/1	Aqua System	
11103	µCarbs for CF	
11103-1	µCarbs for DI	
11601	200 Place Dual Heated Block 240 Volt	
11801	Sercon XYZ Gas Autosampler	
71107-1	CF oxygen-18 equilibration kit	
71107-2	DI Oxygen-18 Equilibration kit	
71201-1	CF deuterium equilibration kit	
71201-2	DI Deuterium Equilibration kit	
71801-1	WES-DI start up kit (Inc. with WES-DI)	
GC Units		
10402/2	Orchid module 1500C (Will run Hd 70901-1 C Spares Kit Inc)	
10901	Nitrogen Option (71301-1 N Spares kit Included)	
HP7890/1	Agilent 7890B GC System	
HP7890/2	Agilent 7890B GC with Auto Injector	
HP7890/3	Agilent 7890B GC + Auto Injector + 150 Vial Sample Tray	
SI2561	Nexis GC 2010 Plus	

3 - MACHINE SPECIFICATION

Client:	MR MedNuc SRL		
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Ref No.	Product Description	Required
GC Units <i>continued</i>		
SI2564	Nexis GC-2030	
70901-3	GC Pyrolysis H and O Start Up Kit	
70901-4	GC Pyrolysis H Spares Kit	
70901-5	GC Combustion C Spares Kit (approx. 5000 samples)	
70901-6	GC Pyrolysis h Start Up Kit (approx. 5000 samples)	
71301-1	GC N Spares kit	
ABCA2 Units		
10502/1	ABCA2 Sercon XYZ Autosampler	
10602	ABCA2 Gas Box	
20602	Complete Sercon ABCA2 system	Y
20603	ABCA IR Analyser	
70101-1	ABCA2 spares kit (<i>Inc. With ABCA2</i>)	Y
70101-2	ABCA2 Spares Kit for AB Analitica Systems	
70101-3	ABCA2 Autosampler Upgrade Kit	
SI1767	CVL505 – Barcode Reader	Y
SC9973	13C Urea breath test kit for Helicobacter pylori infection	
SC9974	Helicobacter Test kit for children age 3-11 (45mg)	
Integra2 Units		
20802/4	Integra2	
70201-2	Integra2 analyser spares kit - Included	
70401-1	Integra-2 consumables (<i>Inc. With Integra2</i>)	
Trace Gas Systems		
10802/4	CryoPrep	
10802/5	Automated LN refiller	
10802/6	CryoFlex (TOC)	
10802/7	CryoGas	
10802/8	CryoFlex (LA)	
SI2533	Silicon Carbide Vertical Furnace	
SI2731	213nm Laser Ablation System	
SI2733	isoScell 100 sampler chamber	
71001-1	Cryoprep Spares Kit	
71001-5	CryoGas Consumables Kit	
TOC Units		
14001	Thermalox Environmental TOC-IRMS	
14002	Thermalox Environmental TOC-Standalone	
14003	Thermalox Environmental TOC-Standalone No Sampler	
SI2772	CO2 Detector, High sensitivity Option	
SI2773	NOx detector Option	
SI2774	Vacuum pump Option	
SI2775	Stirred Vial rack Option	
72101-1	TOC Start Up Kit	
72101-2	TOC Chem Pack	
72101-3	TOC & TN Instrument with heavy usage - one year	
72101-4	TOC only - economy holding	
GEO 20-22 (dual inlet)		
10702	GEO 20-22 Water Equilibration System (D & 18O)	
21802/1	GEO 20-22	
21802/2	GEO 20-22 + E-Mag	

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21802/3	GEO 20-22 + E-Mag +Hd	
21802/4	GEO 20-22 Inlet	
70301-1	GEO start up kit - Included	
70301-3E	Comprehensive GEO 20-22 spares kit for 5 years operation	

HT-EA

11501/4	HT-EA (With Autosampler)	
11501/5	HT-EA With Liquid Option	
11501/6	HT-EA Stand Alone	
11501/7	HT-EA (Without Autosampler)	
SI2622	CTC PAL3-LSI-L-S	
SI2624	CTC PAL3-Kit-Standalone	
70801-1	Pyrolysis Consumables Kit-High Temp for Solids	
71501-1	HT-EA Pyrolysis Start Up kit O and H	
71501-2	HT-EA Pyrolysis Kit for Water injections	
71501-3	HT-EA Sensitivity Start Up Kit for O & H in small samples	
71501-4	HT-EA Sensitivity Consumables Kit for O & H in small samples	
71501-5	HT-EA Sensitivity Kit for O&H in Small Samples (5000 samples)	
71501-7	HT-EA Kit for Room Temp Equilibration	
71501-8	HT-EA Pyrolysis Kit for Water injections (approx. 1 year kit)	

Ref No.	Product Description	Required
Upgrades		
12101	Evacuation System ***	
12102	2 Ref Gas+ Dilutor Box ***	
20101	Standard Source Assy ***	
20102	HS Source Assy ***	
20301	Standard Collector Assy ***	
30202/1	System Control Upgrade (Pmag) installation not included	Edwards Or Pfeiffer
30202/2	System Controller Upgrade (Emag) installation not included	Edwards Or Pfeiffer
10202/7	Preparation PCB Upgrade	
30202/3	Hijack Box ***	
30302/4	nEXT85 Edwards Pumping System Upgrade Single - installation not included	
30302/5	nEXT85 Edwards Pumping System Upgrade Dual - installation not included	
30302/6	nEXT85 Edwards Pumping System Upgrade Triple- installation not included	
SI2542	ABCA2 Upgrade Kit	
CALLISTOW	Callisto software upgrade ***	
Specials		
11702	LC-I interface	
12202	Leco Interface Unit	
SI2320	Agilent 1260 Series Refractive Index Detection HPLC System	
71401-1	ABCA-G Start Up/Spares Kit	
71401-2	ABCA-G Equilibration Spares Kit - Room temp O only	
71401-3	ABCA-G Equilibration Spares Kit - Room Temp O & H	
71601-1	LC Interface Spares Kit	
ADDITIONS		
PC	Windows 7 based PC System with Callisto Software	Y
Printer	Printer	
INST1	Installation and start up training at customer's site by Sercon Engineer	Y
INST2	Installation and start up training at customer's site by Agents Engineer	
WARR	1 year warranty	
WARR2	2 year warranty	Y
TRAIN	Training in UK for one person for 3 days	
SCONTRACT	Maintenance Service Contract – 1 year	

3 - MACHINE SPECIFICATION

Client:	MR MedNuc SRL		
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Job Number:	IN1289	Date:	23/08/2022

SPECIFICATION REQUIREMENTS			
Voltage	230 Volts 50/60Hzs		Y
Plug Type	SI2510	3 Metre USA/Japan plug to IEC C 13	
	SI2511	2.5 Metre Australian plug to IEC C 13	
	SI2512	3 Metre UK 13 amp Fused plug to IEC C 13	
	SI2523	3metre Schuko (Euro) Plug to IEC C13 Socket	Y
	SI2514	2.5 metre Chinese mains to IEC C13	
Pallet	Stamped for export heat treated for 30 min @ 56 °C		Y
	Complies with all Export Requirements		

3 - MACHINE SPECIFICATION

Client:	MR MedNuc SRL		
Quotation Number:	15524	Date:	20/06/2022
Job Number:	IN1289	Date:	23/08/2022

Approved by Sales: Garry Armstrong	Date: 30/08/2022
Approved by Tech.: <i>Mark O'Connor</i>	Date: 30/08/2022

4 - LOG SHEET

Client:	MR MedNuc SRL		
Quotation Number:	15524	Date:	20/06/2022
Job Number:	IN1289	Date:	23/08/2022

Date	Action Taken	By Whom
22-11-22	Adjusted crump on V13 to give beam height of $1.5e-8$ Adjusted magnet position for maximum sensitivity and peak coincidence. Peak α Stability ran.	SB
23/11/22	CO2 Peak + Stability are good	SM
	Ref gas Precision - 0.02% ✓	SM
	Breath Prec - 0.09% ✓	SM
24/11/22	5% Precision - 0.09%	
	Sensitivity Trap 150 - $1e-08$	SM
	Linearity - 0.27	SM
	All Specs complete	
	Barcode reader tested and Sercon test + End	
	Instrument ready to ship	SM

6 - ABCA2 TEST / ACCEPTANCE SPECIFICATION

Client:	MR MedNuc SRL		
Quotation Number:	15524	Date:	20/06/2022
Job Number:	IN1289	Date:	23/08/2022
Unit Serial Number	206021202211289		
Gas Box Serial Number	60101A-202217289		
Autosampler Serial Number			

¹³ C				
Ref Gas Injection Precision	100% CO ₂ (n=5)	≤0.1‰ 0.02‰ RECORD VALUE HERE	Test ☒ Sheet ☐	Install ☐ Sheet ☐
Ref gas in tubes precision	10ml 5% CO ₂ (n=5)	≤0.1‰ 0.06‰ RECORD VALUE HERE	Test ☒ Sheet ☐	Install ☐ Sheet ☐
Breath Precision	Breath in Exetainer (n=5)	≤0.2‰ 0.09‰ RECORD VALUE HERE	Test ☒ Sheet ☐	Install ☐ Sheet ☐
Sensitivity	10ml 5% CO ₂ in Exetainer	Major beam 5e-9 with trap of 150 1e-08 RECORD VALUE HERE	Test ☒ Sheet ☐	Install ☐ Sheet ☐
Linearity	0.5% - 8.0% CO ₂ in Exetainer	≤0.3 ‰ change 0.27 RECORD VALUE HERE	Test ☒ Sheet ☐	Install ☐ Sheet ☐
Peak Shape	Beam 1,2 and 2/1	Minimum 5V wide 2/1. Gradient acceptable due to single turbo pump	Test ☒ Sheet ☐	Install ☐ Sheet ☐
Stability	2/1 ratio over 600 seconds	Flat, no spikes or variations. Slight gradient acceptable	Test ☒ Sheet ☐	Install ☐ Sheet ☐
Software Test	All read backs Valves function Autosampler bed CETAC Firmware Version No.:	☒ ☒ ☒ 800.7.00	Date 23/11/22	Initial SM

Flow Meter S/N..... Leak Detector S/N.....

Multi-Meter S/N..... Dum1

Special Tests

Linearity to be better than 0.3‰ and recorded

Sales Signature: <i>[Signature]</i>(Required)	Date: 24/11/22
Test Signature: <i>[Signature]</i>(Completed)	Date: 24/11/22
Install Signature: <i>[Signature]</i>(Completed)	Date: 03/12/2023

Data to be transferred to:

\\CENTRAL-SERVER\CentralFiles\SER SPREADSHEETS\Instrument Performance Spreadsheet.xls

7: ASSEMBLY AND TEST RECORD

Client:	MR MedNuc SRL		
Quotation Number:	15524	Date:	20/06/2022
Job Number:	IN1289	Date:	23/08/2022

 PRODUCT: ABCA 2.

 SERIAL NUMBER: 20602/1-2022/1289

 ASSEMBLED:
 (Name) Bew

 Date: 10/11/22

 PRE-TEST
 INSPECTION:
 (Production name) P. Hayps

 Date: 10/11/22

 PRE-TEST
 INSPECTION:
 (Test name) James Kern

 Date: 10/11/22
 HR 1/12/22

 SYSTEM TEST:
 (Name) S. Mead

 Date: 24/11/22

 PRE-DESPATCH
 INSPECTION:
 (Name) James Hansen

 Date: 28/11/22
 HR 1/12/22

P.A.T. Test results

 In compliance with Low Voltage directive 73/23/EEC
 To Low Voltage standard EN61010 – 1:1993

 Earth Continuity 0.076 Ω

 Insulation 7300 $M\Omega$

 Earth Leakage Current 0.60 mA. @ 0.05 kVA.

 Tested by: P. Hayps.

 Date: 10/11/22

7: ASSEMBLY AND TEST RECORD

Client:	MR MedNuc SRL		
Quotation Number:	15524	Date:	20/06/2022
Job Number:	IN1289	Date:	23/08/2022

PRODUCT:

 VERSA ~~1~~ - 1

SERIAL NUMBER:

6010/1-2022/1289

 ASSEMBLED:
 (Name)



Date:

10/11/22

 PRE-TEST
 INSPECTION:
 (Production name)

P. Rayns.

Date:

10/11/22

 PRE-TEST
 INSPECTION:
 (Test name)

S. Mass

Date:

10/11/22

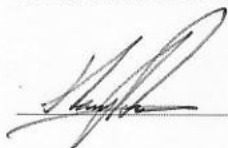
 SYSTEM TEST:
 (Name)

S. Mass

Date:

24/11/22

 PRE-DESPATCH
 INSPECTION:
 (Name)



Date:

28/11/22

P.A.T. Test results

 In compliance with Low Voltage directive 73/23/EEC
 To Low Voltage standard EN61010 - 1:1993

Earth Continuity

Ω

Insulation

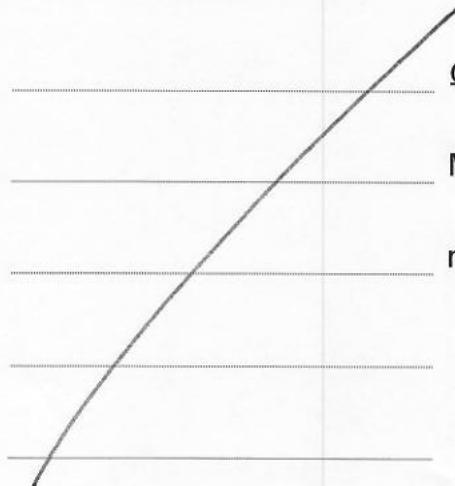
MΩ

Earth Leakage Current

mA. @ _____ kVA.

Tested by:

Date:



8 - Serial Numbers Record Document

Client:	MR MedNuc SRL		
Quotation Number:	15524	Date:	20/06/2022
Job Number:	IN1289	Date:	23/08/2022

Units	S/N
MS/ABCA	20602/2022/1289
Integra 2	/
Prep Unit 1	/
Prep Unit 2/Misc	/
Electronics Upgrade	/
CETAC	60101/1-2022/1289
Gas Box	
Autosampler	/
BCR	0910 00 32
Dual Heater Block	20602/2022/1289

Pump Kit and Optics	S/N
* Turbo pump S	220786643
Turbo pump A	
* Rotary Pump	220510658
Voltage	110 / 240
Gauge S	220505195
Gauge A	
Source	20102HS-176
Collector 1	20301-123
Collector 2	
Magnet	23/5/22 (4)

Parts	S/N
Fan PSU	
24V PSU	

PCBs	S/N
Electronics Box	20220010
Prep PCB	/
VFC PCB	/
Watchdog PCB	/
Head Amp PCB 1	22001
Head Amp PCB 2	/
Electromagnet RP	/

Furnaces	S/N
Combustion	
Reduction	
HT-EA	
GC Oven	
Furnace 1	
Furnace 2	

PC	S/N
* PC ^{SERVICE TAG}	59LJYR3
* Monitor	4N2HBH3
Printer	

Key

Pumps:	E: Edwards P: Pfeiffer
Furnaces:	V/S: Vecstar E: Elite
Magnet:	E: Electromagnet S: Standard
Turbos & Gauges:	S: Source A: Analyser
Collectors:	Std: Standard S: Sulphur HD: Hydrogen Deuterium

Additional System Info:



Packing List

Reference: Raoul Muteganya

Shipper / Exporter:

Sercon Limited
Unit 3B Crewe Trade park
Gateway
Crewe
CW1 6JT
UK

Tel: +44 (0) 1270 580008
Reference: IN1289_15524

Consignee:

MR MedNuc SRL
Square Edmond machsens 2
1080 BRUXELLES
Centre Médical Machtens.
Belgium

Contact Name: Dr Raoul Muteganya
Contact Tel Number: +32 489 32 56 28

BOX: 1

Quantity	Product Code	Product Description	Serial Number: if available
☒ 1	20602/1	ABCA	20602/20222/1289

Packed by: 

Date: 28/11/2022

Claims for damage or shortages must be made within 3 days



S080_v4

Sercon Limited
Unit 3B Crewe Trade Park
Gateway, Crewe
CW1 6JT U.K.
Company Registration No.: 4290072
Page 1 of 4

Phone: +44 (0) 1270 580008
Fax: +44 (0) 1270 252310
sales@sercongroup.com
www.sercongroup.com
VAT No.: 771 1100 74
19/01/2017

Packing List

Reference: Raoul Muteganya

Shipper / Exporter:

Sercon Limited
 Unit 3B Crewe Trade park
 Gateway
 Crewe
 CW1 6JT
 UK

Tel: +44 (0) 1270 580008
 Reference: IN1289_15524

Consignee:

MR MedNuc SRL
 Square Edmond machsens 2
 1080 BRUXELLES
 Centre Médical Machtens.
 Belgium

Contact Name: Dr Raoul Muteganya
 Contact Tel Number: +32 489 32 56 28

BOX: 2

Quantity	Product Code	Product Description	Serial Number: if available
☒ 5		Versa racks	
☒ 1	SI0103	Rotary Pump	220510658
☒ 1	SI0101	Permanent Magnet + feet	23/5/22 4
☒ 1		Mains cable and external pipes / cables box	
☒ 1	SI0155	PC	59LJYP3
☒ 1	SI2391	Monitor	4N2HBH3
☒ 1	70101-1	ABCA Spares Kit	
☒ 1		USB software and manuals inside PC box	
☒ 1		USB windows recovery inside PC box	

Packed by:

Date:

[Signature]
[Signature]
 28/11/2022

Claims for damage or shortages must be made within 3 days



Packing List

Reference: Raoul Muteganya

Shipper / Exporter:

Sercon Limited
Unit 3B Crewe Trade park
Gateway
Crewe
CW1 6JT
UK

Tel: +44 (0) 1270 580008
Reference: IN1289_15524

Consignee:

MR MedNuc SRL
Square Edmond machtens 2
1080 BRUXELLES
Centre Médical Machtens.
Belgium

Contact Name: Dr Raoul Muteganya
Contact Tel Number: +32 489 32 56 28

BOX: 3

Quantity	Product Code	Product Description	Serial Number: if available
☒ 1	60101/1	Versa 4	60101/1-2022/1289
☒ 1		Versa power supply and mains cable	
☒ 1		Versa needle	

Packed by:

Date:

[Signature]
25/11/2022

Claims for damage or shortages must be made within 3 days



S080_v4

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CW1 6JT U.K.
Company Registration No.: 4290072
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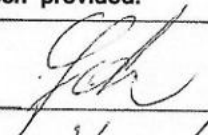
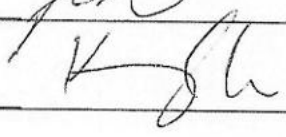
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Fax: +44 (0) 1270 252310
sales@sercongroup.com
www.sercongroup.com
VAT No.: 771 1100 74
19/01/2017



ABCA2 Installation Acceptance Certificate

Job no.:	IN1289
Customer:	Diagnosticni centre Bled, Slovenia
Address	Ljubljanska cesta 29, Novo Mesta
Contact:	Sasa Pogacar, Grega Kimovec, Kristjan Jovanov
System:	ABCA 2, Versa
ABCA2 Serial Number	20602/2022/1298
Gas Box Serial Number	60101/1-2022/1298
Autosampler Serial Number	60101/1-2022/1298
Software:	ABCA 13c breath analyser v 800.9.0
Engineer:	Robert Kameny
Installation Start Date:	17-21.04.2023
Installation Completion Date:	21.04.2023
Maintenance Required by Date:	20.04.2025
Delivery Date:	w/c 10th April 2023
Warranty Commences:	21.04.2023
Warranty Expires:	20.04.2025
Consignor:	Sercon Limited Unit 3B, Crewe Trade Park Gateway Crewe CW1 6JT U.K.
Outstanding Installation Requirements:	

I hereby agree that the installation has been completed and meets the manufacturer's specifications and that basic training has been provided.

Customer Acceptance		Date:	21.4.23
Engineer's Signature		Date:	21.04.23

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20/01/2017



Details of Visit:

As a main responsible person for this instrument I don't feel that I've have been given enough of time to generate sufficient set of skills to operate to operate this instrument in the correct manner. We have requested additional day of training, either remotely or in person in our center.

Kristine Jensen Olsen
21.4.2023

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Customer Training Checklist

Tuning Parameters:

- What do they mean with respect to what is actually happening in the source?
- How do they affect peak shape, sensitivity and stability?

Gas Box and ASX7400 overview.

- Describe the sample pathway for tube injection, internal ref gas loop loading, ref gas pulse
- Adjusting the autosampler bed layout
- Replacing the needle
- Leak Checking

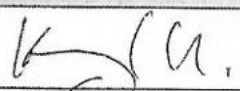
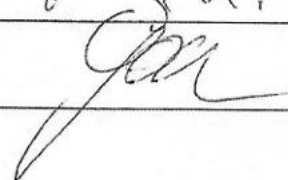
Running Samples

- How to create the sample list? BCR vs Disk File
- Choosing the correct references and method set up for your application, from tube, ref gas pulse, internal loop loading.
- Event files, when to modify them and how
- Timings, how to adjust the timings to ensure the sample peak is completely integrated
- Measuring and setting the helium flow; valco and syringe.
- Report set up, drift/undrift corrected

The Gas Handling

Routine Maintenance:

- Discuss routine maintenance, including filament and oil change, using the manual as a reference guide.
- A physical demonstration of replacing the needle.

Training Completed			
Engineer Signature:		Date:	21.4.23
Customer Signature:		Date:	21.4.23

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- Breath prec. 0.35‰
- V13 open (signal 2e-08 mass 44, decided to crimp down to 1.3e-08)
- Syringe- needle flow set to 30ml/min
- Ref gas precision: 0.05‰ (1e-07)
- Breath precision: 0.61‰
- Reduced syringe flow to match nafion 22-22ml/min
- Breath precision: 0.42‰
- Decided to implement V10 shut off event
- Breath 0.22‰
- Linearity: 3.25‰, changed IR to -3, eV-80, Trap 200, linearity achieved 0.52‰
- Adjusted magnet height, gained sensitivity and so decided to reduce trap to 150
- Ref gas: 0.13‰, breath: 0.16‰, linearity 2.76‰
- Changed IR to -2.5, trap 250, linearity 5.56‰
- Changed focus 87, ir 2.0, trap 150: linearity 0.5-2%=0.06‰, 4-8%= 0.52‰
- Focus 88 Ir 2, trap 150, linearity 0.5-2%=0.28‰, 4-8%=0.80‰
- Focus 86, IR 1.5, Trap 150, linearity 0.5-2%= 0.52‰, 4-8%= 0.45‰
- Focus 87, IR3, trap 150, linearity: 0.5-2%=0.51, 4-8%=1.82‰
- Decided to revert back to the parameters, which achieved the best specs:
- HT 2515, Focus 85, HP2, IR -3, eV-80, Trap 150 (410)
- Best Specs achieved: ref gas prec 0.01‰, Breath prec: 0.17‰, 5% in tube: 0.11‰, sensitivity: 8.51e-09, linearity: 0.49‰

21.04.23

- Customer training on site (as per customer training checklist)
- Setting up in house printer

Recommendations:

• Seek additional information about prescriber data to patient.

Faults and Shortages:**Additional Parts Used:**

Part Description	Part Code	Cost

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17.4.23

- Unpacking
- Comms established
- tPumps on pm (achieved 4.9×10^{-7} mbar/ 5 hrs)
- Att. unable to set up gasses (compressed air regulator missing)

18.4.23

- Air regulator delivered by post pm
- Gasses set up: He, CO₂, Air pressure set at 4.0 bars
- Initial tuning and specs pm: ref gas 0.12‰, breath prec. 0.20‰
- Flows needle: 29, nafion 22ml/min
- Balanced flows to 22 -22 ml/min
- V3 crimp adjusted
- Ref gas 0.02‰, breath 0.27‰ (irregular TBA)
- Attempted to increase the needle flow to 30ml/min = breath prec. 0.35‰ (still fluctuating TBA from 7.7×10^{-8} - 6.3×10^{-8})

19.4.23

- Leak checked the gas box+ MS : pass
- Needle flow bulhead 25-25ml/min out needle
- Ref gas prec. 0.05‰ (2.4×10^{-7}), Breath 0.31‰ (7×10^{-8})
- V3 crimp adjusted ref to match breath sample
- Ref gas prec: 0.03‰ (7.5×10^{-8})
- Breath prec: 0.42‰ (8.2×10^{-8})
- V3 crimp adjusted again to 1×10^{-7} , breath prec. achieved 0.23‰
- Decided to replace the needle, breath TBA 7×10^{-8} (std 0.16‰), 5% in tube precision 0.18‰, Sensitivity 7.6×10^{-9}
- Obtained sample specimens from 2 adults
- Adult 1: 0.32‰, Adult 2: 0.82‰
- Decided to replace the o rings in the syringe, retuned the source (achieved higher sensitivity)
- t/b = 1.2×10^{-7} / 8×10^{-8}
- breath precision 0.17‰, Ref gas prec: 0.01‰ (1.25×10^{-7}), 5%: 0.11 (7×10^{-8}), Sensitivity: 8.51×10^{-9} , Linearity: 1-8%:2.29‰, changed eV to -80 Trap 150: 1.70‰
- ion source tuning parameters: HT:2519, Focus:85, HP:2, IR(-2), eV:-85, Trap 170 (476)

20.4.23

- Decided to adjust magnet height/position (achieved 2/1 0.0122)
- Specs: ref gas: 0.06‰ (1.4×10^{-7}), Breath 0.54‰ (8×10^{-8}) (trap 170)
- Trap 150: breath 0.34‰ (8×10^{-8})
- V3 crimp adjusted to achieve 8×10^{-8} (actual 9.4×10^{-8})

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ABCA2 Installation Acceptance Certificate

Job no.:	IN1289
Customer:	Machtens Medical Centre, Brussels,Belgium
Address	Square Edmond Machtens 2,1080 Molenbeek – Saint Jean
Contact:	+32 (0) 24103920
System:	ABCA 2, Versa Autosampler
ABCA2 Serial Number	20602/2022/1289
Gas Box Serial Number	60101/1-2022/1289
Autosampler Serial Number	60101/1-2022/1289
Software:	V800.7.0.20196
Engineer:	Robert Kamený
Installation Start Date:	30.1.2023
Installation Completion Date:	03.02.2023
Maintenance Required by Date:	02.02.2024
Delivery Date:	22.12.2022
Warranty Commences:	03.02.2023 04/5/23
Warranty Expires:	02.02.2025 04/5/25 + 6 months 04/11/25
Consignor:	Sercon Limited Unit 3B, Crewe Trade Park Gateway Crewe CW1 6JT U.K.
Outstanding Installation Requirements:	n/a

I hereby agree that the installation has been completed and meets the manufacturer's specifications and that basic training has been provided.

Customer Acceptance		Date:	
Engineer's Signature	<i>Kamený R.</i>	Date:	03.02.2023

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Details of Visit:

30.1.2023

- Technical room reorganisation
- Att. ambient temperature in average of 26°C (air conditioning recommended)
- Gas supply (cylinders have been delivered on site)
- Correct gas regulators have been supplied too.
- Att. noticeable delay for the gas technician to arrive and use correct tools
- Unit powered on
- Pumping
- Source On at 2e-07mbar (waiting time around 3.5hrs)

31.1.2023

- Meeting up with gas technician am to resolve the outlet on the CO2 regulator
- Gas plumbing used 1/8" copper pipe (red plastic tubing for compressed air)
- Gas pressures settings: He-CO2-Air about 3.5Bars
- Initial attempts to tune the M/S
- Best specs achieved on the day: ref gas prec.0.01, breath prec.0.13, in tube prec.0.10, linearity:0.53

01.02.2023

- Tuning of the MS continued
- Flows as indicated: to m/s 28, nafion 27.5, needle 27ml/min
- Best specs achieved on the day: ref gas prec.0.01, breath prec.0.06, in tube prec.0.14, linearity:0.35

02.02.2023

- Quick check up, getting unit ready for training session on the 03.02.2023
- Best specs achieved
- Peak shape and stability: pass
- Ref gas prec:0.02 , Breath prec:0.08
- Source final tuning parameters: HT 2581,focus 85,HP 10, Ir 6.0, eV (-85), Trap 170

03.03.2023

- Training am/pm

Recommendations:

- Consider purchase: digital gas leak detector, flow meter, ABCA 2 service kit
- Use correct type of exetainers
- Bio-hazard bin for waste
- **Loose Gas cylinders impose great health and safety risk factor when present in the technical room (consider undertaking safety measures accordingly)**
- Room temperature regulation: consider purchase of air conditioning

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**Faults and Shortages:**

- N/A

Additional Parts Used:

Part Description	Part Code	Cost

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Customer Training Checklist

Tuning Parameters:

- What do they mean with respect to what is actually happening in the source?
- How do they affect peak shape, sensitivity and stability?

Gas Box and VERSA 1 overview.

- Describe the sample pathway for tube injection, internal ref gas loop loading, ref gas pulse
- Adjusting the autosampler bed layout
- Replacing the needle
- Leak Checking

Running Samples

- How to create the sample list? BCR vs Disk File
- Choosing the correct references and method set up for your application, from tube, ref gas pulse, internal loop loading.
- Event files, when to modify them and how
- Timings, how to adjust the timings to ensure the sample peak is completely integrated
- Measuring and setting the helium flow; valco and syringe.
- Report set up, drift/undrift corrected

The Gas Handling

Routine Maintenance:

- Discuss routine maintenance, including filament and oil change, using the manual as a reference guide.
- A physical demonstration of replacing the needle.

Training Completed			
Engineer Signature:	<i>Kamený R.</i>	Date:	03.02.2023
Customer Signature:		Date:	

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20/01/2017