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Quotation Number:	17713	Date:	22/12/2023
Job Number:	IN1334	Date:	11/03/2024

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ADDITIONAL:

Payment Terms:

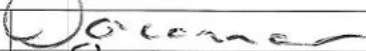
50% / 40% / 10%

Other: please specify

Penalty Clause Yes / No

Please specify:

Blue Book Completion:

Signed		Date	24/12/24
Verified		Date	24/12/24

Quotation

To: Ghent University (€EUR)
Laboratory of Applied Physical Chemistry
Coupure Links 653
9000 Gent
BELGIUM

VAT No. 0248015142

Quotation Date: 22/12/2023
Quotation Reference: 17713
Customer Ref:
Account Ref: GHE002
Quotation Validity: 31/01/2024

Quantity	Product Code	Product Description	Unit Price €	Net Price €
1	11501/4	Proposal for HTEA Upgrade HT-EA (With Autosampler) For high temperature pyrolysis for H & O. Includes solid autosampler. Additional autosampler required for liquid injections. 70801-1 - Pyrolysis start up kit high temp for solids. 71501-1 - HT-EA Pyrolysis start up kit O and H (Used In Build)	28,750.000	25,875.00
1	INST	Installation and start up training at Customer's site	6,850.000	6,850.00
1	CIP	Estimated CIP - Destination Airport	1,500.000	1,500.00
1	WARR2	2 year warranty	0.000	0.00

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

Payment Details:-
Payment is required within 30 DAYS of invoice date by bank transfer.
All bank transfer charges are the responsibility of the customer.
Bank transfer to be made to the relevant IBAN number.
Intra-community supply, subject to VAT in the country of acquisition.

Sercon Bank Details:-
National Westminster Bank, 36 High Street,
Nantwich, Cheshire CW5 5GA U.K.

Sterling: IBAN: GB74NWBK54101736755133
Euro: IBAN: GB14NWBK60721013806831
US Dollar: IBAN: GB94NWBK60730113806556
BIC: NWBKGB2LXXX

This quotation is issued in Euro
Total Net Amount € 34,225.00
Total VAT Amount € 0.00
Order Total € 34,225.00

ORDER FORM

SerCon
Gateway
CW1 6JT Crewe Cheshire
United Kingdom
Tel: (44)1270/580008
Fax: (44)1270/252310
VAT nr.: GB771110074
Supplier number UGent: 2000012193

Vakgroep Groene Chemie en Technolog

VAT nr. : BE0248015142
UGent account no.: BE59-3900-9658-0026
Tel: 09 264 60 01
E-mail: Saskia.VanderLooven@UGent.be

Order form number:	4205269107	Your quotation number:	
Order form date:	07.03.2024	Your quotation date:	
Quotation 17713 from 22/12/2023 HT-EA (With Autosampler)			
Description	Delivery term	Quantity Unit	Unit price Amount/Curr.
HT Pyrolysis and autosampler	07.03.2024	1 Stuks	22.743,00 22.743,00 EUR
HT Pyrolysis and autosampler	07.03.2024	1 Stuks	11.482,00 11.482,00 EUR
Total net value (excl. of VAT)			34.225,00 EUR
Total VAT			0,00 EUR
Total order amount (incl. of VAT)			34.225,00 EUR

Way of delivery: Carriage paid to

Terms and conditions of trade and payment: Payment according to the public procurement regulations.

Please mention the purchase order number by all kinds of communication.

Pascal Boeckx

UGent can receive invoices in various ways. UGent is dropping paper invoices and is resolutely going for E-invoicing More information on this can be found at:

<https://www.ugent.be/nl/univgent/administratie-bestuur/dfin/leveranciers-info>

Contact:
Saskia Van der Looven
Tel: 09 264 60 01
E-mail:
Saskia.VanderLooven@UGent.be

Please deliver to:
Universiteit Gent
ISOTOPE BIOSCIENCE LABORATORY
BLOK B - FLOOR 3
COUPURE LINKS 653
9000 GENT
4131566

Send invoice to:
Universiteit Gent
Vakgroep Groene Chemie en Technolog
Coupure Links 653
9000 Gent

3 - MACHINE SPECIFICATION

Client:	Ghent University		
Quotation Number:	17713	Date:	22/12/2023
Job Number:	IN1334	Date:	11/03/2024

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	

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Quotation Number:	17713	Date:	22/12/2023
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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	
20603	ABCA IR Analyser	
70101-1	ABCA2 spares kit (<i>Inc. With ABCA2</i>)	
70101-2	ABCA2 Spares Kit for AB Analitica Systems	
70101-3	ABCA2 Autosampler Upgrade Kit	
SI1767	CVL505 – Barcode Reader	
SC9973	13C Urea breath test kit for <i>Helicobacter pylori</i> infection	
SC9974	<i>Helicobacter</i> 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 & 180)	
21802/1	GEO 20-22	
21802/2	GEO 20-22 + E-Mag	

3 - MACHINE SPECIFICATION

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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)	Y
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	Y
71501-1	HT-EA Pyrolysis Start Up kit O and H	Y
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	
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:	Ghent University		
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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		

4 - LOG SHEET

Client:	Ghent University		
Quotation Number:	17713	Date:	22/12/2023
Job Number:	IN1334	Date:	11/03/2024

Date	Action Taken	By Whom
11-12/3/26	FURNACE AND ELEMENT REMOVED AND INSPECTED. FURNACE INSULATION FOUND TO BE DAMAGED. NEW FURNACE FITTED, ORIGINAL ELEMENT RE-USED. REAR "WALL" OF CABINET FOUND TO HAVE BROKEN WELDS. "L" BRACKET FITTED TO SUPPORT CABINET WALL. GC BOX FOUND TO BE LOOSE AND ON INSPECTION BOX FOUND TO BE DAMAGED. NEW GC BOX FITTED USING THE ORIGINAL INSULATION AND COLUMN FROM THE DAMAGED BOX. NOTE: THIS INSTRUMENT IS NOT LOANED TO THE WIRING SCHEMATIC.	MW
13/3/26	Turned on HT-6A, hollow tube put in furnace with external thermocouple set in, to check a) hot spot height, b) temp difference. Pyrolysis tube in furnace - heating to full temp. flow through system around 100ml/min Only the second staticable carousel sent back.	AD
16/3/26	Swapped scrubber tube with new chemicals and O-rings (O-rings misshapen) Replaced 1/8"-1/16 PTFE ferrules on GC 1/8 nuts - previous ones overtightened furnace at 1300°C and background for CO at 4E ⁻¹⁰	AD

4 - LOG SHEET

Client:	Ghent University		
Quotation Number:	17713	Date:	22/12/2023
Job Number:	IN1334	Date:	11/03/2024

Date	Action Taken	By Whom
16/3/26	NO temp cal file - copied one with 1.08 offset, Furnace cooled overnight	AD
17/3/26	Changed temp cal to 1.15, ramping temp back to 1350°C / 1400°C Running Samples throughout the day to see if the flow drops Temp failed at 1398°C - lost furnace readback - had to reset the preprogram Changed cal file to 1.15	AD
18/3/26	Temperature stayed on overnight - has reached 1400°C Running Samples - no flow drop all day Temperature has stayed at target all day R type probe delivered - cooling furnace to use in test O ₂ pyrolysis passing 0.3 std dev	AD
19/3/26	Empty ceramic tube put in furnace with R type probe measuring temp. 1.18 scale = 1000°C Set is 915°C actual 1 scale = 1000°C Set is 1073°C actual Hot spot 4.5cm lower than thermocouple Scale back to 1.18 - running continuous Samples overnight	AD
20/3/26	Flow and temperature ok after long run. leaving long run on over weekend	
23/03/26	Furnace cooled over weekend - 10amp relay and thin wires used on furnace changing to match HT-FA model part 10ml/min flow lost - pressure release on He carrier into auto sampler	

4 - LOG SHEET

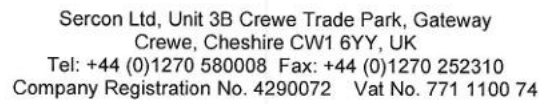
Client:	Ghent University		
Quotation Number:	17713	Date:	22/12/2023
Job Number:	IN1334	Date:	11/03/2024

Date	Action Taken	By Whom
1/4/26	2KVA TRANSFORMER REMOVED AND REPLACED WITH 3KVA UPGRADE. SSR REPLACED (ORIGINAL SSR APPEARS TO BE NOW STOCK/NOT USUAL ITEM). TRANSFORMER CABLES UPGRADED TO 6MM ² (TRANSFORMER SECONDARY TO FURNACE ELEMENT). INSULATION BLOCK REMOVED FROM CURRENT POSITION ON TOP OF FURNACE COLLAR AND RE-FITTED TO THE "NORMAL" LOCATION INSIDE FAN DUCT ABOVE FURNACE. FURNACE RELAY UPGRADED FROM EXISTING 10A TO 30A RELAY. RELAY WIRING ALTERED TO MATCH LATEST HTEA WIRING SCHEMATIC. I.E TRANSFORMER NOW FEEDS PROTECTION FUSE THEN NORMALLY OPEN OF RELAY THEN SSR TO FURNACE ELEMENT. UNIT RE-PAT TESTED.	MW
2/4/26	Started heating the system - changed offset to 1.07. left at 1000 over long weekend	DJT
7/4/26	Furnace stayed at 1000, but locked out and contact after driving further - offset changed back to 1.17. Heating to 1400°C Flow Set to 100ml/min Furnace locked out at 1120°C - Swapped prep board heating to 1000°C	AD
8/4/26	Connected furnace to cal controller - slow to heat (not reaching temps past 1000°C) Replacing element	AD

4 - LOG SHEET

Client:	Ghent University		
Quotation Number:	17713	Date:	22/12/2023
Job Number:	IN1334	Date:	11/03/2024

Date	Action Taken	By Whom
9/4/26	Element replaced for new - heating using Cal controller. Reached 1300°C with Cal controller	AD
10/4/26	Put heating back on prep board - temp reached over 1300°C Temp at 1395°C, flow is good CD background slightly high - needs to settle	AD
13/4/26	Temp and flow not changed. Running a long run	AD
14/4/26	Overnight run on Ran 50 blanks (93 Samples run total) flow dropped from 100-86 ml/min Checked flow going to Sampler, big pressure release, flow returned. leaving another long run on overnight	AD
15/4/26	No loss of flow overnight but PC tried updating - lost conn for a couple minutes - furnace cooled slightly but heating now Ran ok all day, long run left on overnight	AD
16/4/26	Ran ok all day - leaving long run on overnight	AD
17/4/26	System ran well all day. Leaving over weekend	AD
20/4/26	System on after weekend, continuing running Samples	AD
21/4/26	System ok. Cooling ready to pack	AD
22/4/26	XL Magnets added to door	SW

19/01/2017

6 - TEST / ACCEPTANCE SPECIFICATION

Customer:	Ghent University		
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HS20-22			
Reference Gas Precision (n=5)			
¹³ C	(CO ₂)	0.06	
¹⁵ N		0.06	
¹⁸ O	(CO ₂)	0.06	
³⁴ S	(SO ₂)	0.1	
² H		0.4	

Reference Gas Linearity			
¹³ C	≤0.02‰/nA		
¹⁵ N	≤0.02‰/nA		

IsoEarth & IsoEarth+					
Combustion (n=5)					
¹³ C	100 µg C	0.1		10 µg C	0.8
¹⁵ N	100 µg N	0.15		10 µg N	1.5
³⁴ S	25 µg S	0.3		10 µg S	1.0
Dual	400 µg C	0.1		100 µg N	0.15

Integra2			
¹³ C	100 µg C	0.2	
¹⁵ N	100 µg N	0.3	
Dual	100 µg N & 400 µg C	0.4 & 0.15	
³⁴ S	30 µg S	0.5	
¹⁸ O	100 µg O	0.5	

6 - TEST / ACCEPTANCE SPECIFICATION

Customer:	Ghent University		
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HT-EA			
Pyrolysis (n=5)			
¹⁸ O	100 µg O or 1 µl water	0.3	
² H	200 µg H or 1 µl water	1.0	

Aqua, µCarbs & GasBox					
Equilibrations (n=5)					
¹⁸ O	0.2 ml water	0.1			
² H	0.2 ml water	2.0			
Carbonates (n=5)					
¹³ C	100 µg CaCO ₃	0.08			
¹⁸ O	100 µg CaCO ₃	0.1			
Gas Analysis (n=5)					
¹³ C	5% CO ₂	0.1		Air CO ₂	0.1
¹⁸ O	5% CO ₂	0.1		Air CO ₂	0.2
² H	0.5 ml H ₂	1.5			
¹⁵ N	0.5 ml N ₂	0.1		100 ppm N ₂ O	0.5
¹³ C	Breath (12 ml)	0.1			
DIC (n=5)					
¹³ C	15ppm (0.5ml)	0.15			

LC-I			
(n=5)			
¹³ C		0.2	

6 - TEST / ACCEPTANCE SPECIFICATION

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GC Orchid						
Combustion (n=3 for each analyte)						
¹³ C	3 Alkanes	100 ng C	0.2		10 ng C	0.5
¹⁵ N	2 Amines	100 ng N	0.5		14 ng N	1.5
Pyrolysis (n=3 for each analyte)						
² H	3 Alkanes	250 ng H	3.0		25 ng H	10.0
¹⁸ O	3 FAMES	100 ng O	0.5		20 ng O	2.0
Water pyrolysis (n=5)						
² H	0.1 µl water	3.0				
¹⁸ O	0.1 µl water	0.4				

CryoRange						
(n=5)						
¹³ C	Air CO ₂ (12ml)	0.1		Air CH ₄ (125ml)	0.2	
¹⁵ N	Air N ₂ (1ml)	0.1		Air N ₂ O (125ml)	0.4	
¹⁸ O	Air CO ₂ (12ml)	0.15		Air N ₂ O (125ml)	0.7	
¹⁸ O	Air O ₂ (1ml)	0.1				
² H	Air CH ₄	3.0				
¹³ C	TOC (5ppm)	0.4				
¹³ C	Laser					

6 - TEST / ACCEPTANCE SPECIFICATION

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Geo2			
Internal precision (no change overs)			
² H	200 Bar µl	0.15	
¹³ C	100 Bar µl	0.01	
¹⁵ N	100 Bar µl	0.01	
¹⁸ O	100 Bar µl	0.015	
³⁴ S	100 Bar µl	0.015	
Single cold finger volumes (10 change overs)			
¹³ C	20 Bar µl	0.01	
¹⁸ O	20 Bar µl	0.015	
¹³ C	3 Bar µl	0.02	
¹⁸ O	3 Bar µl	0.03	
CAPS (n=5)			
¹³ C	50 µg CaCO ₃	0.03	
¹⁸ O	50 µg CaCO ₃	0.06	
WES (n=5)			
² H		1.0	
¹⁸ O		0.05	
Manifold (10 tubes)			
² H		0.5	
¹³ C		0.02	
¹⁵ N		0.02	
¹⁸ O		0.03	
³⁴ S		0.03	

6 - TEST / ACCEPTANCE SPECIFICATION

Customer:	Ghent University		
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Special tests

Sales Signature: <u><i>G. O'Connor</i></u>	Date: <u>23/5/24</u>
Test Signature: <u><i>AS</i></u>	Date: <u>19/7/24</u>

7: ASSEMBLY AND TEST RECORD

Client:	Ghent University		
Quotation Number:	17713	Date:	22/12/2023
Job Number:	IN1334	Date:	11/03/2024

PRODUCT:

HT-EA

SERIAL NUMBER:

11501/4 - 2024/1334

 ASSEMBLED:
 (Name)



Date:

11/4/24

 PRE-TEST
 INSPECTION:
 (Production name)



Date:

11/4/24

 PRE-TEST
 INSPECTION:
 (Test name)



Date:

11/4/24

 SYSTEM TEST:
 (Name)



Date:

13/5/24.

 PRE-DESPATCH
 INSPECTION:
 (Name)



Date:

21/5/24

P.A.T. Test results

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

Earth Continuity

0.046 Ω

Insulation

> 300 MΩ

Earth Leakage Current

0.55 mA. @ 0.37 kVA.

Tested by:



Date:

11/4/24

8 - Serial Numbers Record Document

Client:	Ghent University		
Quotation Number:	17713	Date:	22/12/2023
Job Number:	IN1334	Date:	11/03/2024

Units	S/N
MS/ABCA	
Integra 2	
Prep Unit 1	11501/4 - 2024/1334
Prep Unit 2/Misc	
Electronics Upgrade	
CETAC	
Gas Box	
Autosampler	42684
BCR	
Dual Heater Block	

Pump Kit and Optics	S/N
Turbo pump S	
Turbo pump A	
Rotary Pump	
Voltage	110 / 240
Gauge S	
Gauge A	
Source	
Collector 1	
Collector 2	
Magnet	

Parts	S/N
Fan PSU	
24V PSU	

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

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

PC	S/N
PC	
Monitor	
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

Customer Reference: 4205269107

Shipper / Exporter:

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

Tel: +44 (0)1270 580008
Reference: IN1334

Consignee:

Universiteit Gent
ISOTOPE BIOSCIENCE LABORATORY
BLOK B - FLOOR 3
COUPURE LINKS 653
9000 GENT
BELGIUM

Contact Name: Saskia Van der Looven
Contact Tel Number: 09 264 60 01

BOX: 1

Quantity	Product Code	Product Description	Serial Number: if available
☒ 1	11501/4	HT- EA	11501/4-2024/1334
☒ 1	SI2737	Autosampler	42684
☒ 1	70801-1	Pyrolysis start-up kit high temp for solid	
☒ 1	71501-1	HT-EA pyrolysis start-up kit O and H	
☒ 1		16 amp cable	

Packed by:

P. Hays

Date:

21/05/24

Claims for damage or shortages must be made within 3 days



Packing List

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Shipper / Exporter:

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Tel: +44 (0)1270 580008
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Consignee:

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BLOK B - FLOOR 3
COUPURE LINKS 653
9000 GENT
BELGIUM

Contact Name: Saskia Van der Looven
Contact Tel Number: 09 264 60 01

BOX: 1

Quantity	Product Code	Product Description	Serial Number: if available
☒ 1	11501/4	HT- EA	11501/4-2024/1334
☒ 1		16 amp cable	
☒ 1		USB software	

Packed by:

Date:

[Signature]
22/04/24

Claims for damage or shortages must be made within 3 days



S035b_v6

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
sales@sercongroup.com
www.sercongroup.com
VAT No.: 771 1100 74
19/01/2017



COLLECTION NOTE

Job Number: **IN1334**
Customer: **Universiteit Gent**
Contact: **Katja Van Nieuland**

Collection on
Date:

24/7/24

No.
of boxes:

1

By:
Company:

SIMARCO

Vehicle

Reg No.

MF22 LNG

Signature:

S. Page

Print:

S. PAGE



S062_v3

Sercon Ltd
Unit 3B Crewe Trade Park
Gateway, Crewe, Cheshire
CW1 6JT U.K.
Registered in England and Wales: 4290072

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

SERVICE REPORT

Job Number:	IN1334		
Customer:	University of Ghent		
Contact:	Katja Van Nieuland		
Instrument:	HTEA with Solid Sampler (plumbing into existing 20-22)		
Date of Visit:	22 nd Sep 24	Days:5	
Engineer:	Henry Connell Cooke		
Reason for Visit:			
Install HTEA and plumb into existing 20-22			
Service Contract?	No	Expires:	N/A
Warranty?	Yes	Expires:	27 Sep 2026
Details of Visit:			
Day 1 • Arrive to HTEA on trolley with all but the base of the box removed, lifted onto desk • Front door of instrument opened, dust from the furnace covered the floor of the instrument • Side and back panels removed, GC box and prep board both sat at an angle since both their left connections to the walls of the instrument have broken. This suggests impact to the left side of the instrument on transit • Autosampler unpacked and plumbed in • System switched on successfully using 16A cable with regular EU plug, into 20A supply • Plugged into existing PC, attempts to create combined software between HTEA and old GSL do not work • Compressed air and He plumbed in, with new valve added to customer's He line prior to the instrument, since threading had worn (valve provided by the customer) • Reaction tube made up, but did not fit through the furnace, as the furnace was misaligned with the inlet • Attempts to move the brackets and realign the furnace still did not allow for a reaction tube to fit through with the top insulation in place			

SERVICE REPORT

Day 2

- Brackets removed off the wall of the instrument, both found to be bent out of shape on the same side of the machine as the broken GC and prep board mountings
- New brackets, Prep board mounting screws and K type thermocouple sent for next day delivery
- Brackets driven to Ghent university metal workshop and straightened out
- Brackets screwed back in, and furnace realigned, tube can now fit in and out of the furnace
- Scrubber tube made up
- He flow set to 70mLmin⁻¹ Pressure to 23 PSI
- System leak checked, connection leaving scrubber tube tightened, then no more leaks detected
- Furnaces started heating. Reaction furnace left to heat to 1000 overnight
- Tube makeup explained to the customer

Day 3

- Temps folder altered to allow for heating up to 1450, furnace set to 1350
- New bitmap created to add trapping loop to the HTEA system
- Attempts to combine old and new software for Europa GSL were unsuccessful
- Sugar sample trapped in loop, CO tuning started. CO stability at a large gradient, scale moved
- Typical background of 2-3e⁻¹⁰ with sample isolation valve open
- First precision run set off overnight

Day 4

- Precision analysed, 0.37 ‰
- Flow calibrated
- Prep board screwed back into place after damage from transit
- Another sugar sample trapped, tuning continued
- Software changes explained to the customer
- Customer runs their own samples to compare standards
- Another precision ran, 0.72 (one bad sample, 0.32 n=4)
- Customer decided to keep GSL running on old software, tested a sample to show all still works
- Further tuning and precision ran overnight

Day 5

- Precision 0.29 ‰ after reprocessing
- GC oven removed and disassembled to rescrew into the top of the instrument
- Leak check shows no GC leak
- First sample after GC change gave no peak, autosampler found to be wonky and sample got stuck
- Autosampler realigned to be level
- Second sample peak as expected, showing the system is returned to working order

12 – Installation Acceptance and Warranty Certificate

Client:	University of Gent		
Quotation Number:		Date:	
Job Number:	IN1334	Date:	23 Sep 24

Contact:	Katja Van Nieuland
System:	HTEA with Solid Autosampler
Software:	Callistio5000 v 50.0.0
Engineer:	Henry Cooke
Installation Date:	23 Sep 24

Warranty commences:	27 Sep 24
Warranty Expires:	27 Sep 26

Customer Acceptance:

 Name: Katja Van Nieuland

 Signature: 

 Date: 27 Sep 24

Engineer's Signature:

On behalf of Sercon Limited

 Name: Henry Cooke

 Signature: 

 Date: 27 Sep 24

Notes:

7: ASSEMBLY AND TEST RECORD

Client:	Ghent University		
Quotation Number:	17713	Date:	22/12/2023
Job Number:	IN1334	Date:	11/03/2023

PRODUCT: MT-EA

SERIAL NUMBER: 11501/4 - 2024/1334

ASSEMBLED:
(Name) [Signature]

Date: 11/3/26

PRE-TEST
INSPECTION:
(Production name) [Signature]

Date: 11/3/26

PRE-TEST
INSPECTION:
(Test name) [Signature]

Date: 12/3/26

SYSTEM TEST:
(Name) [Signature]

Date: 21/4/26

PRE-DESPATCH
INSPECTION:
(Name) [Signature]

Date: 22/4/26

P.A.T. Test results

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

Earth Continuity 0.05 Ω

Insulation >300 $M\Omega$

Earth Leakage Current 0.6 mA. @ 0.39 kVA.

Tested by: [Signature]

Date: 11/3/26

Rework

7: ASSEMBLY AND TEST RECORD

Client:	Ghent University		
Quotation Number:	17713	Date:	22/12/2023
Job Number:	IN1334	Date:	11/03/2024

PRODUCT:

HT-ETA

SERIAL NUMBER:

11501/4 - 2024/1334

ASSEMBLED:
(Name)

[Signature]

Date:

9/7/24

PRE-TEST
INSPECTION:
(Production name)

P. Hayes

Date:

20/7/24

PRE-TEST
INSPECTION:
(Test name)

Date:

SYSTEM TEST:
(Name)

Date:

PRE-DESPATCH
INSPECTION:
(Name)

P. Hayes

Date:

22/7/24

P.A.T. Test results

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

Earth Continuity

0.057

Ω

Insulation

7300

M Ω

Earth Leakage Current

0.55

mA. @

0.35

kVA.

Tested by:

[Signature]

Date:

9/7/24

Packing List

Customer Reference: 4205269107

Shipper / Exporter:

Sercon Limited
Unit 3B Crewe Trade park
Gateway
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Tel: +44 (0)1270 580008
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Consignee:

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BLOK B - FLOOR 3
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9000 GENT
BELGIUM

Contact Name: Saskia Van der Looven
Contact Tel Number: 09 264 60 01

BOX: 1

Quantity	Product Code	Product Description	Serial Number: if available
☒ 1	11501/4	HT- EA	11501/4-2024/1334
☒ 1		16 amp cable	
☒ 1		External pipes	
☒ 1	10202-s	Autosampler	42684
☒ 1	SI2789	Tray 2	

Packed by:



Date:

22/4/2026

Claims for damage or shortages must be made within 3 days