EUROPEAN COMMUNITY - EXP-SAD/SEC

1

Copy for the country of dispatch/export

2 Consignor/Exporter — No GB771110074000

SERCON LIMITED
UNIT 3B
CREWE
CW1 6JT GB

DECLARATION TYPE (1): EX D — Other SCI (S32):

A OFFICE OF DISPATCH/EXPORT: GB000383

UCR: 1GB996672546000-UKEA210254

21GB04X28629894010

3 Forms: 001 — 4 Loading lists: 001

ENO: 120A-B01599F-14/04/2021

5 Items: 001 — 6 Total packages: 2 — 7 Reference numbers: UKEA210254

8 Consignee — No

COLLEGE OF AGRICULTURE AND LIFE SCI
BLDG. 1, 77, YONGBONG-RO
GWANGJU
61186 KR

Seal Number (S28)

14 Declarant/representative — No GB996672546000

CARGO KING (U.K.) LIMITED
450 BATH ROAD
LONGFORD
UB7 0EB GB

Transport charges method of payment code (S29)

C. disp./exp. Code (15): a GB b

Country destin. Code (17): a KR

Countr(ies) of routing codes (S13)

18 Identity and nationality of means of transport at departure — 19 Ctr.

20 Delivery terms

21 Identity and nationality of active means of transport crossing the border: OZ0522 17 Apr 2021 — KR

22 Currency and total amount invoiced: GBP

23 Exchange rate

24 Nature of transaction

25 Mode of transport: 4 at the border

26 Inland mode of transport

1

29 Office of exit

Location of goods (30)

31 Packages and description of goods

Marks and numbers - Container No(s) - Number and kind

EA-IRMS INSTRUMENT

2 [CT] Addressed;

32 Item: 1 No

33 Commodity code: 90273000

34 Country origin code: a b

35 Gross mass (kg)

37 PROCEDURE: 1000 001

38 Net mass (kg): 215.000

40 Summary declaration/Previous document

Z-741-988-26806500 Z-703-UKEA210254
Z-380-14982

41 Supplementary units

Seal number (S28)

A.I. Code

46 Statistical value: 66960.00

44 Additional information/ Documents produced/ Certificates and authorizations

[LIC99]

47. Calculation of taxes

Type	Tax base	Rate	Amount	MP
		Total:		

48 Deferred payment

49 Identification of warehouse

B ACCOUNTING DETAILS

50 Principal — No

Signature:

represented by

Place and date:

CONTROL BY OFFICE OF EXIT (K)

Stamp:

Date of arrival:

Examination of seals:

Remarks:

CONTROL BY OFFICE OF DISPATCH/EXPORT (E)

Stamp:

Result:

Seals affixed: Number:

identity:

Time limit (date):

54. Place and date:

Cargo King (UK) Ltd
HEATHROW 14/04/2021

Signature and name of declarant/representative:

Air Export UK 2

EUROPEAN COMMUNITY - EXP-SAD/SEC

Statistical copy - Country of dispatch/export

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Date of arrival:

Examination of seals:

Remarks:

CONTROL BY OFFICE OF DISPATCH/EXPORT (E)

Stamp:

Result:

Seals affixed: Number:

identity:

Time limit (date):

54. Place and date:

Cargo King (UK) Ltd
HEATHROW 14/04/2021

Signature and name of declarant/representative:

Air Export UK 2

Generated by ASM Sequoia

EUROPEAN COMMUNITY - EXP-SAD/SEC

3

Copy for the consignor/exporter

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SERCON LIMITED
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CREWE
CW1 6JT GB

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CONTROL BY OFFICE OF DISPATCH/EXPORT (E)

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Seals affixed: Number:

identity:

Time limit (date):

54. Place and date:

Cargo King (UK) Ltd
HEATHROW 14/04/2021

Signature and name of declarant/representative:

Air Export UK 2

sercon
innovators in isotopes
Sercon Ltd, Unit 3B Crewe Trade Park, Gateway
Crewe, Cheshire CW1 6JT, UK
Tel: +44 (0)1270 580008 Fax: +44 (0)1270 252310
Company Registration No. 4290072 Vat No. 771 1100 74

6 - TEST / ACCEPTANCE SPECIFICATION

Customer:	College of Agriculture C/O: Saram International		
Quotation Number:	14982	Date:	01/01/2021
Job Number:	IN1251	Date:	19/01/2021

Special tests

Sales Signature: O'connor	Date: 12/1/21
Test Signature: S. Mead	Date: 12/1/21

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Invoice

Invoice to:

Saram International Co. Ltd
B1019, F10, 167
Songpa-daero, Songpa-gu
Soeul, 05855
Republic of Korea

VAT Reg No: KR

Invoice No.	14055
Invoice/Tax Date	14/04/2021
Due Date	14/04/2021
Account No.	SAR001

Customer Order No. SARAM2021-PO119A-SCN

Job Number 14982
IN1251

Quantity	Product Code	Product Description	Unit Price £	Net Amount £	VAT Rate %	VAT Amount £
		Agent Pricing				
1	20802/4	Integra2 CN Analysis Only	60,000.00	60,000.00	0.00	0.00
1	INST	Installation and start up training at Customer's site	6,960.00	6,960.00	0.00	0.00
		Special Payment Terms 30% at order, 20% at shipment, and 50% after installation				

Delivery address:
June Yoo
Jeonnam (Chonnam) National University
Bldg #1, 77 Yongbong-ro, Buk-gu
Gwangju, 61186
South Korea

This invoice is issued in: Pound Sterling

Total Net Amount	£	**66,960.00**
Total VAT Amount	£	**0.00**
Invoice Total	£	**66,960.00**

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.

IBAN: GB74NWBK54101736755133
SWIFT/BIC: NWBKGB2LXXX

sercon

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
E-mail: accounts@sercongroup.com
www.sercongroup.com
VAT No.: 771 1100 74

Proforma Invoice

To: Saram International Co. Ltd
B1019, F10, 167
Songpa-daero, Songpa-gu
Soeul, 05855
Republic of Korea

VAT No.

No:	14982
Date:	20/01/2021
Account Ref:	SAR001
Customer Ref:	SARAM2021-PO119A-SC

Quantity Ordered	Product Code	Product Description	Unit Price £	Net Price £
		Agent Pricing		
1	20802/4	Integra2 CN Analysis Only Integrated EA-IRMS, for isotopic and elemental analysis of 13C and 15N, or 34S. Includes standard source, high sensitivity source is available as an optional upgrade. Includes 70201-2 - analyser spares kit - filament, gaskets, pump oil, source tool kit, snoop and ferrules Includes 70501-3 - sample preparation kit - micro spatula, mirror, forceps, sample tray and syringe Windows based PC and printer	0.00	0.00
1	INST	Installation and start up training at Customer's site	0.00	0.00
		Special Payment Terms 30% at order, 20% at shipment, and 50% after installation		
1	CON001	30% PAYMENT DUE WITH ORDER	20,088.00	20,088.00

Total Net Amount	£	20,088.00
Shipping Charges (approx)	£	0.00
Total VAT Amount	£	0.00
Order Total	£	20,088.00

Payment Details:-
Payment is required within 30 DAYS of invoice date by bank transfer.
All bank transfer charges are the responsibility of the customer.
For credit card payments phone: +44 (0)1270 580008

Sercon Bank Details:-
National Westminster Bank, 36 High Street,
Nantwich, Cheshire CW5 5GA U.K.
IBAN: GB74NWBK54101736755133
SWIFT/BIC: NWBKGB2LXXX

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.: GB 771 1100 74

Pre-Installation Guide Integra2

Contact Name:	Prof. Woo-Jung Choi	
Customer Name:	Prof. Woo-Jung Choi	
Address:		
Department of Rural and Bio-systems Engineering, Chonnam National University, Gwangju 61186, Republic of Korea		
Tel No:	+82-62-530-2153	Email:wjchoi@jnu.ac.kr
Fax:	+82-62-530-2159	
Date of delivery:		
Customer Signature		
Date:	April 9, 2021	

Please return to service@sercongroup.com



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Sercon Ltd, Unit 3B Crewe Trade Park, Gateway
Crewe, Cheshire CW1 6YY, UK
Tel: +44 (0)1270 580008 Fax: +44 (0)1270 252310
Company Registration No. 4290072 Vat No. 771 1100 74

4 - LOG SHEET

Client:	College of Agriculture C/O: Saram International		
Quotation Number:	14982	Date:	01/01/2021
Job Number:	IN1251	Date:	19/01/2021

Date	Action Taken	By Whom
22Mar21	Instrument pumped down ok.	
	Collector, Head amp + Source	
	fitted.	
	fitted source inlet 6 thou line	
	pumped down ok.	
	Source limits when tried to condition	
	→ strange response. Seems to respond	
	ok as normal but limit warning	
	+ red light on SysCon perm on.	
	Replaced SysCon for new.	
	Fitted S/N - 20210004.	
	Filament conditions ok.	
	Exit vent pig tail fitted	
	Changed plumbing to fit main	
	carrier flow crimp in better position.	
	Made up new combustion, reduction	
	Water trap + CO_2 trap tubes + fitted.	
	V7 not responding. Swapped valve	
	for new. Still doesnot respond.	
	Changed channel for V7. Now	
	responds ok. Alter bit map on	
	software. V7 now is V7.	DJH
23Mar21	Conditioned GC column over night	
	@ 140°C → column became	
	blocked. swapped for new.	
	Plumbed in auto sampler	
	fitted magnet.	
	Peak shape not very good on N_2	
	or CO_2.	
	Possible leak on trapping loop.	
	Furnaces heat up ok.	DJH
	Filament limiting removed + fitted	
	new. Orginal filament has cracked	
	Theria.	DJH
24-MAR-21	HIGH EMISSION. FILAMENT ADJUSTED. LOWER	LM

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4 - LOG SHEET

Client:	College of Agriculture C/O: Saram International		
Quotation Number:	14982	Date:	01/01/2021
Job Number:	IN1251	Date:	19/01/2021

Date	Action Taken	By Whom
07-APR-21	NEW SOURCE FITTED AS PREVIOUS CONTINUING TO	
	SPIKE. NEW TUBES FITTED. SPIKING HAS STOPPED.	
	LINEARITY NEEDS TUNING	CM
08-APR-21	LINEARITY PASS, PRECISION PASS PEAK SHAPE	
	AND STABILITY PASS. TEST COMPLETE	CM

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Company Registration No. 4290072 Vat No. 771 1100 74

4 - LOG SHEET

Client:	College of Agriculture C/O: Saram International		
Quotation Number:	14982	Date:	01/01/2021
Job Number:	IN1251	Date:	19/01/2021

Date	Action Taken	By Whom
25Mar21	Change source, fitted new built one. Flashing over. Removed and fitted new wrap around. Now & emissions are good.	DAH
26Mar21	Peak shape v. poor cannot obtain any flat peaks on N_2 or CO_2. Change magnet over. + rebuilt source.	DAH
29Mar21	Peak shape now good. but 2/1 ratio is wrong. Ratio is dropping (N_2). O_2 pressure regulator leaking Rebuilt - Now ok	DAH
30Mar21	Linearity poor 2/1 ratio on N_2 shifts wildly with different volumes of N_2 present. Swapped sources around + swapped magnets - no change.	
31Mar21	Baked out flight tube. See improvement in N_2 2/1 ratio. Peak shapes now very good. Stability wandering. Occasional flash over for seemingly no reason	DAH
06Apr21	2/1 nearly correct. Baked out again. No change. Swapped source of old test rig one. No change refitted original Sudden issue with wandering Trap. Limiting + trap will not stabilise. Removed, filament looks bent. Fitted new	DAH
06-APR-21	TRAP STILL WANDERING. LEAK ON GC SO SWAPPED TO OLD ONE. PASSES PRESSURE TEST. NEW FILAMENT AND FILAMENT LINKS FITTED	LM

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6 - TEST / ACCEPTANCE SPECIFICATION

Customer:	College of Agriculture C/O: Saram International		
Quotation Number:	14982	Date:	01/01/2021
Job Number:	IN1251	Date:	19/01/2021

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 0.1	
^{15}N	100 µg N	0.3 —	
Dual	100 µg N & 400 µg C	0.4 & 0.15 0.21 + 0.1	
^{34}S	30 µg S	0.5	
^{18}O	100 µg O	0.5	

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Company Registration No. 4290072 Vat No. 771 1100 74

7: ASSEMBLY AND TEST RECORD

Client:	College of Agriculture C/O: Saram International		
Quotation Number:	14982	Date:	01/01/2021
Job Number:	IN1251	Date:	19/01/2021

PRODUCT: INTEGRA2 (WAVE)

SERIAL NUMBER: 20802/4/2021/1251

ASSEMBLED: (Name) [signature] Date: 9/3/21

PRE-TEST INSPECTION: (Production name) P. Hayes Date: 9/3/21

PRE-TEST INSPECTION: (Test name) P. Hayes Date: 9/3/21

SYSTEM TEST: (Name) [signature] Date: 12-MAR-21

PRE-DESPATCH INSPECTION: (Name) P. Hayes Date: 12/4/21

P.A.T. Test results

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

Earth Continuity 0.078 Ω

Insulation >300 MΩ

Earth Leakage Current 0.90 mA. @ 0.05 kVA.

Tested by: P. Hayes

Date: 9/3/21

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Company Registration No. 4290072 Vat No. 771 1100 74

8 - Serial Numbers Record Document

Client:	College of Agriculture C/O: Saram International		
Quotation Number:	14982	Date:	01/01/2021
Job Number:	IN1251	Date:	19/01/2021

Units	S/N
MS/ABCA	
Integra 2	20802/4-2021/1251
Prep Unit 1	
Prep Unit 2/Misc	
Electronics Upgrade	
CETAC	
Gas Box	
Autosampler	42632
BCR	-
Dual Heater Block	-

Pump Kit and Optics	S/N
Turbo pump S	210127348-
Turbo pump A	
Rotary Pump	210122246.
Voltage	110 / (240)
Gauge S	200010634
Gauge A	-
Source	20101-048
Collector 1	20301-099-
Collector 2	-
Magnet	REFURB

Parts	S/N
Fan PSU	
24V PSU	

PCBs	S/N
Electronics Box	202 / 0002
Prep PCB	-
VFC PCB	-
Watchdog PCB	-
Head Amp PCB 1	2015
Head Amp PCB 2	-
Electromagnet RP	-

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

PC	S/N
PC	DRH3F93
Monitor	CJ-0H6D2w-FCCC0-0BL-A34L-A03
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:

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CONTENTS PAGE

Client:	College of Agriculture C/O: Saram International		
Quotation Number:	14982	Date:	01/01/2021
Job Number:	IN1251	Date:	19/01/2021

- ☑ 1 QUOTATION
- ☑ 2 CUSTOMER ORDER
- ☑ 3 MACHINE SPECIFICATION DOCUMENT_S027_v11
- ☑ 4 LOG SHEET_S028_v3
- ☑ 5 FAULT REPORTING DOCUMENT_S029_v3
- ☑ 6 TEST ACCEPTANCE SPECIFICATION_S030_v9
- ☑ 7 ASSEMBLY AND TEST RECORD_S023_v5
- ☑ 8 SERIAL NUMBER FORM_S053_v4
- ☑ 9 TEST DATA
- ☐ 10 PACKING LIST_S035b_v6
- ☐ 11 INSTALLATION REPORT_S057_v6
- ☐ 12 INSTALLATION ACCEPTANCE AND WARRANTY CERTIFICATE_S071_v3 – agent Install

ADDITIONAL:

Payment Terms:
50% / 40% / 10%
Other: please specify

Penalty Clause **Yes / No**
Please specify: _____

Blue Book Completion:

Signed	S. [illegible]	Date	22/6/21
Verified	P. Hays	Date	22/9/21

COMMERCIAL INVOICE

Date: 14/04/2021

Customer Reference: SARAM2021-PO119A-SCN

Shipper / Exporter:

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

Contact: Joanne O'Connor
Tel: +44 (0) 1270 580008
Invoice Reference: 14982 IN1251

Delivery Address:

College of agriculture and life sciences
Jeonnam (Chonnam) National University
Bldg #1, 77 Yongbong-ro, Buk-gu
Gwangju, 61186
South Korea

Contact Name: June Yoo
Cust Tel Number: +82-2-3402-0518

Country of Export: UK
Country of Manufacture: UK
Country of Destination: KR Korea (South)

Shipping Marks /

Box 1 @ 99x86x108cms GW: 155kg, Box 2 @ 65x65x98cms GW: 68kg

UK Commodity Code: 90273000

Quantity	Product Code	Product Description	Amount £
		Agent Pricing	
1	20802/4	Integra2 CN Analysis Only	60,000.00
		Special Payment Terms 30% at order, 20% at shipment, and 50% after installation	

None of the goods contained in this consignment are restricted by IATA or shipping regulations

Total Invoice Value: £ 60,000.00

Signed J O'Connor

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

sercon
innovators in isotopes

14982
IN1251

Order Acknowledgement

Order Date 20/01/2021
Order Ref. 14982
Cust. Ref. SARAM2021-PO119A-SCN
Account Ref. SAR001

Invoice address

Saram International Co. Ltd
B1019, F10, 167
Songpa-daero, Songpa-gu
Soeul, 05855
Republic of Korea

VAT No.

Delivery address

College of agriculture and life sciences
Jeonnam (Chonnam) National University
Bldg #1, 77 Yongbong-ro, Buk-gu
Gwangju, 61186
South Korea

Contact: June Yoo
Tel: +82-2-3402-0518

Quantity Ordered	Product Code	Product Description	Unit Price £	Net Price £
		Agent Pricing		
1	20802/4	Integra2 CN Analysis Only Integrated EA-IRMS, for isotopic and elemental analysis of 13C and 15N, or 34S. Includes standard source, high sensitivity source is available as an optional upgrade. Includes 70201-2 - analyser spares kit - filament, gaskets, pump oil, source tool kit, snoop and ferrules Includes 70501-3 - sample preparation kit - micro spatula, mirror, forceps, sample tray and syringe Windows based PC and printer	60,000.00	60,000.00
1	INST	Installation and start up training at Customer's site	6,960.00	6,960.00
		Special Payment Terms		
		30% at order, 20% at shipment, and 50% after installation		

Total Net Amount	£	66,960.00
Total VAT Amount	£	0.00
Order Total	£	66,960.00

sercon

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.: GB 771 1100 74

sercon
innovators in isotopes

Packing List

Customer Reference: SARAM2021-PO119A-SCN

Shipper / Exporter:

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

Tel: +44 (0)1270 580008
Reference: IN1251

Consignee:

College of agriculture and life sciences
Jeonnam (Channam) National University
Bldg #1, 77 Yongbong-ro, Buk-gu
Gwangju, 61186
South Korea

Contact Name:
Contact Tel Number: +82 2 3402 0518

BOX: 2

	Quantity	Product Code	Product Description	Serial Number: *if available*
☑	1	SI0155	PC	DRH3F93
☑	1	SI2391	MONITOR	CN-OH6D2W-FCCCO-OBL-AJ4L
☑	1	SI0101	MAGNET & FEET	
☑	1	10202-S	AUTOSAMPLER	42632
☑	1	SI0103	ROTARY PUMP	210122246
☑	3		MAINS CABLES X 3	
☑	1		MANUAL	
☑	1		WINDOWS BACK UP DRIVE (WITH PC)	
☑	1		SOFTWARE RECOVERY DRIVE (WITH PC)	
☑	1	70501-3	SAMPLE PREP KIT	
☑	1	70201-2	SPARES KIT	

Packed by: [signature]

Date: 12/4/21

Claims for damage or shortages must be made within 3 days

sercon
innovators in isotopes

Packing List

Customer Reference: SARAM2021-PO119A-SCN

Shipper / Exporter:

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

Tel: +44 (0)1270 580008
Reference: IN1251

Consignee:

College of agriculture and life sciences
Jeonnam (Channam) National University
Bldg #1, 77 Yongbong-ro, Buk-gu
Gwangju, 61186
South Korea

Contact Name:
Contact Tel Number: +82 2 3402 0518

BOX: 1

	Quantity	Product Code	Product Description	Serial Number: *if available*
☑	1	20802/4	INTEGRA WAVE	20802/4-2021/1251

Packed by: P. Hayes

Date: 12/4/21

Claims for damage or shortages must be made within 3 days

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

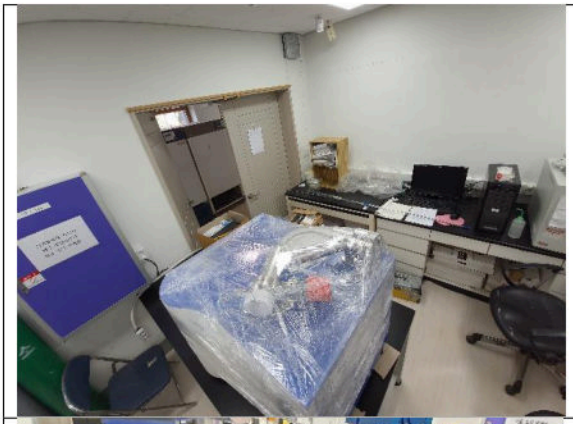
Phone: +44 (0) 1270 580008
Fax: +44 (0) 1270 252310
sales@sercongroup.com
www.sercongroup.com
VAT No.: 771 1100 74

Sercon Integra2, Installation/Training Report

22nd Jun. / MJ Kim / Saram International

Preliminary works on 4th June 2021

4 Jun(Fri)	- Instrument packages transport to customer site - Instrument placement on customer lab table - CDA/electrical power(via UPS) line connection finished - He, O2 gas line connection - Installation of Rotary pumps & oil. Leak checking & pressure testing - Installation of Autosampler - Pumping down the instrument over weekend	

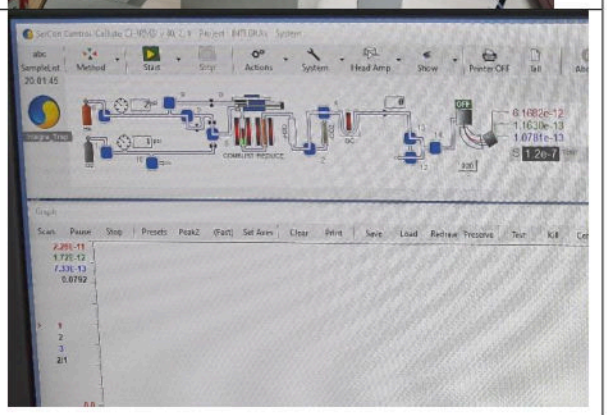








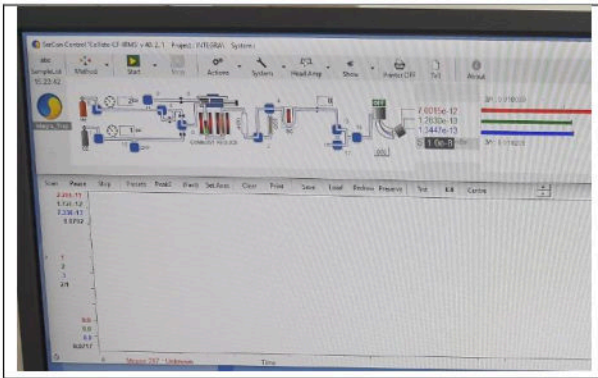


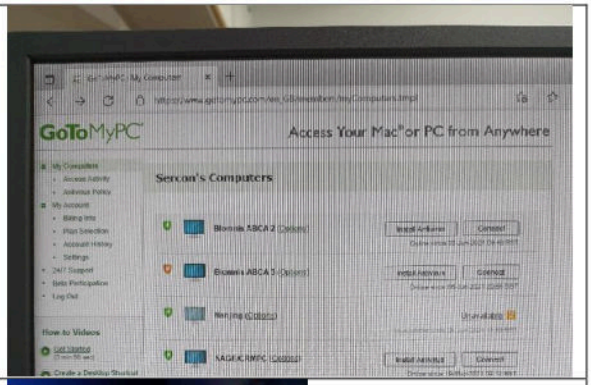


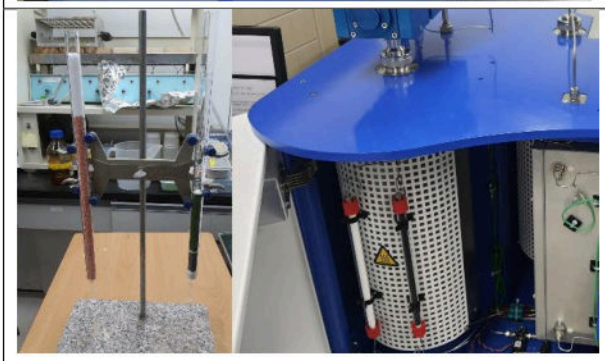
[Sercon / SARAM] Integra2 for JNU

Installation works from 7th June 2021

Day1 : 7 Jun (Mon)	- Network connected, Sercon remote support by GoToMyPC + WhatsAPP Installation and comms set up of instruments to the PC Callisto Software set up Conditioning of the filament. (already done in UK) Making all the tubes and traps together with user. : water trap, CO2 scrubber tube, combustion, reduction tubes Fitting of all the tubes and traps into system. Fitting the gas plumbing and setting up flows. -> Leak found	





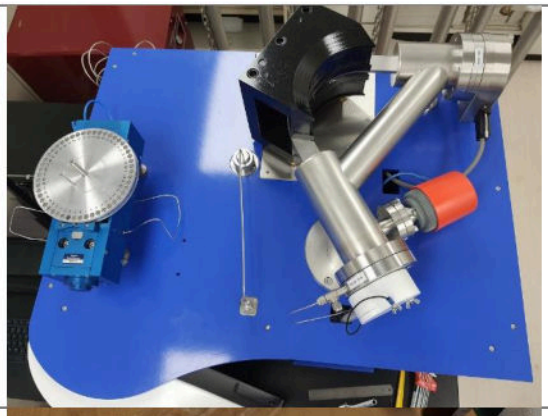




[Sercon / SARAM] Integra2 for JNU

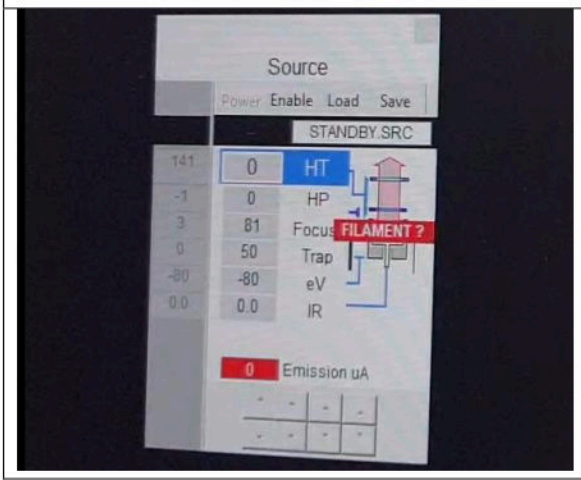
Day2 : 8 Jun (Tue)	Fitting the gas plumbing and setting up flows. -> Leak cleared Establishing optimum magnet position. Setting furnaces to temperature. GC oven set up. Prepare samples for tuning, basic tests. Tuning and 2/1peak and stability tests. Filament disconnected during tuning. Agent training of how to utilise the instrument. Including - Instrumentation explanation - Sample preparation. - Make up of Combustion/Reduction tubes & Water trap & CO2 scrubber tubes training.	







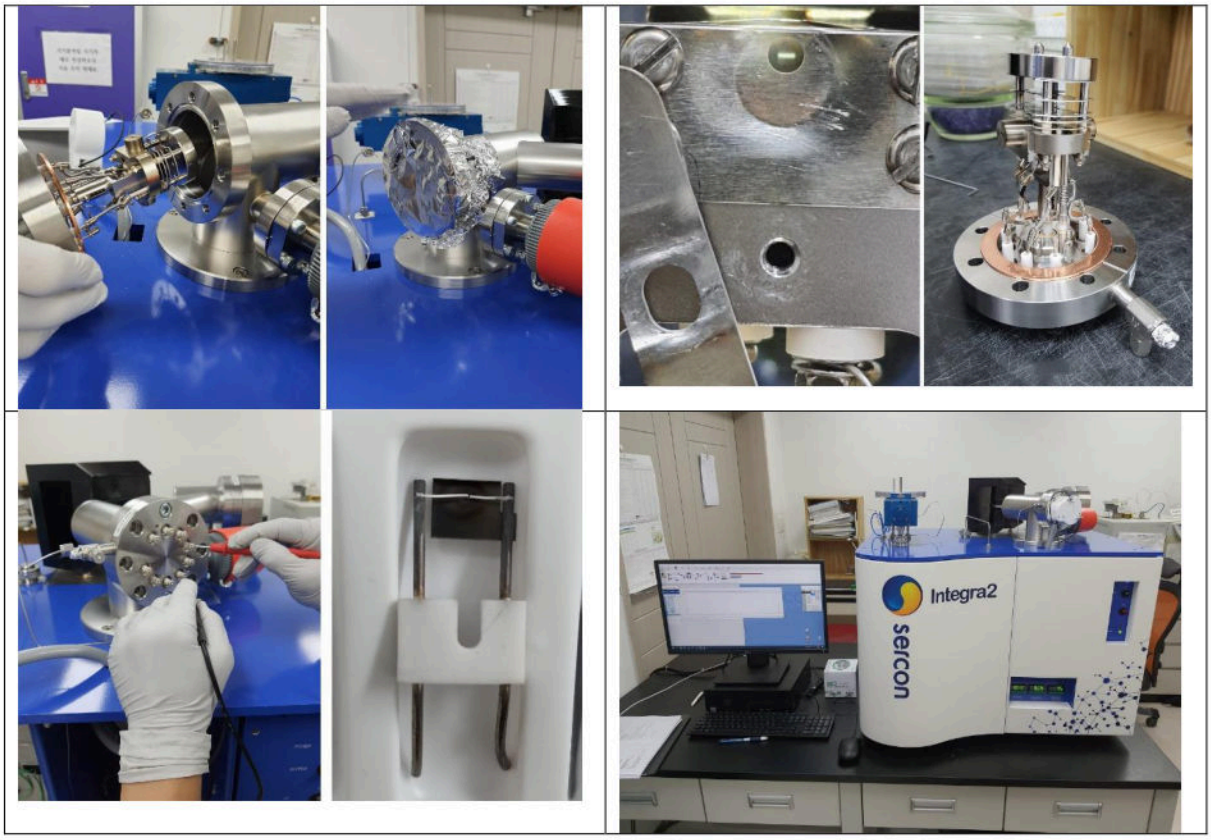




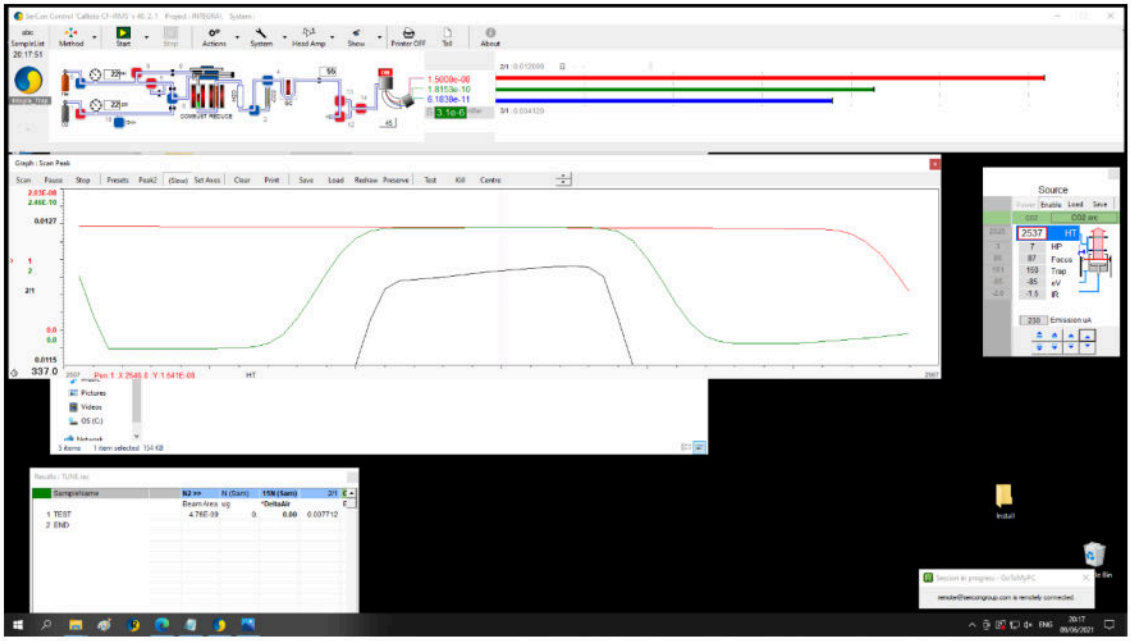


[Sercon / SARAM] Integra2 for JNU

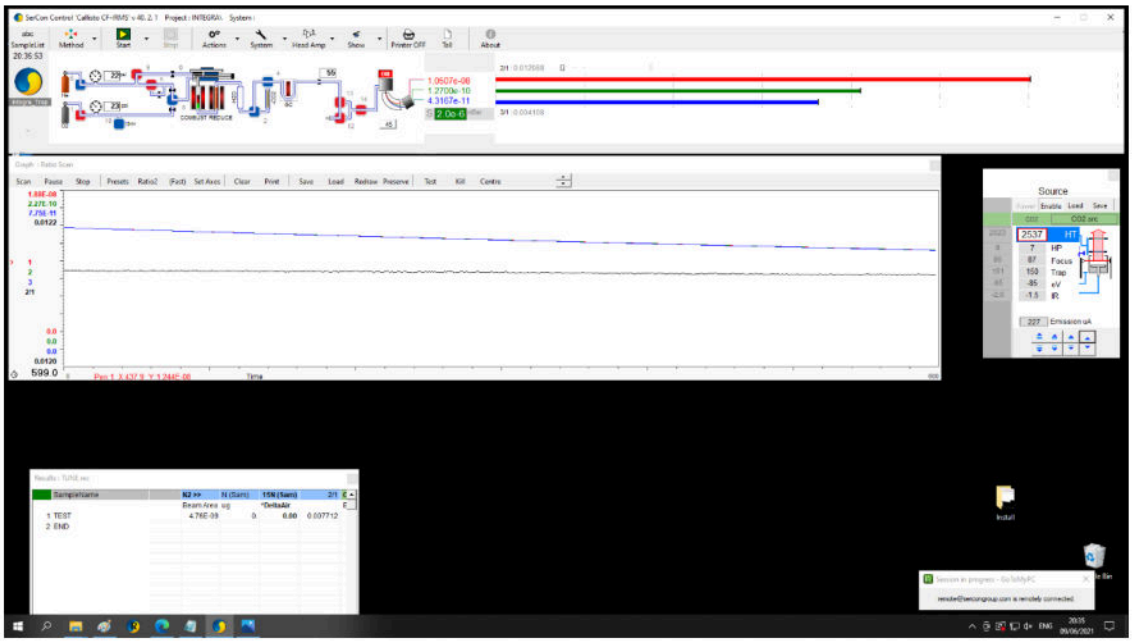
Day3 : 9 Jun (Wed)	Filament exchanging works Conditioning of the new filament. Tuning and stability tests. Agent training of how to utilise the instrument. Including - Instrumentation explanation - Source and Source Tuning training - Callisto Software training.	

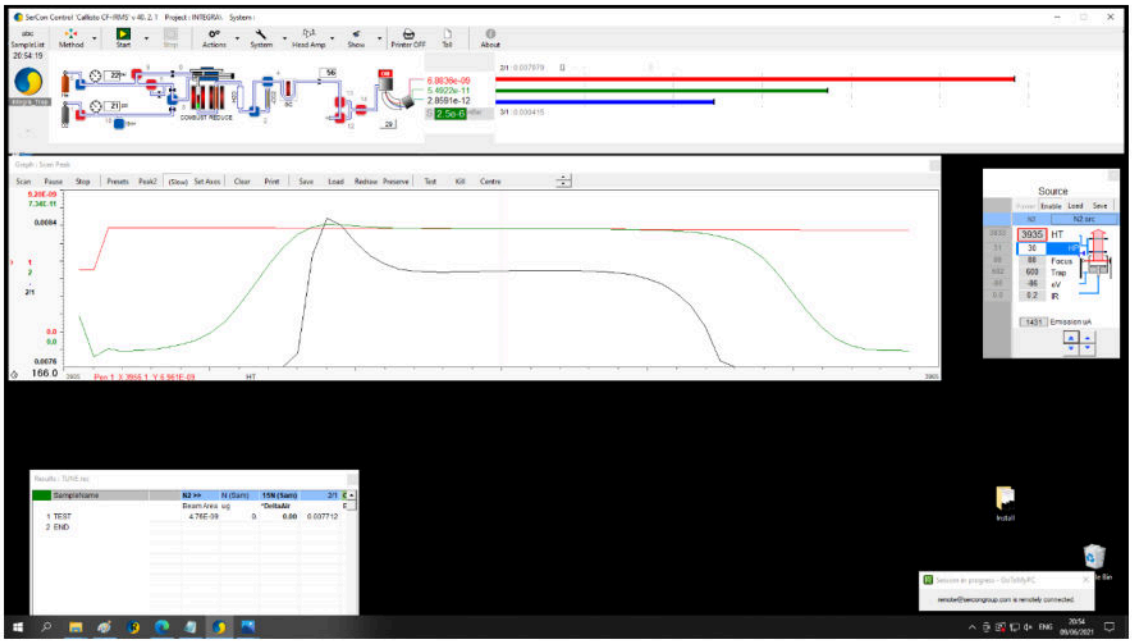


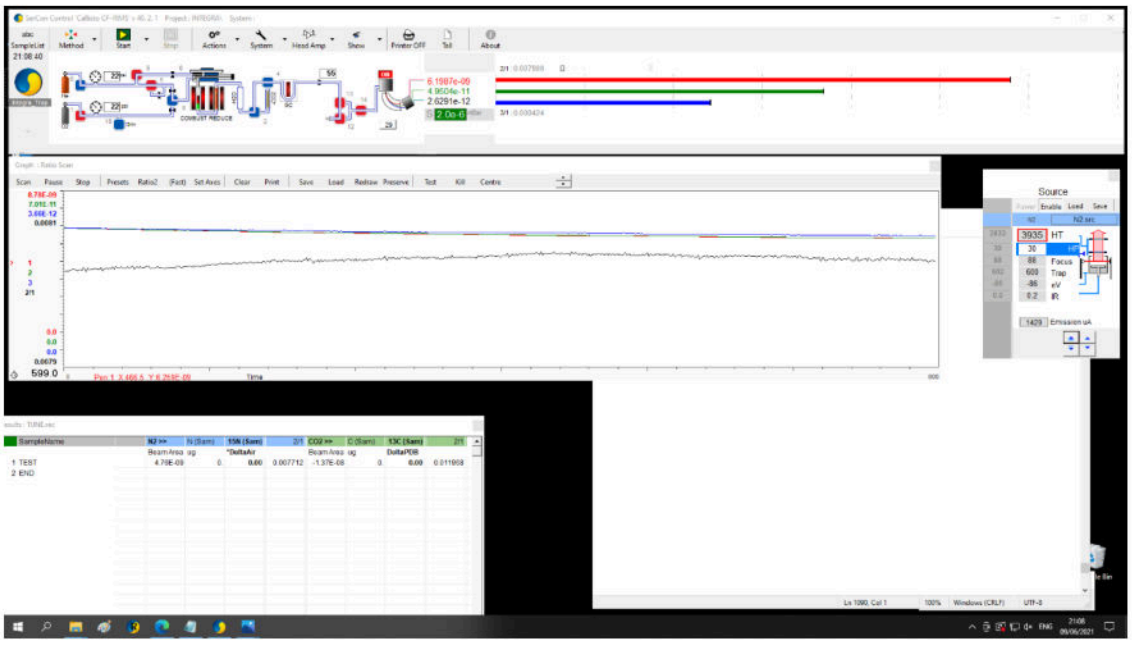
2/1 Peak Shape and Ratio Stability for C, N



[Sercon / SARAM] Integra2 for JNU

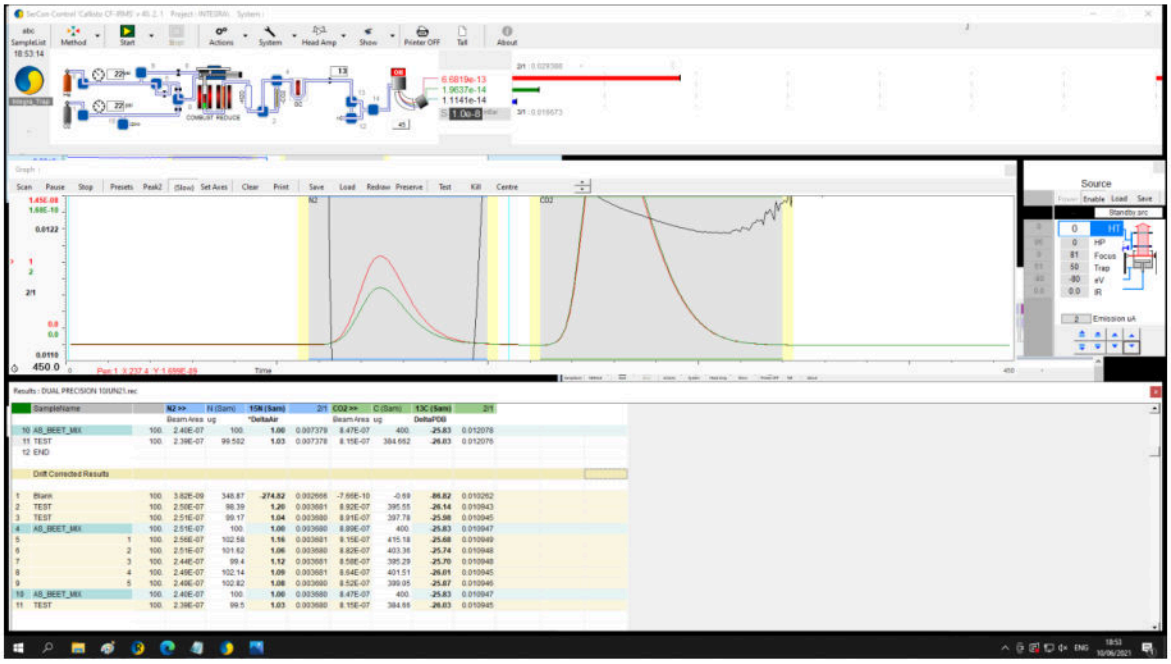


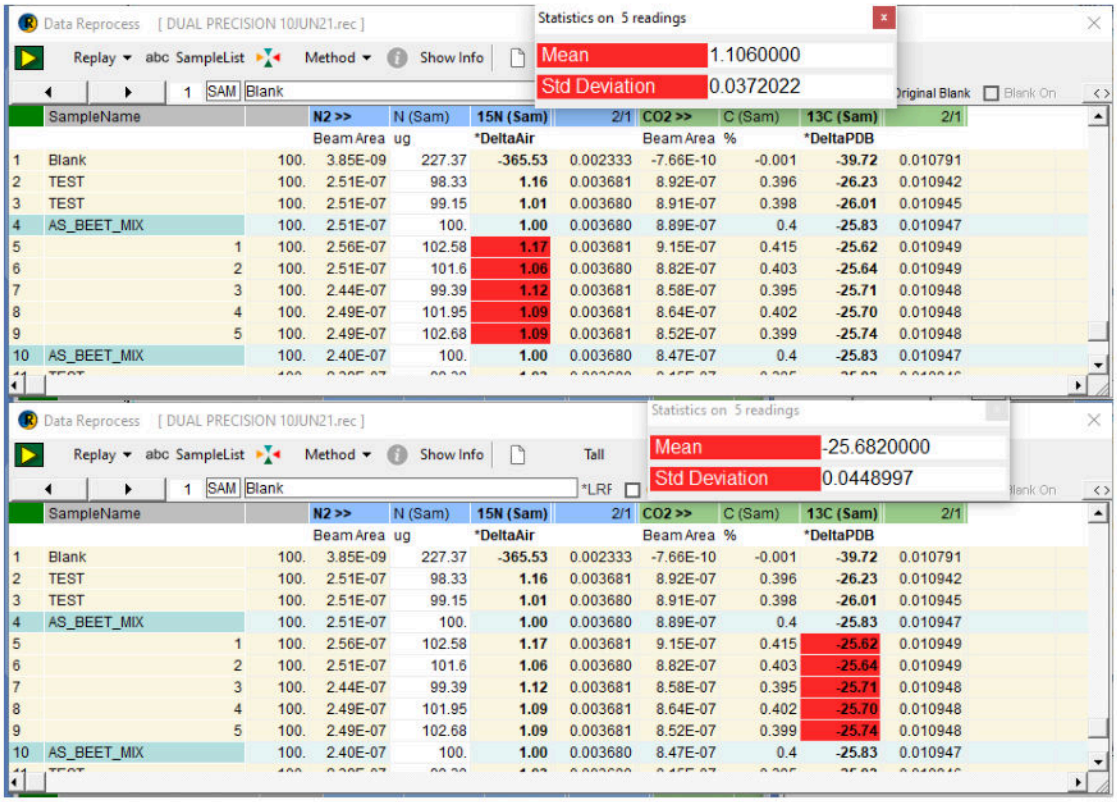




[Sercon / SARAM] Integra2 for JNU

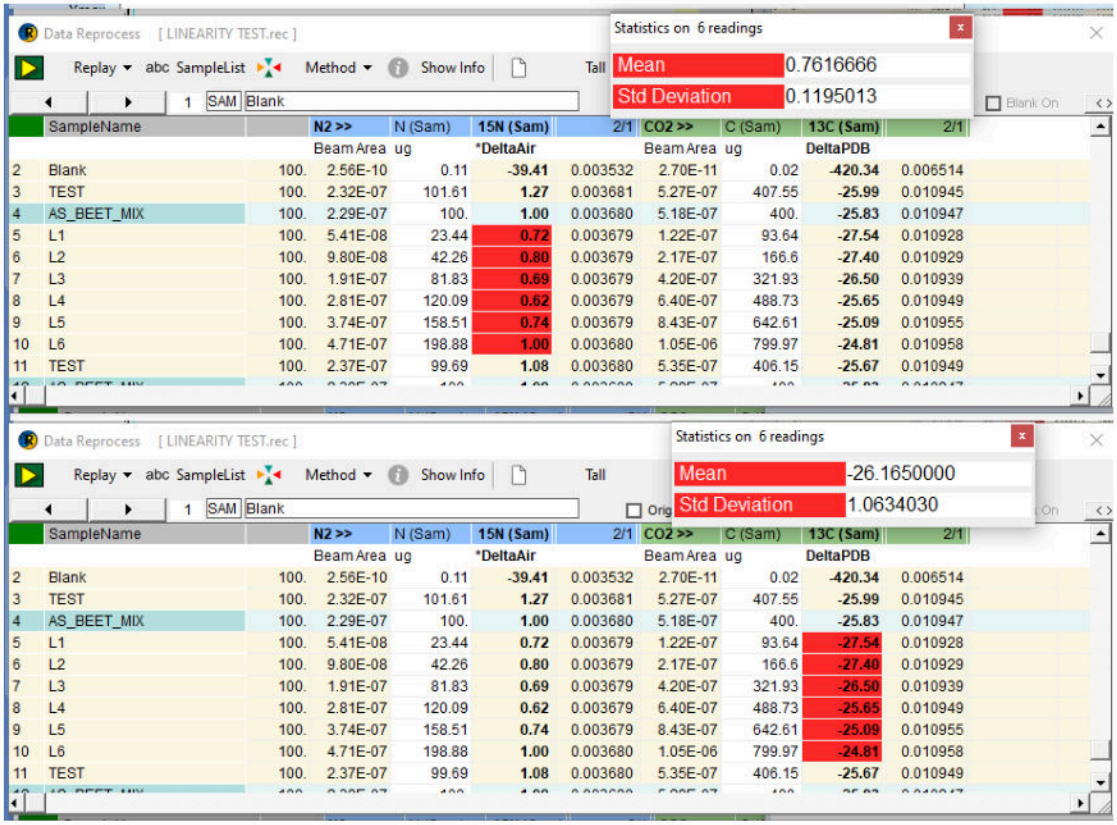
Day4, 5 : 10 Jun (Thu) 11 Jun (Fri)	Running of install specification tests on samples. : Precision Test, Linearity Test Agent training of how to utilise the instrument. Including - Instrumentation explanation - Source and Source Tuning training - Callisto Software training. - Callisto Reprocessor Software training. Precision Test result for CN dual : N <0.04‰, C<0.05‰ Linearity Test result for CN dual : N <0.12‰, C<0.7~1.1‰ # Precision target <0.1‰, Linearity target <0.5‰	

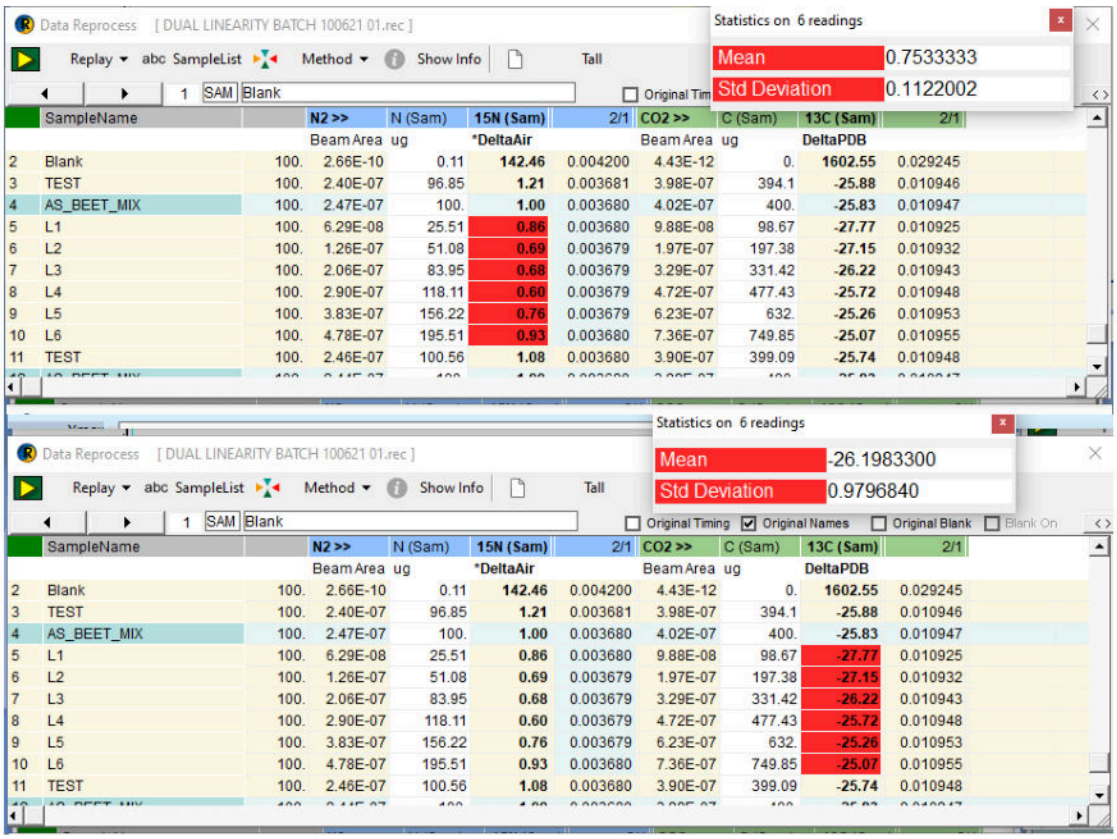




	SampleName		N2 >> Beam Area	N (Sam) ug	15N (Sam) *DeltaAir	2/1	CO2 >> Beam Area	C (Sam) %	13C (Sam) *DeltaPDB	2/1
1	Blank	100.	3.85E-09	227.37	-365.53	0.002333	-7.66E-10	-0.001	-39.72	0.010791
2	TEST	100.	2.51E-07	98.33	1.16	0.003681	8.92E-07	0.396	-26.23	0.010942
3	TEST	100.	2.51E-07	99.15	1.01	0.003680	8.91E-07	0.398	-26.01	0.010945
4	AS_BEET_MIX	100.	2.51E-07	100.	1.00	0.003680	8.89E-07	0.4	-25.83	0.010947
5	1	100.	2.56E-07	102.58	1.17	0.003681	9.15E-07	0.415	-25.62	0.010949
6	2	100.	2.51E-07	101.6	1.06	0.003680	8.82E-07	0.403	-25.64	0.010949
7	3	100.	2.44E-07	99.39	1.12	0.003681	8.58E-07	0.395	-25.71	0.010948
8	4	100.	2.49E-07	101.95	1.09	0.003681	8.64E-07	0.402	-25.70	0.010948
9	5	100.	2.49E-07	102.68	1.09	0.003681	8.52E-07	0.399	-25.74	0.010948
10	AS_BEET_MIX	100.	2.40E-07	100.	1.00	0.003680	8.47E-07	0.4	-25.83	0.010947

	SampleName		N2 >> Beam Area	N (Sam) ug	15N (Sam) *DeltaAir	2/1	CO2 >> Beam Area	C (Sam) %	13C (Sam) *DeltaPDB	2/1
1	Blank	100.	3.85E-09	227.37	-365.53	0.002333	-7.66E-10	-0.001	-39.72	0.010791
2	TEST	100.	2.51E-07	98.33	1.16	0.003681	8.92E-07	0.396	-26.23	0.010942
3	TEST	100.	2.51E-07	99.15	1.01	0.003680	8.91E-07	0.398	-26.01	0.010945
4	AS_BEET_MIX	100.	2.51E-07	100.	1.00	0.003680	8.89E-07	0.4	-25.83	0.010947
5	1	100.	2.56E-07	102.58	1.17	0.003681	9.15E-07	0.415	-25.62	0.010949
6	2	100.	2.51E-07	101.6	1.06	0.003680	8.82E-07	0.403	-25.64	0.010949
7	3	100.	2.44E-07	99.39	1.12	0.003681	8.58E-07	0.395	-25.71	0.010948
8	4	100.	2.49E-07	101.95	1.09	0.003681	8.64E-07	0.402	-25.70	0.010948
9	5	100.	2.49E-07	102.68	1.09	0.003681	8.52E-07	0.399	-25.74	0.010948
10	AS_BEET_MIX	100.	2.40E-07	100.	1.00	0.003680	8.47E-07	0.4	-25.83	0.010947


Data Reprocess [LINEARITY TEST.rec]
Replay abc SampleList Method Show Info Tall
1 SAM Blank
Statistics on 6 readings
Mean 0.7616666
Std Deviation 0.1195013
SampleName N2 >> N (Sam) 15N (Sam) 2/1 CO2 >> C (Sam) 13C (Sam) 2/1
Beam Area ug *DeltaAir Beam Area ug DeltaPDB
2 Blank 100. 2.56E-10 0.11 -39.41 0.003532 2.70E-11 0.02 -420.34 0.006514
3 TEST 100. 2.32E-07 101.61 1.27 0.003681 5.27E-07 407.55 -25.99 0.010945
4 AS_BEET_MIX 100. 2.29E-07 100. 1.00 0.003680 5.18E-07 400. -25.83 0.010947
5 L1 100. 5.41E-08 23.44 0.72 0.003679 1.22E-07 93.64 -27.54 0.010928
6 L2 100. 9.80E-08 42.26 0.80 0.003679 2.17E-07 166.6 -27.40 0.010929
7 L3 100. 1.91E-07 81.83 0.69 0.003679 4.20E-07 321.93 -26.50 0.010939
8 L4 100. 2.81E-07 120.09 0.62 0.003679 6.40E-07 488.73 -25.65 0.010949
9 L5 100. 3.74E-07 158.51 0.74 0.003679 8.43E-07 642.61 -25.09 0.010955
10 L6 100. 4.71E-07 198.88 1.00 0.003680 1.05E-06 799.97 -24.81 0.010958
11 TEST 100. 2.37E-07 99.69 1.08 0.003680 5.35E-07 406.15 -25.67 0.010949
Data Reprocess [LINEARITY TEST.rec]
Replay abc SampleList Method Show Info Tall
1 SAM Blank
Statistics on 6 readings
Mean -26.1650000
Std Deviation 1.0634030
SampleName N2 >> N (Sam) 15N (Sam) 2/1 CO2 >> C (Sam) 13C (Sam) 2/1
Beam Area ug *DeltaAir Beam Area ug DeltaPDB
2 Blank 100. 2.56E-10 0.11 -39.41 0.003532 2.70E-11 0.02 -420.34 0.006514
3 TEST 100. 2.32E-07 101.61 1.27 0.003681 5.27E-07 407.55 -25.99 0.010945
4 AS_BEET_MIX 100. 2.29E-07 100. 1.00 0.003680 5.18E-07 400. -25.83 0.010947
5 L1 100. 5.41E-08 23.44 0.72 0.003679 1.22E-07 93.64 -27.54 0.010928
6 L2 100. 9.80E-08 42.26 0.80 0.003679 2.17E-07 166.6 -27.40 0.010929
7 L3 100. 1.91E-07 81.83 0.69 0.003679 4.20E-07 321.93 -26.50 0.010939
8 L4 100. 2.81E-07 120.09 0.62 0.003679 6.40E-07 488.73 -25.65 0.010949
9 L5 100. 3.74E-07 158.51 0.74 0.003679 8.43E-07 642.61 -25.09 0.010955
10 L6 100. 4.71E-07 198.88 1.00 0.003680 1.05E-06 799.97 -24.81 0.010958
11 TEST 100. 2.37E-07 99.69 1.08 0.003680 5.35E-07 406.15 -25.67 0.010949


Data Reprocess [DUAL LINEARITY BATCH 100621 01.rec]
Replay abc SampleList Method Show Info Tall
1 SAM Blank
Statistics on 6 readings
Mean 0.7533333
Std Deviation 0.1122002
SampleName N2 >> N (Sam) 15N (Sam) 2/1 CO2 >> C (Sam) 13C (Sam) 2/1
Beam Area ug *DeltaAir Beam Area ug DeltaPDB
2 Blank 100. 2.66E-10 0.11 142.46 0.004200 4.43E-12 0. 1602.55 0.029245
3 TEST 100. 2.40E-07 96.85 1.21 0.003681 3.98E-07 394.1 -25.88 0.010946
4 AS_BEET_MIX 100. 2.47E-07 100. 1.00 0.003680 4.02E-07 400. -25.83 0.010947
5 L1 100. 6.29E-08 25.51 0.86 0.003680 9.88E-08 98.67 -27.77 0.010925
6 L2 100. 1.26E-07 51.08 0.69 0.003679 1.97E-07 197.38 -27.15 0.010932
7 L3 100. 2.06E-07 83.95 0.68 0.003679 3.29E-07 331.42 -26.22 0.010943
8 L4 100. 2.90E-07 118.11 0.60 0.003679 4.72E-07 477.43 -25.72 0.010948
9 L5 100. 3.83E-07 156.22 0.76 0.003679 6.23E-07 632. -25.26 0.010953
10 L6 100. 4.78E-07 195.51 0.93 0.003680 7.36E-07 749.85 -25.07 0.010955
11 TEST 100. 2.46E-07 100.56 1.08 0.003680 3.90E-07 399.09 -25.74 0.010948
Data Reprocess [DUAL LINEARITY BATCH 100621 01.rec]
Replay abc SampleList Method Show Info Tall
1 SAM Blank
Original Timing Original Names Original Blank Blank On
Statistics on 6 readings
Mean -26.1983300
Std Deviation 0.9796840
SampleName N2 >> N (Sam) 15N (Sam) 2/1 CO2 >> C (Sam) 13C (Sam) 2/1
Beam Area ug *DeltaAir Beam Area ug DeltaPDB
2 Blank 100. 2.66E-10 0.11 142.46 0.004200 4.43E-12 0. 1602.55 0.029245
3 TEST 100. 2.40E-07 96.85 1.21 0.003681 3.98E-07 394.1 -25.88 0.010946
4 AS_BEET_MIX 100. 2.47E-07 100. 1.00 0.003680 4.02E-07 400. -25.83 0.010947
5 L1 100. 6.29E-08 25.51 0.86 0.003680 9.88E-08 98.67 -27.77 0.010925
6 L2 100. 1.26E-07 51.08 0.69 0.003679 1.97E-07 197.38 -27.15 0.010932
7 L3 100. 2.06E-07 83.95 0.68 0.003679 3.29E-07 331.42 -26.22 0.010943
8 L4 100. 2.90E-07 118.11 0.60 0.003679 4.72E-07 477.43 -25.72 0.010948
9 L5 100. 3.83E-07 156.22 0.76 0.003679 6.23E-07 632. -25.26 0.010953
10 L6 100. 4.78E-07 195.51 0.93 0.003680 7.36E-07 749.85 -25.07 0.010955
11 TEST 100. 2.46E-07 100.56 1.08 0.003680 3.90E-07 399.09 -25.74 0.010948

Day6, 7 : 14 Jun (Mon) 15 Jun (Tue)	Customer training of how to utilise the instrument by Agent. Including - Instrumentation explanation - Source and Source Tuning training - Sample preparation. - Make up of Combustion/Reduction tubes & Water trap & CO2 scrubber tubes training. - Callisto Software training. - Callisto Reprocessor Software training.	

Action items

1	C Linearity target value is <0.5‰, but <0.7~1.1‰ checked. Request the guideline for parameter tuning to reach 0.5 per mil or below for 13C	**Open**
2	The customer want to have a one day training session including realtime Q&A from Sercon Engineer in July. Local Agent, Saram already provided training session to customer for 2days.	**Open**
3	One filament broken. Sercon is expected to provide additional spare of filament.	**Open**
4	Remaining 50% payment, wired to Sercon on 22nd Jun.	**Finished**

Appendix.1 : Sercon Integra2, Consumables/Spare details

 # 70201-2, Integra2 Analyser Spares Kit

Part No	Description	Q'ty	Remark
SC0038	Source Tool Kit	1	
SC0028	20-20 Filament	1	
SC0063	Edwards Rotary Pump Oil, UG15, 1L	1	
SC0032A	Copper Gasket 64mm	5	
SC0033A	Copper Gasket 38mm	5	
SI0703	1/8"-1/16" PTFE Ferrules	5	
SI0700	1/16" PTFE Ferrules	5	
SI0702	1/8"-1/8" PTFE Ferrules	5	
SC8407	Snoop Liquid Leak Detector 2oz	1	

 # 70501-3, Integra2 Sample Prep Kit

Part No	Description	Q'ty	Remark
SC0127	Spatula	1	
SC0128	Mirror Tile	1	
SC1630	Cell Well Place	1	
SC1605	Forceps Curved	1	
SC1606	Forceps Straight	1	
SI0709A	Syringe SK-10F 10µl	1	

 # 70401-1, Integra2 Consumables

Part No	Description	Q'ty	Remark
SC0006	Quartz Wool Very Fine (10g)	1	
SC0007	Silver Wool Very Fine Wire Unreeled (10g)	1	
SC0236	EMASorb A Granular 0.8-1.6mm, 14-25 mesh CO2 Absorbant 25g	4	
SC0162	Magnesium Perchlorate Gran 0.7to1.2mm H20 Absorbent 25g	4	
SC0011	Quartz Liner Sleeve Insert Open Both Ends 15x180mm Pk/1	4	
SC0001/E	Chromium Oxide Granular (25g)	2	
SC0024	Chromosorb W 30-60 Mesh Acid Washed (10g)	1	
SC0002	Copper Wires Fine Wires Reduced (100g)	2	
SC0003	Copper Oxide Fine Wires (100g)	1	
SC0009	Tin Capsules, Pressed, 8 x 5mm, Pk/250	2	
SC0010	Tin Capsules, Pressed, 6 x 4mm, Pk/500	1	
SC0012	Reaction/Reduction Tube Transparent Heavy Wall	3	
SC2495	Scrubber Tube 220mm	3	
SC1410	O Ring Schott Silicone Pk/10	1	
SC0004	Quartz Chips Granular (50g)	1	
SC0047	Small Silicone O-Rings Pk/10	1	
SC1421	Seal Viton Chamfered Square Profile-upper reaction tube Pk/5	1	

14982

Quotation

To: Saram International Co. Ltd
B1019, F10, 167
Songpa-daero, Songpa-gu
Soeul, 05855
Republic of Korea

VAT Reg No: KR

Quotation Date:	14/01/2021
Quotation Reference:	14982
Customer Ref:	Jeonnam Univ
Account Ref.	SAR001
Quotation Validity:	15/04/2021

Quantity	Product Code	Product Description	Unit Price £	Net Price £
		Agent Pricing		
1	20802/4	Integra2 CN Analysis Only Integrated EA-IRMS, for isotopic and elemental analysis of 13C and 15N, or 34S. Includes standard source, high sensitivity source is available as an optional upgrade. Includes 70201-2 - analyser spares kit - filament, gaskets, pump oil, source tool kit, snoop and ferrules Includes 70501-3 - sample preparation kit - micro spatula, mirror, forceps, sample tray and syringe Windows based PC and printer	60,000.00	60,000.00
1	INST	Installation and start up training at Customer's site	6,960.00	6,960.00
		Special Payment Terms 30% at order, 20% at shipment, and 50% after installation		

This quotation is issued in		Pound Sterling
Total Net Amount	£	66,960.00
Total VAT Amount	£	0.00
Order Total	£	66,960.00

*** 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.

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

IBAN: GB74NWBK54101736755133
SWIFT/BIC: NWBKGB2LXXX

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

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3 - MACHINE SPECIFICATION

Client:	College of Agriculture C/O: Saram International		
Quotation Number:	14982	Date:	01/01/2021
Job Number:	IN1251	Date:	19/01/2021

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.)*	*Y*
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	

*** When ordered alone IN no. / Blue book **NOT** required

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Job Number:	IN1251	Date:	19/01/2021

Ref No.	Product Description	Required
GC Units ***continued***		
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 (Inc.With ABCA2)*	
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 Helicobacter pylori infection*	
SC9974	*Helicobacter Test kit for children age 3-11 (45mg)*	
Integra2 Units		
20802/4	Integra2	Y
70201-2	*Integra2 analyser spares kit - Included*	*Y*
70401-1	*Integra-2 consumables (Inc. With Integra2)*	
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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3 - MACHINE SPECIFICATION

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Job Number:	IN1251	Date:	19/01/2021

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	Y
WARR2	2 year warranty	
TRAIN	Training in UK for one person for 3 days	
SCONTRACT	Maintenance Service Contract – 1 year	

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Client:	College of Agriculture C/O: Saram International		
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Job Number:	IN1251	Date:	19/01/2021

SPECIFICATION REQUIREMENTS		
Voltage	230 Volts 50/60Hrzs	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	
	Complies with all Export Requirements	Y

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Job Number:	IN1251	Date:	19/01/2021

SPECIAL REQUIREMENTS (DETAILED SPECIFICATION)

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Client:	College of Agriculture C/O: Saram International		
Quotation Number:	14982	Date:	01/01/2021
Job Number:	IN1251	Date:	19/01/2021

No.	ACTIONS FROM MEETING	ACTIONEE	RESPONSE

Saram
Saram International Co., Ltd.

Purchase Order

TO : Sercon Limited
garry.armstrong@sercongroup.com & sales@sercongroup.com

PO No. : SARAM2021-PO0119A-SCN
Ref document: 14982
Date : 'JAN.19.2021

1. Payment Term T/T 30% at order, 20% at shipment, and 50% after installation
2. Delivery Term Exworks Sercon UK
3. Delivery Address Colleage of agriculture and life sciences, Jeonnam (Chonnam) National University
   Bldg #1, 77 Yongbong-ro, Buk-gu, Gwangju, 61186, South Korea (tel:+82 2 3402 0518)
4. Time of shipment within three months after PO

We are pleased to issue the Purchase Order as follows.

Total Price **£ 66,960.00** (Currency: GBP)

NO.	Product Description	Q'ty	Unit Price	Amount	Remarks
1	20802/4 Integra2 CN Analysis Only Integrated EA-IRMS, for isotopic and elemental analysis of 13C and 15N, or 34S. Includes standard source, high sensitivity source is available as an optional upgrade.	1	£60,000.00	£60,000.00	
2	70201-2 - analyser spares kit - filament, gaskets, pump oil, source tool kit, snoop and ferrules	1	Included		
3	70501-3 - sample preparation kit - micro spatula, mirror, forceps, sample tray and syringe Windows based PC and printer	1	Included		
4	INST Installation and start up training at Customer's site	1	£6,960.00	£6,960.00	
TOTAL AMOUNT				**£**	**66,960.00**

Signed By

President / June Yoo

Saram International Co., Ltd.
B1019, F10, 167, Songpa-daero, Songpa-gu, Soeul, 05855 Republic of Korea (tel:+82 2 3402 0518)

988 | LHR | 2680 6500 HOUSE AIRWAYBILL UKEA210254

Shipper's Name and Address
SERCON LIMITED
UNIT 3B, CREWE TRADE PARK
GATEWAY
CW1 6JT CREWE, CHESHIRE
UNITED KINGDOM
TEL: +44 (0) 1270 580008

Shipper's Account Number

Not negotiable
Air Waybill CARGO KING (U.K.) LIMITED
450 BATH ROAD,
LONGFORD,
Issued by UB7 0EB HEATHROW,
UNITED KINGDOM

Copies 1, 2 and 3 of this Air Waybill are originals and have the same validity

Consignee's Name and Address
CHONNAM NATIONAL UNIVERSITY
BLDG. 1, 77, YONGBONG-RO
BUK-GU
61186 GWANGJU
KOREA, REPUBLIC OF

Consignee's Account Number

It is agreed that the goods described herein are accepted in apparent good order and condition (except as noted) for carriage SUBJECT TO THE CONDITIONS OF CONTRACT ON THE REVERSE HEREOF. ALL GOODS MAY BE CARRIED BY ANY OTHER MEANS MEANS INCLUDING ROAD OR ANY OTHER CARRIER UNLESS SPECIFIC CONTRARY CONTRARY INSTRUCTIONS ARE GIVEN HEREON BY THE SHIPPER, AND SHIPPER AGREES THAT THE SHIPMENT MAY BE CARRIED VIA INTERMEDIATE STOPPING PLACES WHICH THE CARRIER DEEMS APPROPRIATE. THE SHIPPER'S ATTENTION IS DRAWN TO THE NOTICE CONCERNING CARRIER'S LIMITATION OF LIABILITY. Shipper may increase such limitation of liability by declaring a higher value for carriage and paying a supplemental charge if required.

Issueing Carrier's Agent Name and City
CARGO KING (U.K.) LIMITED
450 BATH ROAD,
LONGFORD,
UB7 0EB HEATHROW,

Agent's IATA Code
91-4 7553 0005

Account No.

Airport of Departure (Addr. of First Carrier) and Requested Routing
LONDON HEATHROW

Accounting Information
NOTIFY:
ILYANG EXPRESS
ILYANG BLDG.
299 DONGMAK-RO
04151 MAPO-GU, SEOUL
KOREA, REPUBLIC OF
TEL: 82 2 710 5840

To	By First Carrier / Routing and Destination	To	By	To	By
	ASIANA AIRLINES			ICN	

Currency	CHGS Code	WT/VAL PPD	WT/VAL COLL	Other PPD	Other COLL	Declared Value for Carriage	Declared Value for Customs
GBP			CC		CC	NVD	NCV

Airport of Destination
INCHEON

Flight/Date (For Carrier Use Only)
OZ0522/17

Amount of Insurance
INSURANCE:If Carrier offers insurance,and such insurance is requested in accordance with conditions on reverse hereof, indicate amount to be insured in figures in box marked 'Amount of Insurance'

Handling Information
-SPX- CARGO SECURITY DECLARATION ATTACHED TO AWB. ALL DOCS.ATT.TO AWB - PLS CTC.CNEE.IMM.UPON ARR.

SCI: X

No of Pieces RCP	Gross Weight	kg/lb	Rate Class / Commodity Item No	Chargeable Weight	Rate / Charge	Total	Nature and Quantity of Goods (incl. Dimensions or Volume)
2	223.0	K		223.0		AS AGREED	EA-IRMS INSTRUMENT INV#: 14982 PO#: SARAM2021-PO119A-SCN EX WORKS FREIGHT COLLECT DIMS: 1@99X86X108CM, 1@65X65X98CM

Prepaid	Weight Charge	Collect
	AS AGREED	

Valuation Charge

Tax

Other Charges

Total Other Charges Due Agent

Total Other Charges Due Carrier

Shipper certifies that the particulars on the face hereof are correct and that **insofar as any part of the consignment contains dangerous goods, such part is properly described by name and is in proper conditions for carriege by air according to the applicable Dangerous Goods Regulations.**

CARGO KING (U.K.) LIMITED

Signature of Shipper or his Agent

Total Prepaid	Total Collect
	AS AGREED

dos# : UKEA210254

Currency Conversion Rates	CC Charges in Dest. Currency

14 APR 2021 LHR AE

Executed on (Date) at (Place) Signature of Issuing Carrier or its Agent

For Carrier's Use only at Destination	Charges at Destination	Total Collect Charges

UKEA210254