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Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

- ☐ 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_S031_v6 ✓
- ☐ 7 ASSEMBLY AND TEST RECORD_S023_v5 ✓
- ☐ 8 SERIAL NUMBER FORM_S053_v4 ✓
- ☐ 9 TEST DATA n/a
- ☐ 10 PACKING LIST_S080b_v3 ✓
- ☐ 11 INSTALLATION REPORT_S084_v3 ✓

ADDITIONAL:

Payment Terms:

50% / 40% / 10%

Other: please specify

Penalty Clause Yes / No

Please specify: _____

Blue Book Completion:

Signed	<i>S. Adels</i>	Date	7/8/22
Verified	<i>Go' corner</i>	Date	7/8/22

Quotation

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

VAT Reg No: KR

Quotation Date: 23/03/2022
Quotation Reference: 16156
Customer Ref: KAERI
Account Ref: SAR001
Quotation Validity: 29/06/2022

Quantity	Product Code	Product Description	Unit Price £	Net Price £
Agent Pricing				
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 and printer	44,550.00	44,550.00
1	SI1767	CVL505 - Barcode Reader Bar code reader for error free sample loading, secure patient identification and GLP compliance.	1,071.00	1,071.00
1	WARR2	2 year warranty		
1	INST	Installation and start up training at Customer's site	7,500.00	7,500.00
1	CIP	Estimated CIP - Destination Airport	2,000.00	2,000.00

*** 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.

This quotation is issued in Pound Sterling

Total Net Amount	£	55,121.00
Total VAT Amount	£	0.00
Order Total	£	55,121.00

Sercon Bank Details:-

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

IBAN: GB74NWBK54101736755133
 SWIFT/BIC: NWBKGB2LXXX



Purchase Order

TO : Sercon limited

PO NO. : SR2022-P0330-E001_SCN

Ref. NO. : Q16156

Date : Mar. 30. 2022

Contact to : kimberly.son@sa-ram.com

1. Payment Term 50% with order, 40% on delivery and 10% on installation
2. Delivery Term CIP Incheon Airport in Korea
3. Delivery Address Saram International Co., Ltd.
B1019, F10, 167, Songpa-daero, Songpa-gu, Seoul, 05855, Repeblic of Korea
(tel : +82 2 3402 0518)
4. Delivery within 90 days of receipt of order
5. Remark

We are pleased to issue the Purchase Order as follows.

Total Price £ 55,121.00

(Currency :£)

NO.	Product Description	Q'ty	Unit Price	Amount	Remarks
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 and printer	1	£ 44,550.00	£ 44,550.00	
2	SI1767 CVL505 - Barcode Reader Bar code reader for error free sample loading, secure patient identification and GLP compliance.	1	£ 1,071.00	£ 1,071.00	
3	WARR2 2 year warranty				
4	INST Installation and start up training at Customer's site	1	£ 7,500.00	£ 7,500.00	
5	CIP Estimated CIP - Destination Airport	1	£ 2,000.00	£ 2,000.00	
TOTAL AMOUNT				£ 55,121.00	

end-user :KAERI

Signed By

President / June Yoo

Saram International Co., Ltd.

B1019, F10, 167, Songpa-daero, Songpa-gu, Seoul, 05855, Repeblic of Korea

Tel: +82-(0)2-3402-0518 | Fax: +82-(0)2-3401-0518

e-mail: saram@sa-ram.com | http://www.sa-ram.com

3 - MACHINE SPECIFICATION

Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

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	

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Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

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 (Inc. With ABCA2)	Y
70101-2	ABCA2 Spares Kit for AB Analytica 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 (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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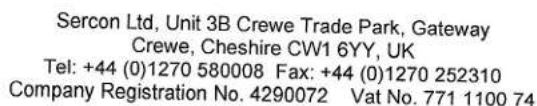
21802/3	GEO 20-22 + E-Mag +Hd	
21802/4	GEO 20-22 Inlet	
70301-1	GEO start up kit - Included	
70301-3E	Comprehensive GEO 20-22 spares kit for 5 years operation	
HT-EA		
11501/4	HT-EA (With Autosampler)	
11501/5	HT-EA With Liquid Option	
11501/6	HT-EA Stand Alone	
11501/7	HT-EA (Without Autosampler)	
SI2622	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:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

SPECIFICATION REQUIREMENTS		
Voltage	220 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	



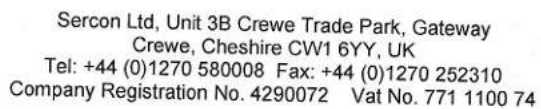
Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

S028_v3

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

Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

[illegible]



Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

S028_v3

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Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

[illegible]



innovators in isotopes

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

Fault reporting - 5

5 - FAULT REPORTING

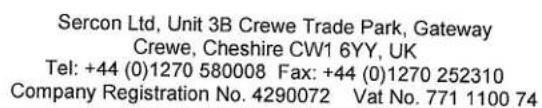
Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

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Company Registration No. 4290072 Vat No. 771 1100 74

Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

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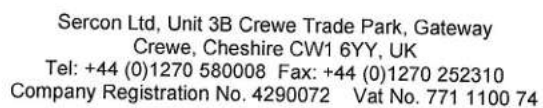
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Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

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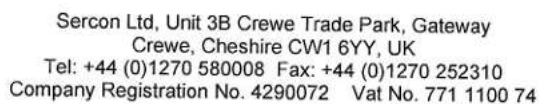
Sercon Ltd, Unit 3B Crewe Trade Park, Gateway
Crewe, Cheshire CW1 6YY, UK
Tel: +44 (0)1270 580008 Fax: +44 (0)1270 252310
Company Registration No. 4290072 Vat No. 771 1100 74

Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

S029_v3

[illegible]

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



Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
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[illegible]

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

Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

[illegible]

6 - ABCA2 TEST / ACCEPTANCE SPECIFICATION

Customer:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022
Unit Serial Number			
Gas Box Serial Number			
Autosampler Serial Number			

¹³ C				
Ref Gas Injection Precision	100% CO ₂ (n=5)	≤0.1‰	Test ☒	Install ☐
		RECORD VALUE HERE 0.02	Sheet 1	Sheet —
Ref gas in tubes precision	10ml 5% CO ₂ (n=5)	≤0.1‰	Test ☒	Install ☐
		RECORD VALUE HERE 0.06	Sheet 2	Sheet —
Breath Precision	Breath in Exetainer (n=5)	≤0.2‰	Test ☒	Install ☐
		RECORD VALUE HERE 0.12	Sheet —	Sheet —
Sensitivity	10ml 5% CO ₂ in Exetainer	Major beam 5e-9 with trap of 150	Test ☒	Install ☐
		RECORD VALUE HERE	Sheet 2	Sheet —
Linearity	0.5% - 8.0% CO ₂ in Exetainer	≤0.3 ‰ change	Test ☒	Install ☐
		RECORD VALUE HERE 0.14	Sheet 4	Sheet —
Peak Shape	Beam 1,2 and 2/1	Minimum 5V wide 2/1. Gradient acceptable due to single turbo pump	Test ☒	Install ☐
			Sheet 5	Sheet —
Stability	2/1 ratio over 600 seconds	Flat, no spikes or variations. Slight gradient acceptable	Test ☒	Install ☐
			Sheet 6	Sheet —
Software Test	All read backs Valves function Autosampler bed CETAC Firmware Version No.:	☒ ☒ ☒	Date	Initial

 Flow Meter S/N RE 102794 Leak Detector S/N 118444

 Multi-Meter S/N MCA1073973

Special Tests

Linearity to be better than 0.3‰ and recorded ✓

 Sales Signature: Galcener (Required)

 Date: 19/07/22

 Test Signature: Steven Bennett (Completed)

 Date: 19-07-22

 Install Signature: R. Kany (Completed)

 Date: 7/8/22

Data to be transferred to:

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

7: ASSEMBLY AND TEST RECORD

Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

PRODUCT:

ABCA 2

SERIAL NUMBER:

20602/2022/1280.

 ASSEMBLED:
 (Name)

James Hume

Date:

14/6/22

 PRE-TEST
 INSPECTION:
 (Production name)

P. Hays

Date:

14/6/22

 PRE-TEST
 INSPECTION:
 (Test name)

Steven Bennett

Date:

21/7/22

 SYSTEM TEST:
 (Name)

Steven Bennett

Date:

21/7/22

 PRE-DESPATCH
 INSPECTION:
 (Name)

Abur Hays

Date:

22/7/22

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

>300 $M\Omega$

Earth Leakage Current

0.80 mA. @ 0.05 kVA.

Tested by:

P. Hays

Date:

14/6/22

Amir

James

Date: 17/05/2022
Time: 15:06:03

Sercon Limited

Page: 1

Batch Picking List

Works Order Number WO01485
BOM Reference 20602/1
BOM Description ABCA2 220-240 VOLTS (E)
Qty Required 1.000
Qty Outstanding 1.000
Manuf.Instructions
Works Order Notes

Sales Order No.

Quantity DueDate

Entered in 25/7/22

Drawings

<u>Reference/Description</u>	<u>Valid From</u>	<u>Valid To</u>	<u>Revision Number</u>	<u>Date</u>
------------------------------	-------------------	-----------------	------------------------	-------------

Required By

<u>Works Order No.</u>	<u>BOM Reference</u>	<u>Quantity</u>
------------------------	----------------------	-----------------

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	20101 Standard Source Assy	1.000	0.000	0.000	1.000	MARKS OFFICE Each
20.00	20301 Standard Collector Assy	1.000	0.000	0.000	1.000	MARKS OFFICE Each
30.00	41903 Three channel 100M/5G/5G amp assy	1.000	0.000	0.000	1.000	D-U1 Each
40.00	70101/12 20-22 Source Cable	1.000	0.000	0.000	1.000	B-H1 Each
50.00	70101/13 Standard Head Amp Cable	1.000	0.000	0.000	1.000	B-H1 Each
60.00	SI0006 20-20 Single Pump Flight Tube	1.000	0.000	0.000	1.000	D-Z Each
70.00	SI0022 Capillary Crimp Parts A & B	1.000	0.000	0.000	1.000	B-I4 Each
80.00	SI0048 Magnet Adjusting Screw	3.000	0.000	0.000	3.000	B-I3 Each
90.00	SI0049 Big Magnet Adjusting Foot	1.000	0.000	0.000	1.000	B-I3 Each
100.00	SI0050 Magnet Foot	2.000	0.000	0.000	2.000	B-I3 Each
110.00	SI0101 Columax Magnet	1.000	0.000	0.000	1.000	D-V4 Each
120.00	SI0112 NW10/16 Clamping Ring Stainless Steel - Edwards	1.000	0.000	0.000	1.000	D-Z5 Each
130.00	SI0113 NW10/16 Adapt/Cent Viton® SS - Edwards	1.000	0.000	0.000	1.000	D-Z5 Each
140.00	SI0204 Bulkhead Union 1/16 SS	3.000	0.000	0.000	3.000	B-J7 Each

Batch Picking List

150.00	SI0344	3.000	0.000	0.000	3.000	B-H5
	2P red illum round rocker swithc, 10A					Each
160.00	SI0346	1.000	0.000	0.000	1.000	B-H3
	SPCO Plug-in Power Relay, 10A 24V DC Coil					Each
170.00	SI0347	1.000	0.000	0.000	1.000	B-H3
	DIN Rail Socket For SPCO G2R-1 Relay					Each
180.00	SI0355	1.000	0.000	0.000	1.000	B-H3
	DPCO Plug-in Relay, 10A 24V DC Coil					Each
190.00	SI0373	1.000	0.000	0.000	1.000	B-H9
	34 Way IDC Header DIN Rail Terminal					Each
200.00	SI0374	4.000	0.000	0.000	4.000	B-H6
	Connector, Terminal, Screw, Single Pole, Interlocking, Tab/Tab					Each
210.00	SI0375	2.000	0.000	0.000	2.000	B-H6
	Connector, Terminal, Screw, Single Pole, Interlocking, End Plate					Each
220.00	SI0376	1.000	0.000	0.000	1.000	B-H3
	DIN/Surface Socket For 6A DPCO Relay					Each
230.00	SI0385	1.000	0.000	0.000	1.000	D-X4
	25 Way Machine Cont Straight D Skt, 750Vac					Each
240.00	SI0388	1.000	0.000	0.000	1.000	D-X4
	9 Way Machine Cont Straight D Skt, 750Vac					Each
250.00	SI0508	1.000	0.000	0.000	1.000	B-H9
	TIS DIN Rail Univ Input SMPSU 24V 300W					Each
260.00	SI0534	1.000	0.000	0.000	1.000	B-H9
	3307 Telescopic Slide 457mm L 483mm					Each
270.00	SI0570	2.000	0.000	0.000	2.000	D-X4
	15 way Solder Contact ZD skt 5A 1000 Vac					Each
280.00	SI0630	7.000	0.000	0.000	7.000	B-H7
	Axial fan finger guard 80Hx80Wmm					Each
290.00	SI0631	1.000	0.000	0.000	1.000	D-X4
	9 Way D Hood					Each
300.00	SI0632	1.000	0.000	0.000	1.000	D-X4
	15 Way D Hood					Each
310.00	SI0687	1.000	0.000	0.000	1.000	B-J5
	1/8" PTFE Ferrules - Blank					Each
320.00	SI0697	1.000	0.000	0.000	1.000	B-K3
	MOVPT-1-50 Pneumatic Valve					Each
330.00	SI0703	1.000	0.000	0.000	1.000	B-J5
	1/8-1/16" PTFE Reducing Ferrule					Each
340.00	SI0756	10.000	0.000	0.000	10.000	D-W1
	Connector, Crimp Terminal, Adaptor, Male-Male					Each
350.00	SI0762	0.200	0.000	0.000	0.200	B-J6
	PSR16-16 PTFE Sealing Rings Pk/20					Each

Batch Picking List						
360.0	SI0777 Spacer,circular,Nylon,M4,tapped/studded,25mm	4.000	0.000	0.000	4.000	D-W3 Each
370.0	SI0793 Fan,axial,DC,80mm sqx15mm,3000rpm,53.0cu.m/h 24V	7.000	0.000	0.000	7.000	B-H7 Each
380.0	SI0895 Blue Cat5e UTP patch lead, 2m	1.000	0.000	0.000	1.000	B-H1 Each
390.0	SI0900 25 Way D Hood	1.000	0.000	0.000	1.000	D-X4 Each
400.0	SI0903 I.E.C Socket Mount	1.000	0.000	0.000	1.000	B-H5 Each
410.0	SI0960 IEC Cord - Plug	1.000	0.000	0.000	1.000	B-I2 Each
420.0	SI0961 IRMS Electronics, basic unit plus Clk/Handshake PCB	1.000	0.000	0.000	1.000	D-V3 Each
430.0	SI1004 Right-Angled Bracket 25mm	1.000	0.000	0.000	1.000	D-W3 Each
440.0	SI1241 Solenoid Valve.3-Port.	1.000	0.000	0.000	1.000	B-J4 Each
450.0	SI1244 Seal Kit	1.000	0.000	0.000	1.000	B-J3 Each
460.0	SI1245 SOL Cable	1.000	0.000	0.000	1.000	B-J3 Each
470.0	SI1246 2-Station Manifold - M5	1.000	0.000	0.000	1.000	B-J2 Each
480.0	SI1255 M5 Plug	1.000	0.000	0.000	1.000	B-J3 Each
490.0	SI1328 FN9222 Screw mount inlet filter, 15A	1.000	0.000	0.000	1.000	B-H4 Each
500.0	SI1329 RPS-60 Series SMPSU, 24V 2.5A	1.000	0.000	0.000	1.000	B-H5 Each
510.0	SI1330 Cover kit for 2x4inch power supplies	1.000	0.000	0.000	1.000	B-H5 Each
520.0	SI1331 Connector kit, VHR-3N,VHR-4N,BVH-21T-P1.1	1.000	0.000	0.000	1.000	B-H5 Each
530.0	SI1344 IEC connector retaining clamp kit, KT0006	2.000	0.000	0.000	2.000	B-H4 Each
540.0	SI1364 SOSS 101 Invisible Hinge 43x10mm	2.000	0.000	0.000	2.000	B-H8 Each
550.0	SI1375 Anti surge T HBC min fuse,3.15A 5x20mm	1.000	0.000	0.000	1.000	B-K7 Each
560.0	SI1418 Metal EMC screen filter, 80Hx80Wmm	3.000	0.000	0.000	3.000	B-H7 Each

Batch Picking List

570.00	SI1478 Double Flange	1.000	0.000	0.000	1.000	B-H8 Each
580.00	SI1482 34 Way IDC Bump Polarised Socket, 1A	1.000	0.000	0.000	1.000	D-X4 Each
590.00	SI1548 Anti surge T LBC min fuse, 4A 5x20mm	1.000	0.000	0.000	1.000	B-K7 Each
600.00	SI1579 Door Pin	1.000	0.000	0.000	1.000	B-H8 Each
610.00	SI1580 Source Block Stud	2.000	0.000	0.000	2.000	D-U2 Each
620.00	SI1594 15 Way D Plate	1.000	0.000	0.000	1.000	D-U3 Each
630.00	SI1595 37 Way D Plate	1.000	0.000	0.000	1.000	D-U3 Each
640.00	SI1693 Non Magnetic Catch	1.000	0.000	0.000	1.000	B-H8 Each
650.00	SI1743 ABCA 2 Cabinet	1.000	0.000	0.000	1.000	B Each
660.00	SI1758 ABCA 2 FLIGHT TUBE BASE	1.000	0.000	0.000	1.000	D-Z Each
670.00	SI1759 ABCA 2 MAGNET BASE	1.000	0.000	0.000	1.000	D-Z Each
680.00	SI1792 Jack Screw Mounting Kit	1.000	0.000	0.000	1.000	D-X4 Each
690.00	SI1793 37 Way IDC D Hood	1.000	0.000	0.000	1.000	D-X4 Each
700.00	SI1794 37 Way IDC D Socket - Metal	1.000	0.000	0.000	1.000	D-X4 Each
710.00	SI1795 37 Way IDC D Plug - Metal	1.000	0.000	0.000	1.000	D-X4 Each
720.00	SI1821 3 Port valve	1.000	0.000	0.000	1.000	B-J3 Each
740.00	SI1899 1/16 x M5 Fitting	4.000	0.000	0.000	4.000	B-J6 Each
750.00	SI1900 Dowty Seal - M5	4.000	0.000	0.000	4.000	B-J6 Each
760.00	SI1919 Power cord C13 bottom angle one end 2m	1.000	0.000	0.000	1.000	B-I2 Each
770.00	SI2288 Internal USB 4.5m	1.000	0.000	0.000	1.000	B-H2 Each
780.00	SI2289 Oil Mist Eliminator	1.000	0.000	0.000	1.000	D-Z6 Each

Batch Picking List

790.00	SI2294	1.000	0.000	0.000	1.000	D-Z5
	NW10 x 3/8" Bsp Adapter					Each
800.00	SI2304	2.000	0.000	0.000	2.000	B-H6
	Screwdriver bayonetcap fuseholder 5x20mm					Each
810.00	SI2411	1.000	0.000	0.000	1.000	B-H2
	Split cable gland					Each
820.00	SI2412	1.000	0.000	0.000	1.000	B-H2
	Quick Insert Pk 10					Each
840.00	SI2477	1.000	0.000	0.000	1.000	C
	ABCA2 Door Graphic					Each
830.00	SI2512	1.000	0.000	0.000	1.000	B-I1
	3 Metre UK 13 amp Fused plug to IEC C 13					Each
730.00	SI2662	1.000	0.000	0.000	1.000	D-Z
	nEXT85 ABCA KIT					Each

20101

20301

41903

70101/12

13

S13026 - Turbo

S13027 - CON

S13028 Small Air

29 V1U

30 Rotary

31 gauge

Henry

Date: 16/06/2022
Time: 09:37:27

Sercon Limited

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Batch Picking List

Works Order Number WO01512 Sales Order No. Quantity DueDate
BOM Reference 41903
BOM Description Three channel 100M/5G/5G amp assy
Qty Required 1.000
Qty Outstanding 1.000
Manuf.Instructions
Works Order Notes

Drawings				
Reference/Description	Valid From	Valid To	Revision Number	Date

Required By		
Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
20	SI0035 Feedthru Connector	4.000	0.000	4.000	4.000	D-X6 Each
30	SI1599 Brass Clip	4.000	0.000	4.000	4.000	D-X Each
40	SI1802 M3x8mm Hex Spacer	0.000	0.000	0.000	0.000	B-H2 Each
50	SI2235 Head Amp Plate Blank	1.000	0.000	1.000	1.000	D-U1 Each
60	SI2237 Head amp Cover	1.000	0.000	1.000	1.000	D-U1 Each
70	SI2253 Brass F-F threaded hex spacer, M3x40mm	0.000	0.000	0.000	0.000	B-H2 Each
80	SI2260 15 way IDC DIN41652 class2 D plug	0.000	0.000	0.000	0.000	B-H2 Each
90	SI2261 15 way IDC DIN41652 class2 D socket	0.000	0.000	0.000	0.000	B-H2 Each
10	SI2526 Three channel 100M/5G/5G amp pcb	1.000	0.000	1.000	1.000	D-U1 Each

James

Date: 16/06/2022
Time: 09:37:47

Sercon Limited

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Batch Picking List

Works Order Number WO01513 Sales Order No. Quantity DueDate
BOM Reference 70101/12
BOM Description 20-22 Source Cable
Qty Required 1.000
Qty Outstanding 1.000
Manuf.Instructions
Works Order Notes

Drawings				
Reference/Description	Valid From	Valid To	Revision Number	Date

Required By		
Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10	SI1127 Plug Housing, 9way	1.000	0.000	1.000	1.000	D-U2 Each
20	SI1128 Strain Relief, 9way	2.000	0.000	2.000	2.000	D-U2 Each
30	SI1157 Cable for Source	0.000	0.000	0.000	0.000	D Each
40	SI1334 Crimp pin, mate-n-lok PK/100	0.000	0.000	0.000	0.000	D-W2 Each
50	SI1476 Feedthrough Boss	1.000	0.000	1.000	1.000	D-U2 Each
60	SI1477 FeedThrough Boss Cover	1.000	0.000	1.000	1.000	D-U2 Each
70	SI1599 Brass Clip	9.000	0.000	9.000	9.000	D-X Each

James

Date: 16/06/2022

Time: 09:38:05

Sercon Limited

Page: 1

Batch Picking List

Works Order Number	WO01514	Sales Order No.	Quantity	DueDate
BOM Reference	70101/13			
BOM Description	Standard Head Amp Cable			
Qty Required	1.000			
Qty Outstanding	1.000			
Manuf.Instructions	To be used on HD cable for 20/22.1 METER LONG ABCA/2 2 METERS LONG. INTEGRA/2 1.2 METERS LONG.			
Works Order Notes	To be used on HD cable for 20/22.1 METER LONG ABCA/2 2 METERS LONG. INTEGRA/2 1.2 METERS LONG.			

Drawings				
Reference/Description	Valid From	Valid To	Revision Number	Date

Required By		
Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10	SI0567 15 Way Solder Contact ZD Plug 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each
20	SI0570 15 way Solder Contact ZD skt 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each
30	SI0632 15 Way D Hood	2.000	0.000	2.000	2.000	D-X4 Each
40	SI2439 6 Pair Twisted Pair Industrial Cable	0.000	0.000	0.000	0.000	Each

7: ASSEMBLY AND TEST RECORD

Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

PRODUCT:

verSA 1

SERIAL NUMBER:

 60101/1-2022/1280
~~20602/1-2022/1280~~ PH. 21/7/22

 ASSEMBLED:
 (Name)



Date:

14/6/22

 PRE-TEST
 INSPECTION:
 (Production name)



Date:

14/6/22

 PRE-TEST
 INSPECTION:
 (Test name)



Date:

21/7/22

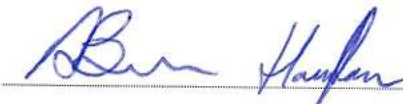
 SYSTEM TEST:
 (Name)



Date:

21/7/22

 PRE-DESPATCH
 INSPECTION:
 (Name)



Date:

22/7/22

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:

Date: 18/05/2022
Time: 09:50:24

Sercon Limited

Page: 1

Batch Picking List

Works Order Number WO01486
BOM Reference 60101/1
BOM Description verSA 1 (ABCA XYZ Autoamplifier)
Qty Required 1.000
Qty Outstanding 1.000
Manuf.Instructions
Works Order Notes

Sales Order No.

Quantity DueDate

Done in 25/7/22

Drawings

Reference/Description	Valid From	Valid To	Revision Number	Date
-----------------------	------------	----------	-----------------	------

Required By

Works Order No.	BOM Reference	Quantity
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Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10	SC2463 10ml Gas Tight Syringe	1.000	0.000	1.000	1.000	B-K3 Each
20	SI0022 Capillary Crimp Parts A & B	2.000	0.000	2.000	2.000	B-I4 Each
30	SI0060 Piston	1.000	0.000	1.000	1.000	B-K2 Each
40	SI0070 Syringe Adaptor	1.000	0.000	1.000	1.000	B-K2 Each
50	SI0071 Syringe Coupling	1.000	0.000	1.000	1.000	B-K2 Each
60	SI0196 Reducing Union 1/4 OD x 1/16 OD SS	2.000	0.000	2.000	2.000	B-J7 Each
70	SI0198 Tee Union 1/16 SS	3.000	0.000	3.000	3.000	B-J7 Each
80	SI0199 Male Connector 1/16 OD x 1/8 NPTM SS	8.000	0.000	8.000	8.000	B-J7 Each
90	SI0204 Bulkhead Union 1/16 SS	4.000	0.000	4.000	4.000	B-J7 Each
100	SI0205 Bulkhead Union 1/8 SS	2.000	0.000	2.000	2.000	B-J7 Each
110	SI0341 SPST Blue Visi Rocker switch, 6(4)A	1.000	0.000	1.000	1.000	B-T3 Each
120	SI0366 Flow Meter AWM3100V	1.000	0.000	1.000	1.000	B-J3 Each
130	SI0567 15 Way Solder Contact ZD Plug 5A 400 Vac	2.000	0.000	2.000	2.000	D-X4 Each
140	SI0568 37 Way Solder Contact ZD Plug , 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each

Batch Picking List

150	SI0570 15 way Solder Contact ZD skt 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each
160	SI0632 15 Way D Hood	2.000	0.000	2.000	2.000	D-X4 Each
170	SI0648 M3x13mm Nylon Pillar Male-Female,	2.000	0.000	2.000	2.000	D-W3 Each
180	SI0701 PTFE Ferrules 1/4" (RE21128/214400)	2.000	0.000	2.000	2.000	B-J7 Each
190	SI0703 1/8-1/16" PTFE Reducing Ferrule	4.000	0.000	4.000	4.000	B-J5 Each
200	SI0708 SSUE 16/16 Stainless Steel Union Pk/1	1.000	0.000	1.000	1.000	B-J9 Each
210	SI0762 PSR16-16 PTFE Sealing Rings Pk/20	0.200	0.000	0.200	0.200	B-J6 Each
220	SI0767 6 Way VALCO	1.000	0.000	1.000	1.000	B-K6 Each
230	SI0837 Perma Pure Dryer	1.000	0.000	1.000	1.000	B-K3 Each
240	SI0883 M3x30mm Nylon Spacers Male-Female Pk/50	0.100	0.000	0.100	0.100	D-W3 Each
250	SI0926 0/60 psi Gauge	2.000	0.000	2.000	2.000	B-K3 Each
260	SI0971 6 way Ni finish screen DIN chassis socket	1.000	0.000	1.000	1.000	B-T3 Each
270	SI1043 Black steel spring clip, 5/8in	4.000	0.000	4.000	4.000	D-W3 Each
280	SI1052 3 Way MOLEX Clip	1.000	0.000	1.000	1.000	B-J2 Each
290	SI1186A O-Ring Seals for Syringe Plunger Pk/1	1.000	0.000	1.000	1.000	B-K3 Each
300	SI1187A Syringe Block O-Ring (for Gas Box) Pk/1	1.000	0.000	1.000	1.000	B-K3 Each
310	SI1242 2 Way Solenoid Valve	3.000	0.000	3.000	3.000	B-J4 Each
320	SI1245 Cable for mini solenoid valve	4.000	0.000	4.000	4.000	B-J3 Each
330	SI1251 Solenoid Valve (Autosampler)	2.000	0.000	2.000	2.000	B-J3 Each
340	SI1535 1 Way Ref Gas Manifold	2.000	0.000	2.000	2.000	B-J2 Each
350	SI1603 Bulkhead fitting 4 to 1/8	1.000	0.000	1.000	1.000	B-K5 Each

Batch Picking List

360	SI1604 Male Conn 1/8-UNI 1/8	1.000	0.000	1.000	1.000	B-K5 Each
370	SI1720 Speed Controller 1/8-4mm Tube	2.000	0.000	2.000	2.000	B-K5 Each
380	SI1774 1/8 Female Coupling BSP	2.000	0.000	2.000	2.000	B-J9 Each
390	SI1784 4mm Y Fitting	1.000	0.000	1.000	1.000	B-K5 Each
400	SI1787 ABCA2 Sample Racks	5.000	0.000	0.000	5.000	Each
410	SI1792 3342-2 jack screw mounting kit	2.000	0.000	2.000	2.000	D-X4 Each
420	SI1793 37 way IDC flat cable plastic D backshell	2.000	0.000	2.000	2.000	D-X4 Each
430	SI1794 37 way IDC class 2 metal shell D socket	1.000	0.000	1.000	1.000	D-X4 Each
440	SI1795 37 way IDC class 2 metal shell D plug	1.000	0.000	1.000	1.000	D-X4 Each
450	SI1821 3 Port valve	2.000	0.000	2.000	2.000	B-J3 Each
460	SI1829 Metal spacer M4x20mm	2.000	0.000	2.000	2.000	D-W3 Each
470	SI1899 1/16 x M5 Fitting	14.000	0.000	14.000	14.000	B-J6 Each
480	SI1900 Dowty Seal - M5	14.000	0.000	14.000	14.000	B-J6 Each
490	SI2078 Right Angle Bracket	1.000	0.000	1.000	1.000	D-W3 Each
500	SI2244 Male Elbow 4mm to M5	8.000	0.000	4.000	8.000	B-K4 Each
510	SI2296 Precision Flow Control	2.000	0.000	2.000	2.000	B-J4 Each
520	SI2307 60 psi Regulator	2.000	0.000	2.000	2.000	B-J4 Each
530	SI2329 Double acting roundline cylinder, 20x25mm	1.000	0.000	1.000	1.000	B-K2 Each
540	SI2330 Rear clevis for 20/25mm cylinder	1.000	0.000	1.000	1.000	B-K2 Each
550	SI2515 µCarbs Single Needle	1.000	0.000	1.000	1.000	A-G1 Each
560	SI2542 ABCA2 Upgrade Kit	1.000	0.000	1.000	1.000	A-D2 Each

Batch Picking List

570	SI2971 150 ELECTRIC ACTUATOR WITH SCREW DRIVE	1.000	0.000	1.000	1.000	Each
580	SI2973 300 ELECTRIC ACTUATOR WITH SCREW DRIVE	1.000	0.000	1.000	1.000	Each
590	SI2974 300 SUPPORT GUIDE FOR ELECTRIC ACTUATOR	1.000	0.000	1.000	1.000	Each
600	SI3012 450 ELECTRIC ACTUATOR WITH SCREW DRIVE	1.000	0.000	1.000	1.000	Each
610	SI3022 24Volt 250W AC/DC PSU	1.000	0.000	1.000	1.000	Each
620	SI3039 StarTech 7x USB A Port Hub, USB 3.0 - Terminal Connector	1.000	0.000	1.000	1.000	Each
630	SI3040 StarTech1 Port USB 3.0 Ethernet Adapter, 10/100/1000Mbit/s	1.000	0.000	1.000	1.000	Each
640	SI3041 Panel Mount Socket to Socket Type B to A 3.0	1.000	0.000	1.000	1.000	Each
650	SI3042 Cat6 Ethernet Cable, RJ45 to RJ45 300mm	1.000	0.000	1.000	1.000	Each
660	SI3043 Ethernet Cable, Cat6a, 150 mm, 5.9 ", RJ45 Plug to RJ45 Plug	2.000	0.000	2.000	2.000	Each
670	SI3044 ABCA XYZ Assy.	1.000	0.000	0.000	1.000	Each
680	SI3049 Des 10 Cable Entry frame (2 rows of 3 inserts)	1.000	0.000	1.000	1.000	Each
690	SI3050 Despred 32 Spilt gland and Lock nut.	1.000	0.000	1.000	1.000	Each
700	SI3051 SPP 3G Single insert 3-4mm grey.	1.000	0.000	1.000	1.000	Each
710	SI3052 SPP 5G single insert 5-6mm grey	3.000	0.000	3.000	3.000	Each
720	SI3053 SPP 6G single insert 6-7mm grey	2.000	0.000	2.000	2.000	Each
730	SI3055 SPP 2X6G double insert 2 x 6mm grey	1.000	0.000	1.000	1.000	Each
740	SI3060 verSA 1 (ABCA GAS BOX CASING)	1.000	0.000	1.000	1.000	Each
750	SI3061 GREEN 24V LED INDICATOR	1.000	0.000	0.000	1.000	Each
760	SI3062 USB RS232-PCBA	2.000	0.000	0.000	2.000	Each
770	SI3063 Male USB A to Male USB B Cable, USB 3.0, 3m	1.000	0.000	0.000	1.000	Each

Batch Picking List

S11787 Sample Racks 210

S13044 ABCA ~~1/2~~ ASSY - 1.

S13061

S11170



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

Serial Numbers - 8

8 - Serial Numbers Record Document

Client:	KAERI C/O: Saram International Co. Ltd		
Quotation Number:	16156	Date:	23/03/2022
Job Number:	IN1280	Date:	30/03/2022

Units	S/N
MS/ABCA	20602/2022/1280
Integra 2	
Prep Unit 1	
Prep Unit 2/Misc	
Electronics Upgrade	
GETAC	60101/-2022/1280
Gas Box	
Autosampler	
BCR	
Dual Heater Block	

Pump Kit and Optics	S/N
Turbo pump S	IT22196056
Turbo pump A	
Rotary Pump	JP2140U011
Voltage	110 / 240
Gauge S	L12148F234
Gauge A	
Source	20101-194
Collector 1	20301-115
Collector 2	
Magnet	23/5/22 (8)

Parts	S/N
Fan PSU	
24V PSU	

PCBs	S/N
Electronics Box	20220005
Prep PCB	
VFC PCB	
Watchdog PCB	
Head Amp PCB 1	22011
Head Amp PCB 2	
Electromagnet RP	

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

PC	S/N
PC	9JMCWP3
Monitor	5YWCWB3
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: SR2022-P0330-E001_SCN

Shipper / Exporter:

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

Tel: +44 (0) 1270 580008
Reference: IN1280

Consignee:

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

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

BOX: 1

Quantity	Product Code	Product Description	Serial Number: if available
☒ 1	20602/1	ABCA 2	20602/2022/1280

Packed by:

Date:

[Signature]
22.7.22

Claims for damage or shortages must be made within 3 days

Packing List

Reference: SR2022-P0330-E001_SCN

Shipper / Exporter:

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

Consignee:

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

Tel: +44 (0) 1270 580008
 Reference: IN1280

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

BOX: 2

Quantity	Product Code	Product Description	Serial Number: if available
✓ 5		Versa racks	
✓ 1	SI0103	Rotary Pump	JP2140V011
✓ 1	SI0101	Permanent Magnet + feet	23/5/22 8
✓ 3		Mains Cables	
✓ 1	SI0155	PC	9JMCWP3
✓ 1	SI2391	Monitor	5YWCWB3
✓ 1	70101-1	ABCA Spares Kit	
✓ 1		UBS software and manuals inside PC box	
✓ 1		UBS windows recovery inside PC box	
✓ 1		Versa power supply inside mains cable box	
✓ 1		Versa needle	

Packed by:

Date:

Handwritten signature
 22.7.22

Claims for damage or shortages must be made within 3 days

Packing List

Reference: SR2022-P0330-E001_SCN

Shipper / Exporter:

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

Tel: +44 (0) 1270 580008
Reference: IN1280

Consignee:

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

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

BOX: 3

Quantity	Product Code	Product Description	Serial Number: if available
☒	60101/1	VERSA 1	60101/1-2022/1280

Packed by:



Date:

22.7.22

Claims for damage or shortages must be made within 3 days

Packing List

Reference: SR2022-P0330-E001_SCN

Shipper / Exporter:

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

Tel: +44 (0) 1270 580008
Reference: IN1280

Consignee:

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

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

BOX: Dimensions and weights

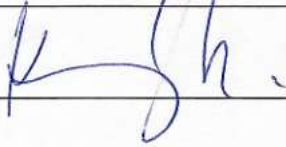
	<u>L</u>	<u>W</u>	<u>H</u>	
Box 1	<u>166 cm</u>	<u>68 cm</u>	<u>100 cm</u>	<u>94 kg</u>
Box 2	<u>100 cm</u>	<u>85 cm</u>	<u>67 cm</u>	<u>67.4 kg</u>
Box 3	<u>100 cm</u>	<u>85 cm</u>	<u>110 cm</u>	<u>76.3 kg</u>



ABCA2 Installation Acceptance Certificate

Job no.:	IN 1280
Customer:	KAERI, Daejeon city, Republic of Korea
Address	Daejeon city, Republic of Korea
Contact:	MJ KIM, Saram International co., ltd
System:	ABCA 2 + Versa 1
ABCA2 Serial Number	20602/2022/1280
Gas Box Serial Number	60101/1-2022/1280
Autosampler Serial Number	60101/1-2022/1280
Software:	V800.7.0.20196
Engineer:	Robert Kameny
Installation Start Date:	29.8.2022
Installation Completion Date:	2.9.2022
Maintenance Required by Date:	1.9.2023
Delivery Date:	7 th August 2022
Warranty Commences:	2.9.2022
Warranty Expires:	1.9.2023
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:	2.9.2022
Engineer's Signature		Date:	2.9.2022

Sercon Ltd

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Gateway, Crewe, Cheshire
CW1 6JT United Kingdom

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S084_v3



¹³C			
Ref Gas Injection Precision	100% CO ₂ (n=5)	≤0.1‰	Observed Precision: 0.01 Pass/Fail: PASS Sheet Number: 1
Ref gas in tubes precision	5% CO ₂ in Exetainers (n=5)	≤0.1‰	Observed Precision: 0.05 Pass/Fail: PASS Sheet Number: 3
Breath Precision	Breath in Exetainers (n=5)	≤0.2‰	Observed Precision: 0.09 Pass/Fail: PASS Sheet Number: 2
Sensitivity	5% CO ₂ in Exetainers	Major beam 5e-9 with trap of 150	Observed Sensitivity: 1.112e-8 Pass/Fail: PASS Sheet Number: 4
Linearity	0.5 to 8.0% CO ₂ in Helium: Exetainers	≤0.5 ‰ change	Observed Linearity: 0.24 Pass/Fail: PASS Sheet Number: 5
Peak Shape	Beam 1,2 and 2/1	Minimum 5V wide 2/1. Gradient acceptable due to single turbo pump	Observed Peak Shape: RK Pass/Fail: PASS Sheet Number: 6
Stability	2/1 ratio over 600 seconds	Flat, no spikes or variations. Slight gradient acceptable	Observed Stability: RK Pass/Fail: PASS Sheet Number: 7
Special Tests			
N/A			
Specification Acceptance			
Engineer Signature:			Date: 2.9.2022
Customer Signature:			Date: 2.9.2022

Sercon Ltd

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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

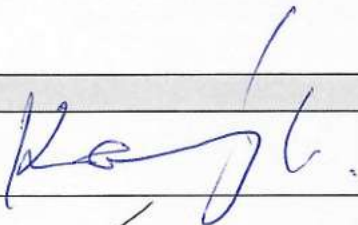
Running Samples

- 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:	2.9.2022
Customer Signature:		Date:	2.9.2022

Sercon Ltd

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S084_v3

**Details of Visit:**

29.8.2022

- Unit found unpacked on the bench
- Plumbing lines (installed)
- Comms established (bar code reader set at comm port 10)
- Pumps on (achieved 3.5e-07mbar in 4 hrs)

30.8.2022

- Vacuum after pumping overnight 1.2e-07mbar
- Initial attempt to tune for co2
- Peak shape pass, 2/1 stability: pass
- Best specs on the day
- Ref gas precision: 0.01 std
- Breath precision: 0.09 std
- 5% in tube precision: 0.05 std
- Sensitivity: 1.11e-08 (mass 44)
- Linearity: 0.34 std (full range)
- Tuning parameters: HT 2565, Focus 87, HP zero, IR 1.0, eV -85, Trap 150 (449)
- Att. intermittent fluctuation for the breath samples (syringe o ring structural failure)
- Leak checked the IRMS and the gas box
- Decided to run extended breath precision overnight

31.8.2022

- Vacuum after pumping overnight 9.7e-08mbar
- Breath precision results (35 breath samples in total) achieved: 0.07, 0.11, 0.05std
- Gas Pressure settings: He 18psi, CO2 16psi, Air 4Bar

1.9.2022

- Training commenced AM
- Running customers samples
- Samples used: artificially generated CO2 in 12ml vial by incubating bacteria
- Customer aims to find out changes in trend between raw and modified bacteria generating CO2 within enclosed air environment
- Samples:
- First 12 ml vial achieved 8.55e-11
- Second vial achieved 1.1e-10
- Third vial achieved 9.75e-11
- Customer has been advised to improve the sample prep method to generate samples with higher content of CO2

Sercon Ltd

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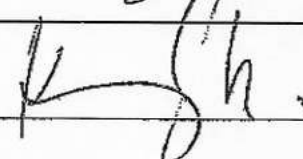
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S084_v3



ABCA2 Installation Acceptance Certificate

Job no.:	IN 1280
Customer:	KAERI, Daejeon city, Republic of Korea
Address:	Daejeon city, Republic of Korea
Contact:	MJ KIM, Saram International co., Ltd
System:	ABCA 2 + Versa 1
ABCA2 Serial Number	20602/2022/1280
Gas Box Serial Number	60101/1-2022/1280
Autosampler Serial Number	60101/1-2022/1280
Software:	V800.7.0.20196
Engineer:	Robert Kameny
Installation Start Date:	29.8.2022
Installation Completion Date:	2.9.2022
Maintenance Required by Date:	1.9.2023
Delivery Date:	7 th August 2022
Warranty Commences:	2.9.2022
Warranty Expires:	1.9.2023
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	2.9.2022
Engineer's Signature		Date	2.9.2022

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CW1 6JT United Kingdom

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Registered in England and Wales 4290072. VAT No.: GB 771 1100 74



¹³ C			
Ref Gas Injection Precision	100% CO ₂ (n=5)	≤0.1‰	Observed Precision: 0.01 Pass/Fail: PASS Sheet Number: 1
Ref gas in tubes precision	5% CO ₂ in Exetainers (n=5)	≤0.1‰	Observed Precision: 0.05 Pass/Fail: PASS Sheet Number: 3
Breath Precision	Breath in Exetainers (n=5)	≤0.2‰	Observed Precision: 0.09 Pass/Fail: PASS Sheet Number: 2
Sensitivity	5% CO ₂ in Exetainers	Major beam 5e-9 with trap of 150	Observed Sensitivity: 1.112e-8 Pass/Fail: PASS Sheet Number: 4
Linearity	0.5 to 8.0% CO ₂ in Helium: Exetainers	≤0.5 ‰ change	Observed Linearity: 0.34 Pass/Fail: PASS Sheet Number: 5
Peak Shape	Beam 1,2 and 2/1	Minimum 5V wide 2/1. Gradient acceptable due to single turbo pump	Observed Peak Shape: RK Pass/Fail: PASS Sheet Number: 6
Stability	2/1 ratio over 600 seconds	Flat, no spikes or variations. Slight gradient acceptable	Observed Stability: RK Pass/Fail: PASS Sheet Number: 7
Special Tests			
N/A			
Specification Acceptance			
Engineer Signature:			Date: 2.9.2022
Customer Signature:			Date: 2.9.2022

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S084_v3



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

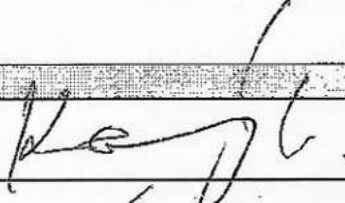
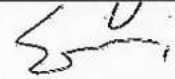
Running Samples

- 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:	2.9.2022
Customer Signature:		Date:	2.9.2022

Sercon Ltd

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CW1 6JT United Kingdom

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S084_v3

**Details of Visit:**

29.8.2022

- Unit found unpacked on the bench
- Plumbing lines (installed)
- Comms established (bar code reader set at comm port 10)
- Pumps on (achieved 3.5e-07mbar in 4 hrs)

30.8.2022

- Vacuum after pumping overnight 1.2e-07mbar
- Initial attempt to tune for CO₂
- Peak shape pass, 2/1 stability: pass
- Best specs on the day
- Ref gas precision: 0.01 std
- Breath precision: 0.09 std
- 5% in tube precision: 0.05 std
- Sensitivity: 1.11e-08 (mass 44)
- Linearity: 0.34 std (full range)
- Tuning parameters: HT 2565, Focus 87, HP zero, IR 1.0, eV -85, Trap 150 (449)
- Att. intermittent fluctuation for the breath samples (syringe o ring structural failure)
- Leak checked the IRMS and the gas box
- Decided to run extended breath precision overnight

31.8.2022

- Vacuum after pumping overnight 9.7e-08mbar
- Breath precision results (35 breath samples in total) achieved: 0.07, 0.11, 0.05std
- Gas Pressure settings: He 18psi, CO₂ 16psi, Air 4Bar

1.9.2022

- Training commenced AM
- Running customers samples
- Samples used: artificially generated CO₂ in 12ml vial by incubating bacteria
- Customer aims to find out changes in trend between raw and modified bacteria generating CO₂ within enclosed air environment
- Samples:
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- Customer has been advised to improve the sample prep method to generate samples with higher content of CO₂

Sercon Ltd

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CW1 6JT United Kingdom

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www.sercongroup.com

Registered in England and Wales 4290072. VAT No.: GB 771 1100 74
9084_v3



ABCA2 Installation Acceptance Certificate

Job no.:	IN 1280
Customer:	KAERI, Daejeon city, Republic of Korea
Address	Daejeon city, Republic of Korea
Contact:	MJ KIM, Saram International co., ltd
System:	ABCA 2 + Versa 1
ABCA2 Serial Number	20602/2022/1280
Gas Box Serial Number	60101/1-2022/1280
Autosampler Serial Number	60101/1-2022/1280
Software:	V800.7.0.20196
Engineer:	Robert Kameny
Installation Start Date:	29.8.2022
Installation Completion Date:	2.9.2022
Maintenance Required by Date:	1.9.2023
Delivery Date:	7 th August 2022
Warranty Commences:	
Warranty Expires:	
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:	
Engineer's Signature		Date:	7/8/22

Sercon Ltd

Unit 3B Crewe Trade Park
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CW1 6JT United Kingdom

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S084_v3

Sercon Ltd

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Email: info:sercongroup.com
www.sercongroup.com

Page 2 of 5

20/01/2017



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:	<i>R. Kavan</i>	Date:	7/8/22
Customer Signature:		Date:	

Sercon Ltd

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CW1 6JT United Kingdom

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S084_v3

**Details of Visit:**

29.8.2022

- Unit found unpacked on the bench
- Plumbing lines (installed)
- Comms established (bar code reader set at comm port 10)
- Pumps on (achieved 3.5e-07mbar in 4 hrs)

30.8.2022

- Vacuum after pumping overnight 1.2e-07mbar
- Initial attempt to tune for co2
- Peak shape pass, 2/1 stability: pass
- Best specs on the day
- Ref gas precision: 0.01 std
- Breath precision: 0.09 std
- 5% in tube precision: 0.05 std
- Sensitivity: 1.11e-08 (mass 44)
- Linearity: 0.34 std (full range)
- Tuning parameters: HT 2565, Focus 87, HP zero, IR 1.0, eV -85, Trap 150 (449)
- Att. intermittent fluctuation for the breath samples (syringe o ring structural failure)
- Leak checked the IRMS and the gas box
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31.8.2022

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- Breath precision results (35 breath samples in total) achieved: 0.07, 0.11, 0.05std
- Gas Pressure settings: He 18psi, CO2 16psi, Air 4Bar

1.9.2022

- Training commenced AM
- Running customers samples
- Samples used: artificially generated CO2 in 12ml vial by incubating bacteria
- Customer aims to find out changes in trend between raw and modified bacteria generating CO2 within enclosed air environment
- Samples:
- First 12 ml vial achieved 8.55e-11
- Second vial achieved 1.1e-10
- Third vial achieved 9.75e-11
- Customer has been advised to improve the sample prep method to generate samples with higher content of CO2

Sercon Ltd

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S084_v3

**Recommendations:**

- Consider ABCA 2 covid service kit for the annual service
- Consider alternative IRMS prep solutions for the CO2 analysis: visit ([Cryo Range | Sercon Instruments & Applications \(sercon-instruments.com\)](#))

Faults and Shortages:

N/A

Additional Parts Used:

Part Description	Part Code	Cost

Sercon Ltd

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S084_v3



COLLECTION NOTE

Job Number: **IN1280**
Customer: **Saram International Co Ltd**
Contact: **June Yoo**

Collection on
Date:

26/07/22

No.
of boxes: 3

By:
Company:

Fribo

Vehicle
Reg No.

M069 HZK

Signature:

[Signature]

Print:

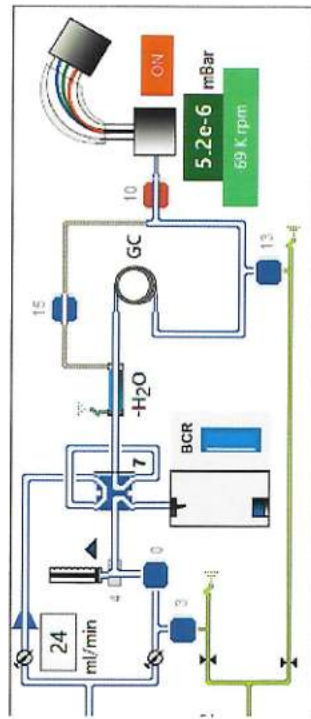
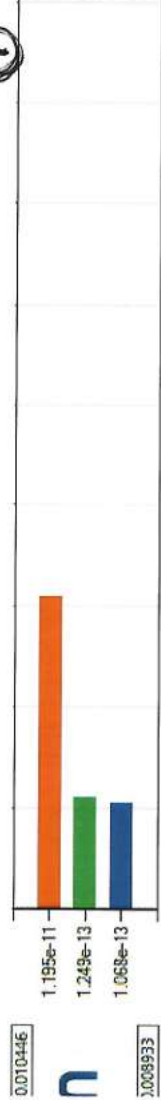
R Houghton



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



Disable Source Controls

HT 2569 2559

Focus 87 86
HP 5 1
IR 1.0 1.0
eV -86 -86

Trap 150 150

Emission 1 530
Filament 1 4

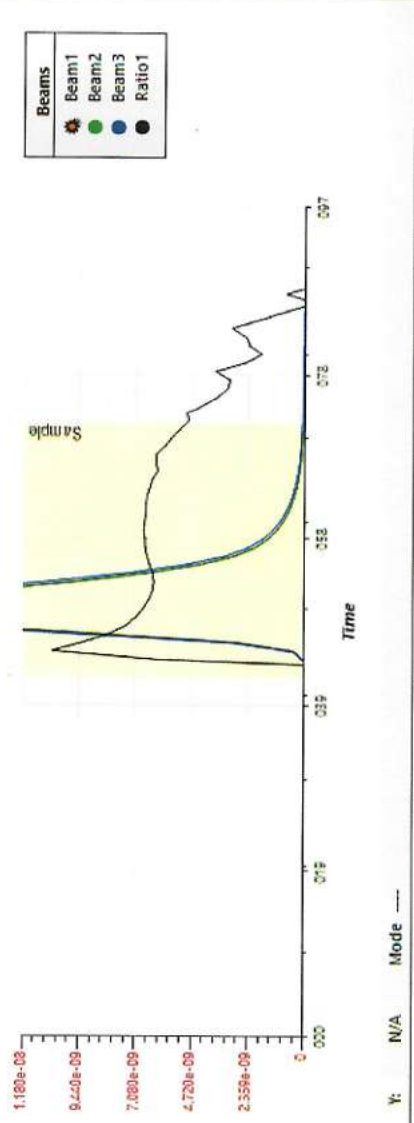
Next Sample

Read Barcode

Batch started at 15:14 by MASTER USER

Samples completed 8 of 8

Batch Completed
Measurement 8 of 8
Measurement 7 of 8
Measurement 6 of 8
Measurement 5 of 8
Measurement 4 of 8
Measurement 3 of 8
Measurement 2 of 8
Running batch



Batch: A06_07_2022P11 List: 5 REF GAS PREC - Completed : 15:29

Status	Name	Type	Total Beam	Isotope C13 value	Isotope O18 value	Yield value
1 OK >	TEST	Test	1.27e-07	-35.24	-17.94	04.99
2 OK >	REF	Reference	1.28e-07	-35.26	-18.00	05.00
3 OK >	TEST	Test	1.28e-07	-35.23	-17.81	05.00
4 OK >	TEST	Test	1.28e-07	-35.27	-17.93	04.99
5 OK >	TEST	Test	1.28e-07	-35.29	-18.04	04.99
6 OK >	TEST	Test	1.28e-07	-35.29	-18.01	04.99
7 OK >	TEST	Test	1.27e-07	-35.28	-17.99	04.95
8 OK >	REF	Reference	1.29e-07	-35.26	-18.00	05.00
9						

Mean C13 -35.27 Std Dev C13 0.02 Mean O18 -17.96 Std Dev O18 0.08

Send to LIMS

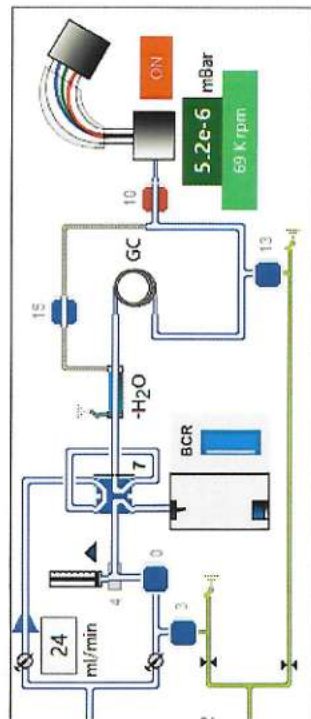
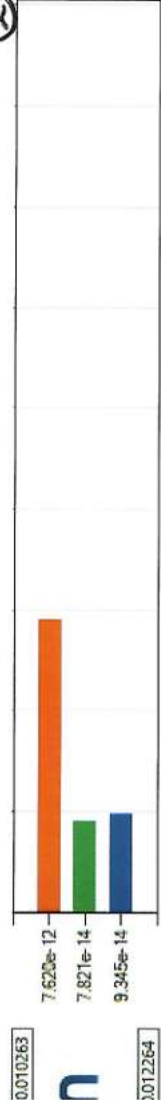
Save Width Changes

Stats

Y: N/A Mode ---

ScanPeak <Slow Stability Backgnd Print FindPeak STOP

Clear Axes



Disable Source Controls

HT 2569 2559

Focus 87 86

HP 5 1

IR 1.0 1.0

eV -86 -86

Trap 150 150

Emission I 532

Filament I 4

Read Barcode

BCR

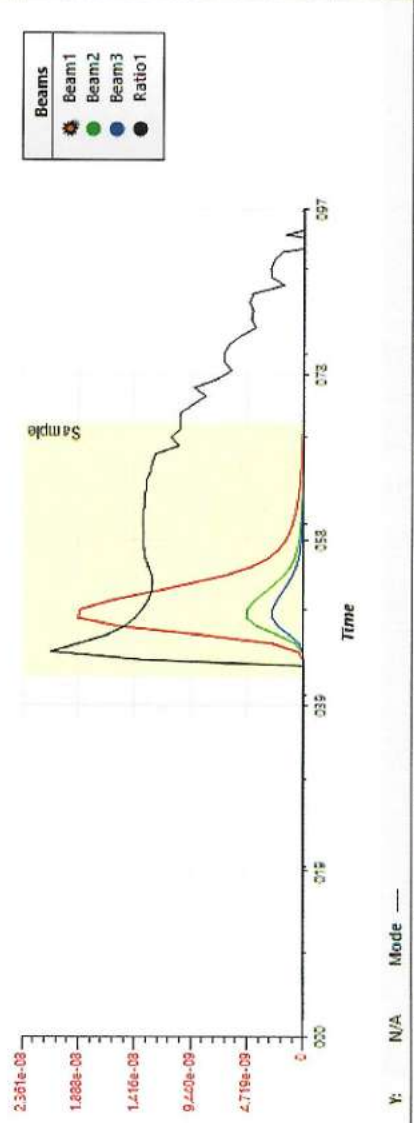
Next Sample

Batch started at 14:51 by MASTER USER

Samples completed 9 of 9

Batch Completed

- Measurement 9 of 9
- Measurement 8 of 9
- Measurement 7 of 9
- Measurement 6 of 9
- Measurement 5 of 9
- Measurement 4 of 9
- Measurement 3 of 9
- Measurement 2 of 9
- Measurement 1 of 9



Batch: A06_07_2022P09 List: 5 REF GAS EXER - Completed : 15:08

Status	Name	Type	Total Beam	Isotope C13 value	Isotope O18 value	Yield value
1 OK >	TEST	Test	1.28e-07	-35.29	-17.99	04.99
2 OK >	REF	Reference	1.28e-07	-35.26	-18.00	05.00
3 OK >	1	Sample	9.01e-08	-46.92	-31.53	03.52
4 OK >	2	Sample	9.37e-08	-47.03	-31.71	03.67
5 OK >	3	Sample	9.58e-08	-46.99	-31.19	03.75
6 OK >	4	Sample	9.47e-08	-47.09	-32.05	03.70
7 OK >	5	Sample	9.29e-08	-46.95	-31.64	03.63
8 OK >	TEST	Test	1.27e-07	-35.30	-18.10	04.99
9 OK >	REF	Reference	1.28e-07	-35.26	-18.00	05.00
10						

0.010578

1.212e-11

1.282e-13

1.101e-13

1.009085

23 ml/min

15

GC

10

5.3e-6 mBar

69 k rpm

13

Trap

150

527

4

Disable Source Controls

HT

2569

2559

Focus

87

86

HP

5

0

IR

1.0

1.0

eV

-86

-86

CO2

StdBy

Cust

Read Barcode

BCR

Next Sample

Batch started at 15:31

by MASTER USER

Samples completed 9 of 9

Batch Completed

Measurement 9 of 9

Measurement 8 of 9

Measurement 7 of 9

Measurement 6 of 9

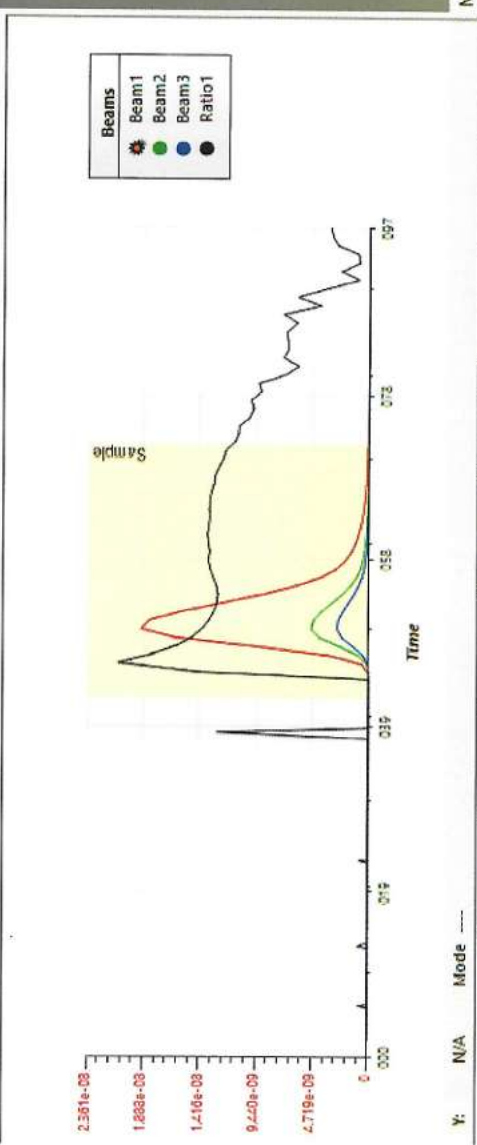
Measurement 5 of 9

Measurement 4 of 9

Measurement 3 of 9

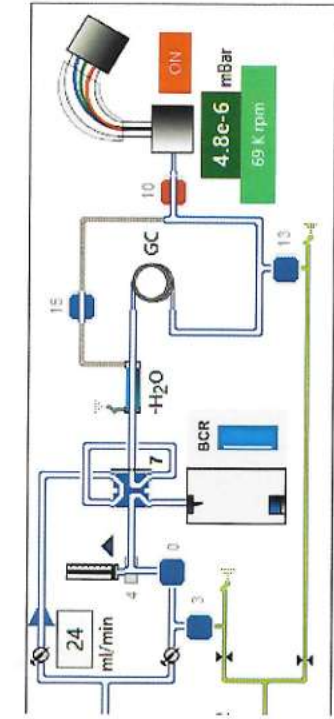
Measurement 2 of 9

Measurement 1 of 9



Batch: A06_07_2022P12 List: 5 BREATH PREC - Completed : 15:48

	Status	Name	Type	Total Beam	Isotope C13 value	Isotope O18 value	Yield value
1	OK >	TEST	Test	1.28e-07	-35.25	-17.84	05.02
2	OK >	REF	Reference	1.27e-07	-35.26	-18.00	05.00
3	OK >	BREATH 1	Sample	1.00e-07	-39.57	-9.04	03.93
4	OK >	2	Sample	9.12e-08	-39.32	-8.57	03.58
5	OK >	3	Sample	9.38e-08	-39.23	-8.83	03.69
6	OK >	4	Sample	9.49e-08	-39.38	-8.67	03.73
7	OK >	5	Sample	9.72e-08	-39.45	-8.82	03.82
8	OK >	TEST	Test	1.27e-07	-35.26	-17.95	05.00
9	OK >	REF	Reference	1.27e-07	-35.26	-18.00	05.00
*10							



Enable Source Controls

CO2 2577 2567

HT 87 86

Focus 5 1

HP 1.0 1.0

IR 1.0 1.0

eV -86 -86

Trap 150 150

Emission I 488

Filament I 4

Cust

Next Sample

BCR

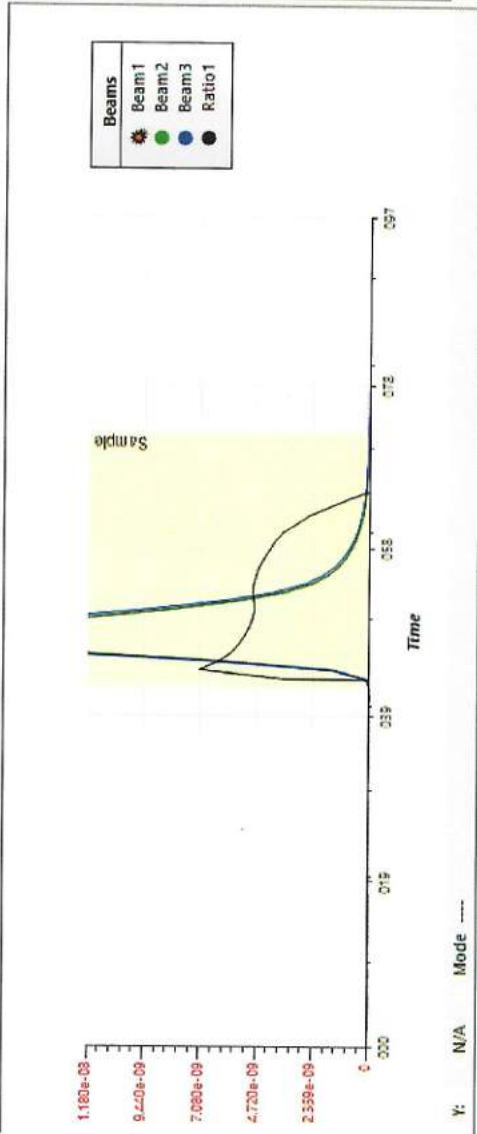
Read Barcode

Batch started at 13:05 by MASTER USER

Samples completed 10 of 10

Batch Completed

- Measurement 10 of 10
- Measurement 9 of 10
- Measurement 8 of 10
- Measurement 7 of 10
- Measurement 6 of 10
- Measurement 5 of 10
- Measurement 4 of 10
- Measurement 3 of 10
- Measurement 2 of 10



Batch: A18_07_2022P06 List: LIN 18-07-22 - Completed : 13:23

Status	Name	Type	Total Beam	Isotope C13 value	Isotope O18 value	Yield value
1 OK >	TEST	Test	1.11e-07	-35.31	-18.35	04.96
2 OK >	TEST	Test	1.11e-07	-35.27	-18.11	04.99
3 OK >	REF	Reference	1.12e-07	-35.26	-18.00	05.00
4 OK >	LIN 1	Sample	6.62e-09	-33.72	-15.84	00.30
5 OK >	2	Sample	1.41e-08	-33.75	-15.79	00.63
6 OK >	3	Sample	3.15e-08	-34.02	-15.79	01.41
7 OK >	4	Sample	6.45e-08	-33.99	-14.82	02.89
8 OK >	5	Sample	7.32e-08	-34.05	-14.97	03.28
9 OK >	TEST	Test	1.12e-07	-35.27	-18.20	05.02
10 OK >	REF	Reference	1.12e-07	-35.26	-18.00	05.00
11						

Mean C13 -33.91 Std Dev C13 0.14 Mean O18 -15.44 Std Dev O18 0.45

Send to LIMS

Save Width Changes

Stats

Y: N/A Mode ---

ScanPeak

<Slow

Stability

Background

Print

Clear

Aves

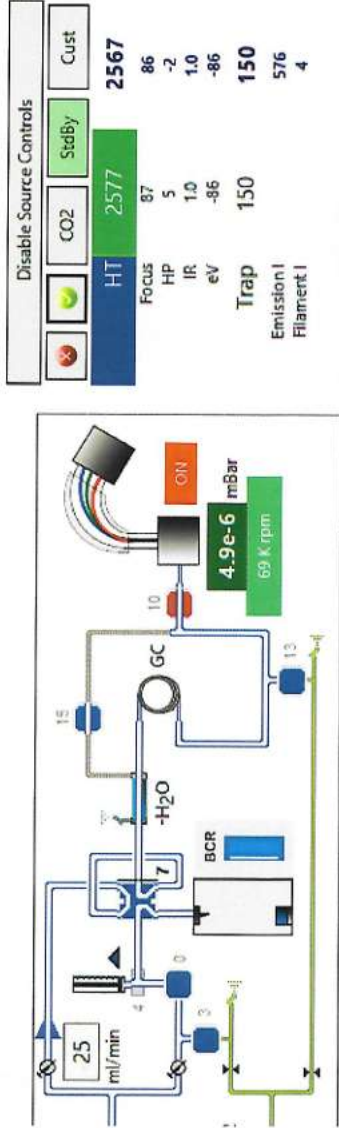
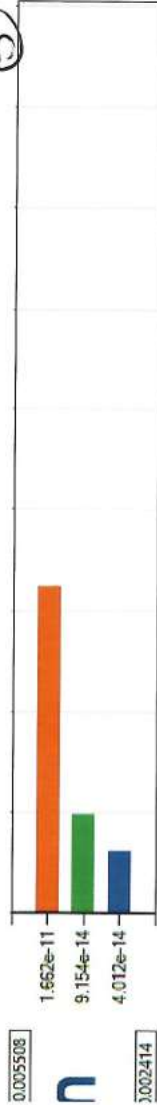
FindPeak

STOP

Date : 18/07/2022 Time : 13:29:15 Delay : 1.0153403 Reset Window Positions

Waiting to run a batch

5



Next Sample

BCR

Read Barcode

Batch started at 0000

by 0000

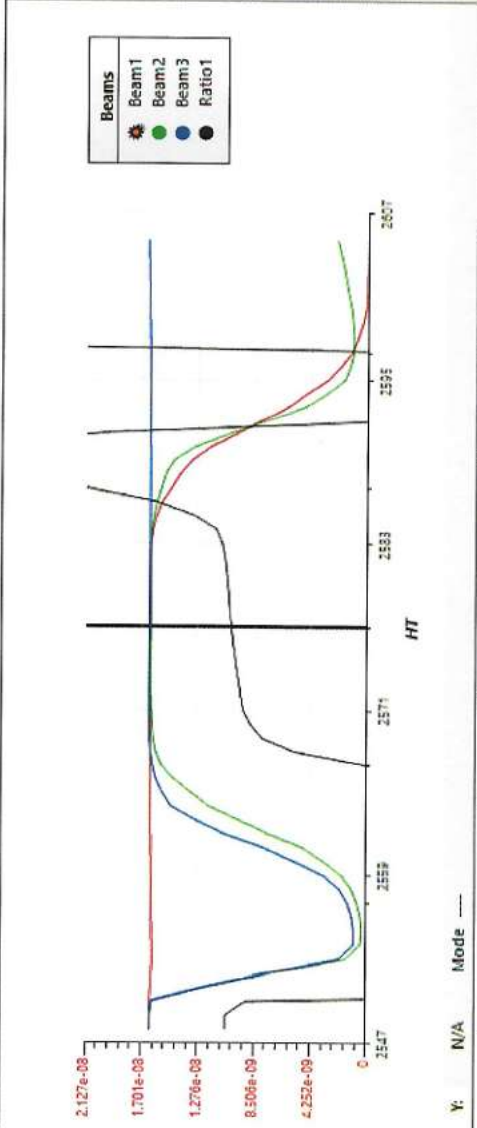
Samples completed 0000

of 0000

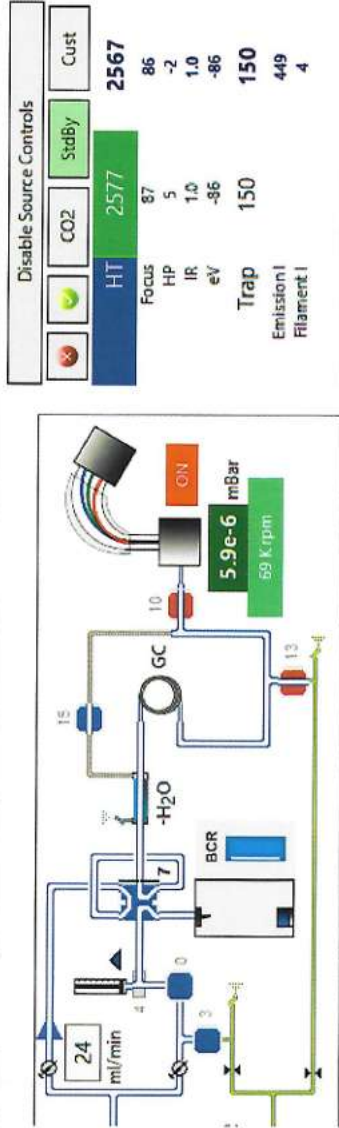
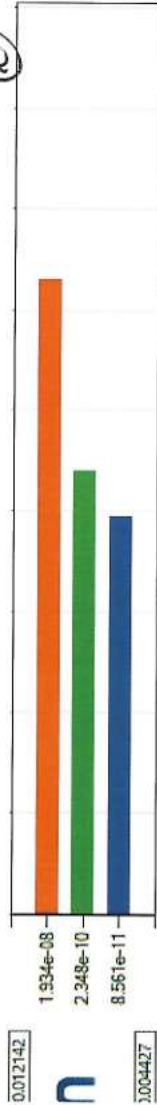
Scanning Peak...

Scanning Peak...

Scanning Peak...



Waiting to run a batch



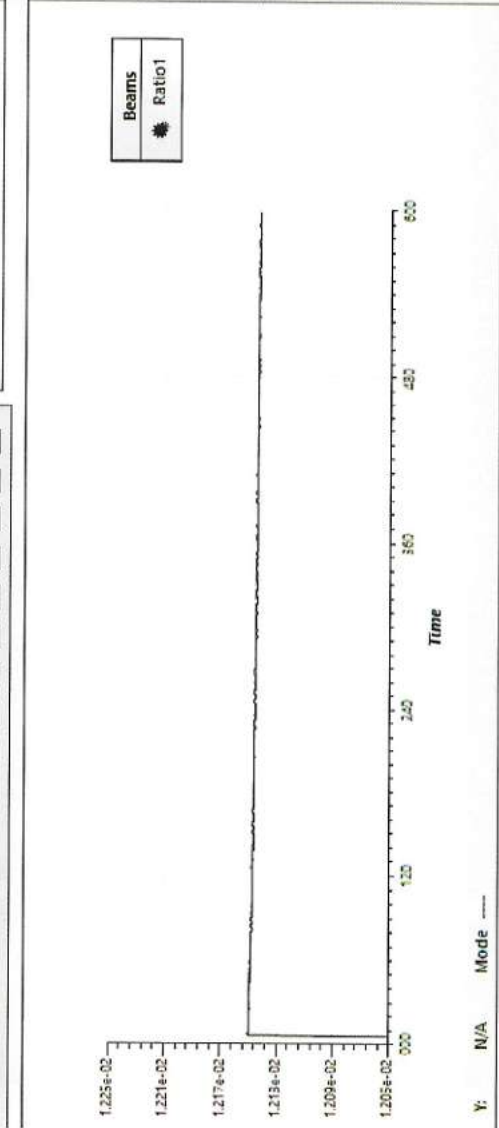
Next Sample

BCR

Read Barcode

Batch started at 0000
by 0000
Samples completed 0000
of 0000

Scanning...
Task aborting...
Scanning...
Scanning Peak...
Scanning Peak...
Scanning Peak...



ScanPeak

<Slow

Stability

Backgnd

Print

Clear

Axes

FindPeak

STOP

Send to LIMS

Save Width Changes

Stats

265.8

6.6

