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Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

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ADDITIONAL:

Payment Terms:

50% / 40% / 10%

Other: please specify

Penalty Clause Yes / No

Please specify:

Blue Book Completion:

Signed		Date	21/08/26
Verified		Date	21/08/26

Quotation

To: Louisiana State University (US\$)
Accounting Services
P.O. Box 25115
BATON ROUGE
LA 70893
USA
VAT No.

Quotation Date: 18/02/2026
Quotation Reference: 18309
Customer Ref: Tommy Blanchard
Account Ref: LOU002
Quotation Validity: 18/05/2026

Quantity	Product Code	Product Description	Unit Price \$	Discount \$	Net Price \$
Proposal for Sercon IRMS System					
1	20402/4	HS2022 + Hd Collector + E-Mag + Trap Loop Continuous flow isotope ratio mass spectrometer. Including high sensitivity source, electro magnet and HD collector Innovative trapping loop technology included, which allows the source to be tuned and delta values to be calculated without the need for a reference gas. System configured for m/z 28 to 64 for the analysis of H2, CO2, N2, N2O, NO, O2, SO, SO2, CO and CH4 (converted to CO2). Windows based data system. 70201-1 - Analyser spares kit includes a filament, copper gaskets, source tool kit, pump oil, snoop and ferrules	161,000.000	24,150.00	136,850.00
1	10202/11	iso-EArth High performance elemental analyser including TCD. Flexible system can be configured for CN or S analysis. Includes autosampler for solids. 70501-3 - Includes sample preparation kit - micro spatula, mirror, forceps, sample tray and syringe 70501-1 - Includes start up consumables kit for C and N combustion Requires Traping Loop for S (REMOVE IF NOT REQUIRED)	51,800.000	7,770.00	44,030.00
1	10802/4	CryoPrep Trace gas analyser optimised for 13C,15N and 18O measurements in CO2, N2O and CH4. Atmospheric to percent concentrations can be gases can measured with the utmost accuracy and precision. Including cryogenic focussing modules, gas chromatography and a micro-combustion stage. Includes XYZ Gas Autosampler. 71001-1 Cryoprep Spares Kit	70,000.000	10,500.00	59,500.00
1	SI2376	10kVA fully isolated UPS 230V	15,838.200	0.00	15,838.20
1	INST	Installation and start up training at Customer's site	11,788.000	0.00	11,788.00

PURCHASE ORDER			ISSUE DATE 02/20/26		ORDER NUMBER PO-0000329485	
BOARD OF SUPERVISORS OF LOUISIANA STATE UNIVERSITY AND AGRICULTURAL & MECHANICAL COLLEGE			SHIP FOB DESTINATION TO (UNLESS SPECIFIED ELSEWHERE) Louisiana State University and Agricultural and Mechanical College CC00316 LSUAM Col of Coast and Envir Oceanography and Coastal ECE - Rm3197 93 South Quad Baton Rouge, LA 70803			
ISSUING LSU CAMPUS Louisiana State University and Agricultural and Mechanical College			BILL TO AND ADDRESS ALL PAYMENT INQUIRIES TO Louisiana State University and Agricultural and Mechanical College LSU Accounts Payable & Travel 217 Thomas Boyd Hall Baton Rouge, LA 70803 PHONE: +1 (225) 578-1550 FAX : +1 (225) 578-2052 EMAIL: aptravel@lsu.edu			
SUPPLIER NAME AND ADDRESS Sercon Limited Europa House Crewe, Cheshire East CW1 6GZ United Kingdom			BUYER OF RECORD NAME Amy Hill Bourgeois EMAIL ahill5@lsu.edu PHONE +1 (225) 578-8651			
ADDRESS ALL INQUIRIES INCLUDING DELIVERIES TO NAME Andrew Jay Perry EMAIL PHONE						
SUPPLIER NUMBER SPL-20671		SUPPLIER REFERENCE		PAYMENT TERMS Net 30		SHIPPING TERM FOB Destination
PURCHASE ORDER TYPE One-Time Purchase - Non-Catalog		REQUISITION		SOLICITATION RFQ-0000002703		FEDERAL FUND X
				FISCAL YEAR 2025 - 2026		TOTAL AMOUNT OF ORDER \$300,408.20
Standard Terms and Conditions of Purchase						
1. Contract All solicitation specifications, terms and conditions are made part of this purchase order as if fully reproduced herein. This order shall not be amended by any supplier contract, form, etc. Departments are expressly prohibited from signing any supplier forms. 2. Applicable Law This contract shall be construed in accordance with and governed by the laws of the State of Louisiana. The Nineteenth Judicial District Court for the Parish of East Baton Rouge, State of Louisiana, shall have exclusive jurisdiction and venue over and shall be the exclusive forum for adjudication of any and all actions between the State and Supplier for any claim or cause of action arising under or by virtue of this contract, whether the action is on the contract or for breach of the contract or whether the action is for declaratory, injunctive, or other equitable relief. 3. Delivery Supplier is responsible for making timely delivery as specified in this order. Supplier shall promptly notify the LSU Department and/or Procurement Office of any unforeseen delays beyond its control. 4. Awarded Products Only those awarded brands and numbers stated in this order are approved for delivery, acceptance, and payment purposes. Any substitutions require prior approval of the Procurement Office. Any defect in any product may cause its rejection. 5. Taxes LSU is exempt from all Louisiana state and local sales and use taxes. Resident and non-resident firms acknowledge their responsibility for the payment of all taxes duly assessed by the State of Louisiana and its political subdivisions for which they are liable, including but not limited to: franchise taxes, privilege taxes, sales taxes, use taxes, ad valorem taxes, etc. 6. Supplier Invoices / Payment Terms Invoices shall reference the LSU purchase order number, supplier's packing list/delivery ticket number, shipping/delivery date, etc. Invoices are to be itemized and billed in accordance with the order, show the amount of any prompt payment discount, and shall be submitted on the supplier's own invoice form. Invoices submitted by the supplier's third party supplier are not acceptable. Unless otherwise contracted, payment is to be made within 30 days after receipt of properly executed invoice, or delivery and acceptance, whichever is later. 7. Assignment of Contract/Contract Proceeds Supplier shall not assign, sublet or transfer its contractual responsibilities, or payment proceeds thereof, to another party without the prior written consent and approval of the Procurement Office. 8. Federal Funds If flagged as "Federally Funded" above, this purchase order is subject to federal contract provisions. By acceptance of this purchase order, supplier agrees to comply with all applicable Terms & Conditions for Federal Contracts and Grants located at http://www.lsu.edu/administration/dfa/procurement/a-z-policies-procedures/purchase-order-terms-and-conditions.php.						
APPROVED		 Amy Hill Bourgeois Date: 2026.02.20 11:23:57 -06'00' AUTHORIZED PURCHASING SIGNATURE				

LSU IS AN EQUAL OPPORTUNITY/ACCESS UNIVERSITY

PRICE SHEET		PURCHASE ORDER				PAGE 2	
SUPPLIER NAME		Sercon Limited				ORDER NUMBER PO-0000329485	
SUPPLIER NUMBER		SPL-20671					
Line	Item Description	Quantity	Unit of Measure	Unit Cost	Extended Amount		
1	All or None Isotope Ratio Mass Spectrometer (IRMS) per specifications outlined in RFQ-0000002703. Manufacturer: Sercon Ltd Model: HS2022 IRMS	1	Each	300408.2	\$300,408.20		

3 - MACHINE SPECIFICATION

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

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+	
10202/25	PyroEArth	
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	

Ref No.	Product Description	Required
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S027_v12

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17/10/2025

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

3 - MACHINE SPECIFICATION

Client:	Louisiana State University		
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Job Number:	IN1378	Date:	20/02/2026

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 (<i>Inc. With ABCA2</i>)	
70101-2	ABCA2 Spares Kit for AB Analitica Systems	
70101-3	ABCA2 Autosampler Upgrade Kit	
SI1767	CVL505 – Barcode Reader	
SC9973	13C Urea breath test kit for Helicobacter pylori infection	
SC9974	Helicobacter Test kit for children age 3-11 (45mg)	

Integra2 Units

20802/4	Integra2	
70201-2	Integra2 analyser spares kit - Included	
70401-1	Integra-2 consumables (<i>Inc. With Integra2</i>)	

Trace Gas Systems

10802/4	CryoPrep	✓
10802/5	Automated LN refiller	
10802/6	CryoFlex (TOC)	
10802/7	CryoGas	
10802/8	CryoFlex (LA)	
SI2533	Silicon Carbide Vertical Furnace	
SI2731	213nm Laser Ablation System	
SI2733	isoScell 100 sampler chamber	
71001-1	Cryoprep Spares Kit	✓
71001-5	CryoGas Consumables Kit	

TOC Units

14001	Thermalox Environmental TOC-IRMS	
14002	Thermalox Environmental TOC-Standalone	
14003	Thermalox Environmental TOC-Standalone No Sampler	
SI2772	CO2 Detector, High sensitivity Option	
SI2773	NOx detector Option	
SI2774	Vacuum pump Option	
SI2775	Stirred Vial rack Option	
72101-1	TOC Start Up Kit	
72101-2	TOC Chem Pack	
72101-3	TOC & TN Instrument with heavy usage - one year	
72101-4	TOC only - economy holding	

GEO 20-22 (dual inlet)

10702	GEO 20-22 Water Equilibration System (D & 18O)	
21802/1	GEO 20-22	
21802/2	GEO 20-22 + E-Mag	
21802/3	GEO 20-22 + E-Mag +Hd	
21802/4	GEO 20-22 Inlet	

3 - MACHINE SPECIFICATION

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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	
Printer	Printer	
INST1	Installation and start up training at customer's site by Sercon Engineer	
INST2	Installation and start up training at customer's site by Agents Engineer	
WARR	1 year warranty	
WARR2	2 year warranty	
TRAIN	Training in UK for one person for 3 days	
SCONTRACT	Maintenance Service Contract - 1 year	
SPECIFICATION REQUIREMENTS		
Voltage	Volts 50/60Hzs	110V

3 - MACHINE SPECIFICATION

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Job Number:	IN1378	Date:	20/02/2026

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	
	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		

3 - MACHINE SPECIFICATION

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

Approved by Sales: (Name)		Date: 24 FEB. 24
Approved by Tech.: (Name)	S. Moseley	Date: 24 12 26

7: ASSEMBLY AND TEST RECORD

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

 PRODUCT: ISO-EARTH

 SERIAL NUMBER: 10202/11-2026/1378

 ASSEMBLED: [Signature]
 (Name)

 Date: 27/03/2026

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

 Date: 28/03/2026

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

 Date: 30/03/2026

 SYSTEM TEST: [Signature]
 (Name)

 Date: 18/05/2026

 PRE-DESPATCH
 INSPECTION: [Signature]
 (Name)

 Date: 22/05/2026

P.A.T. Test results

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

 Earth Continuity 0.068 Ω

 Insulation >300 $M\Omega$

 Earth Leakage Current 1.00 mA. @ 0.05 kVA.

 Tested by: [Signature]

 Date: 30/3/26

**sercon**

Date:

30/3/26

Production Handover Checklist

Unit Name	ISO - Earth
Product Code	1202/11
Customer	Louisiana State University
Unit IN/Stock Number	IN1378

Visual Inspection

REF	Description	Initial
V1)	All external cover/Panels present	SW
V2)	Cabinet and panels free from dents/scratches/damage	SW
V3)	Doors and panels fitted right and correctly alignment	SW
V4)	All instrument controls/fuse holders/connections all marked according to the schematic	SW
V5)	Sercon Logo/Vinyls fitted correctly to door and panels	TBF
V6)	Unit rating/serial sticker correct and fitted to fixed rear panel	TBF
V7)	Mains isolation sticker fitted to all removable panels	SW
V8)	internal compartments free from dust and debris	SW

Mechanical Inspection

REF	Description	Initial
M1)	All fastenings fitted correctly I.E Flat washers and shakeproof washer ETC	SW
M2)	All fastenings tight and tightened to the correct torque where applicable	SW
M3)	All cooling fans fitted correctly with air flow in the right direction and guards present	SW
M4)	All plumbing bulkheads and fittings fitted correctly and tightend to required torque	SW
M5)	All piping secure and free from kinks ETC	SW
M6)	All Valves/Pipework/Fittings labelled correctly	SW

Electrical Inspection

REF	Description	Initial
E1)	Equipotential earth bonding to all removable panels	TBF
E2)	All cable terminations tight and correctly crimped	SW
E3)	All Cable identifications and sizes correct to the schematic drawing	SW
E4)	Ribbon cables fitted and "Checked" label applied	SW
E5)	All fuses fitted to holders and are correct rating as schematic drawing	SW
E6)	All instrument cables supplied with unit	SW

Testing

REF	Description	Initial
T1)	Use 24V test power supply to run and check correct operation of the unit cooling fans	SW
T2)	P.A.T unit	HR
T3)	P.A.T Sticker filled in and applied to the rear of unit	HR
T4)	P.A.T results logged in the blue book	HR

[illegible]

Works Order Picking List

Date: 25/02/2026

Time: 08:33:13

Works Order: WO02638
 Stock Code: 10202/11
 Description: iso-EArth
 Qty Required: 1.00 Each
 Qty Outstanding: 1.00
 Plan Period: WK9/2026
 Due Date: 13/04/2026

SI3237 x 1 ✓
 SI2631 x 2 ✓

(PART - Issued
 27/02
 SS)

Stock Code / Description Qty to Pick Unit Location Qty Picked / By

Manufacturing Instructions: IN1378 - Louisiana State University

9099/1 Instrument Packing	1.00	Each		
SI2621 iso-EArth Artwork	1.00	Each	C	(Removed)
SI2416 PyroEArth Cabinet Full Assy Rev003	1.00	Each	C1	1
SI0201 1/16 O/D x 10-32 UNFM.SS	4.00	Each	Carousel 1 M-1	4
SI0607 Anti Surge T HBC Min Fuse 6.3A 5x20mm	2.00	Each	Carousel 1 M-1	2
SI1052 3 Way MOLEX Clip	1.00	Each	Carousel 1 M-1	1 (+1)
SI1255 M5 Plug	2.00	Each	Carousel 1 M-1	2
SI1548 4A Fuse, Anti Surge 5x20mm	1.00	Each	Carousel 1 M-1	1
SI1681 10A Fuse, Anti surge, 5x20mm	1.00	Each	Carousel 1 M-1	1
SI2666 O Ring ID 4.47 OD 7.93 x 1.78	4.00	Each	Carousel 1 M-1	4
SI0701 1/4" PTFE Ferrules Pk/1	4.00	Each	Carousel 1 P-1	4
SI0708 SSUE 16/16 Stainless Steel Union Pk/1	2.00	Each	Carousel 1 P-1	2
SI1900 Dowty Seal - M5	25.00	Each	Carousel 1 P-1	25
SI2244 Male Elbow 4mm to M5	3.00	Each	Carousel 1 P-1	3
SI0703 1/8-1/16" PTFE Reducing Ferrule Pk/1	15.00	Each	Carousel 1 P-3	15
SI0196 Reducing Union 1/4 x 1/16 SS	4.00	Each	Carousel 1 Q-1	4

Works Order Picking List

Date: 25/02/2026

Time: 08:33:13

Works Order: WO02638
Stock Code: 10202/11
Description: iso-EArth
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK9/2026
Due Date: 13/04/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
SI0212 Reducing Union 1/8 OD x 1/16 OD SS	4.00	Each	Carousel 1 Q-1	4
SI0762 PSR16-16 PTFE Sealing Rings Pk/20	0.20	Each	Carousel 1 Q-1	0.2
SI1167 Reducing Union 1/4-1/8	1.00	Each	Carousel 1 Q-1	1
SI1168 1/4 Nut Knurled (brass)	1.00	Each	Carousel 1 Q-1	1
SI1349 Pneumatic Bulkhead Check Valve - 4mm	2.00	Each	Carousel 1 Q-1	2
SI1603 Bulkhead Fitting 4mm - 1/8 (RS 7714923)	1.00	Each	Carousel 1 Q-1	1
SI1604 Male Connector 1/8 UNION 1/8	1.00	Each	Carousel 1 Q-1	1
SI2471 Bulkhead Retainer 1/8"	2.00	Each	Carousel 1 Q-1	2
SI2472 Bulkhead Retainer 1/16"	2.00	Each	Carousel 1 Q-1	2
SI0198 Tee Union 1/16 SS	4.00	Each	Carousel 1 Q-2	4
SI0204 Bulkhead Union 1/16 SS	5.00	Each	Carousel 1 Q-2	5
SI0205 Bulkhead Union 1/8 SS	11.00	Each	Carousel 1 Q-2	11
SI1899 1/16 x M5 Fitting	25.00	Each	Carousel 1 Q-3	25
SI0902 Toggle Switch	1.00	Each	Carousel A-1	
SI1482 34 Way IDC Bump Polarised Socket, 1A	2.00	Each	Carousel A-3	
SC0030 Thermocouple K-Type 1.5mm Pk/1 (Send with 2 pin/2 Bullet Crimps)	2.00	Each	P-A2	2
SC2495 Scrubber Tube 220mm	2.00	Each	P-B3	2

Works Order Picking List

Date: 25/02/2026

Time: 08:33:13

Works Order: WO02638
Stock Code: 10202/11
Description: iso-EArth
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK9/2026
Due Date: 13/04/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
SC0085 Cap Kit for Threaded Joints Caps & PTFE Backed Sil Seals pk2	2.00	Each	P-B4	2
SC0082 GC Column for ANCA-SL/GSL Pk/1 (U shaped)	1.00	Each	PD-3	1
SC2010 Separation Column Oxygen 1m ANCA-SL/GSL	1.00	Each	PD-3	1
SI0008 GSL Top Hat Adaptor	1.00	Each	Stores A	1
SI0076 Tube Coupling	4.00	Each	Stores A	4
SI0847 IEC Cord - Socket	2.00	Each	Stores A-2	2
SI0374 Terminal Block Section	15.00	Each	Stores A-3	15
SI0375 Terminal Block End Plate	3.00	Each	Stores A-3	3
SI2631 End Bracket	2.00	Each	Stores A-3	2
SI0620 IEC Insulated Cover	1.00	Each	Stores A-4	1
SI1328 Mains Filter	1.00	Each	Stores A-4	1
SI0378 Blk Re-wireable Straight Plug, 10A 250Vac	2.00	Each	Stores A-5	2
SI1344 IEC Connector Clamp Kit	1.00	Each	Stores A-5	1
SI1797 Fuse Holder Insulation Cover	4.00	Each	Stores A-5	4
SI2304 Screwdriver bayonetcap fuseholder 5x20mm	4.00	Each	Stores A-5	4
SI0630 80mm Fan Guard	8.00	Each	Stores A-6	8
SI0793 80mm DC Fan	6.00	Each	Stores A-6	6

Works Order Picking List

Date: 25/02/2026
Time: 08:33:13

Works Order: WO02638
Stock Code: 10202/11
Description: iso-EArth
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK9/2026
Due Date: 13/04/2026

Stock Code / Description	Qty to Pick	Unit	Location	Qty Picked / By
SI1418 80mm Fan Screen Filter	6.00	Each	Stores A-6	6
SI0329 Flatpack Fan (for GSL)	1.00	Each	Stores A-7	1
SI0373 34 Way IDC Terminal Block	1.00	Each	Stores A-8	1
SI0508 24V PSU - Add Finger Cover	1.00	Each	Stores A-8	1
SI1236 Levelling Foot - M10x38mm	6.00	Each	Stores A-8	6
SI0346 SPDT plug-in power Relay - 10A 24V DC coil	2.00	Each	Stores B-2	2
SI0347 SPCO Relay Base	2.00	Each	Stores B-2	2.
SI3230 EArth On-Off Rocker Switch 20A	1.00	Each	Stores B3	1
SI0345 SSR Safety Cover	4.00	Each	Stores B-3	4
SI0559 Solid State Relay 10A rms 24-280 Vac	4.00	Each	Stores B-3	4
SI2411 KVT 20 Split Cable Gland (inc locknut)	1.00	Each	Stores B-6	1
SI2412 KT 5 insert	1.00	Each	Stores B-6	1
SI2790 Halogen Heating Element Bulb with 3X Clips & Ceramic Connect	1.00	Each	Stores C-1	1
SI2435 Electronic Pressure Regulator	2.00	Each	Stores D-1	2
SI0366 Flow Meter PMFc3100V	2.00	Each	Stores D-2	2.
SI1241 3 Way Solenoid Valve	7.00	Each	Stores D-3	7
SI1242 2 Way Solenoid Valve	3.00	Each	Stores D-3	3

Works Order Picking List

Date: 25/02/2026

Time: 08:33:13

Works Order: WO02638
Stock Code: 10202/11
Description: iso-EArth
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK9/2026
Due Date: 13/04/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
SI1245 SOL Cable	1.00	Each	Stores D-3	1
SI1251 Autosampler Solenoid Valve	1.00	Each	Stores D-3	1
SI0807 Thermostat	1.00	Each	Stores D-5	1
SI0581 Toroidal Transformer 1000VA 2x55V o/p	1.00	Each	Stores D8	1
SI2311 MicroFlow Mass Flow Controller Helium <i>- ON ORDER</i>	1.00	Each	Stores E-2	1
SI2319 MicroFlow Mass Flow Controller Oxygen	1.00	Each	Stores E-2	1
SI2346 Thermal Conductivity Detector	1.00	Each	Stores E-2	1
SI2581 Cartridge Heater - 6.5mm -40mm L - 230V - 125W	1.00	Each	Stores E-2	1
SI2589 TCD GC Assy	1.00	Each	Stores E-3	1
SI2600 TCD Heated Block	1.00	Each	Stores E-3	1
SI1689 Threaded Adaptor for GSL/INTEGRA. (NO COUPLING NUT)	2.00	Each	Stores E-8	2
SI1690 Coupling Nut for SI1689 & SI0043	2.00	Each	Stores E-8	2
10202-S Sercon 50 Position Autosampler Assy	1.00	Each	Stores I-1	
SI2409 EA-ST Furnace	2.00	Each	Stores I-3	2
SI2288 Internal USB 4.5m	1.00	Each	Stores J-3	1
SI2582 EArth System PCB	1.00	Each	Stores J-4	1
SI2512 3 Metre UK 13 amp Fused plug to IEC C 13	1.00	Each	Stores NCB	1

Works Order Picking List

Date: 25/02/2026

Time: 08:33:13

Works Order: WO02638
Stock Code: 10202/11
Description: iso-EArth
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK9/2026
Due Date: 13/04/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
70501-1 Consumables for C and N for Combustion Only (Inc.)	1.00	Each	Z@	
70501-3 Sample Preparation Kit	1.00	Each	Z@	

All items picked and packed as marked:

Date: ____/____/____ Signed: _____

Stock Allocated, Issued, Completed:

Date: ____/____/____ Signed: _____

7: ASSEMBLY AND TEST RECORD

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

PRODUCT:

MS2022

SERIAL NUMBER:

20402/2-2026/1378

 ASSEMBLED:
 (Name)



 Date: 11/02/2026

 PRE-TEST
 INSPECTION:
 (Production name)



 Date: 18/02/2026

 PRE-TEST
 INSPECTION:
 (Test name)



 Date: 19/02/2026

 SYSTEM TEST:
 (Name)



 Date: 18/05/2026

 PRE-DESPATCH
 INSPECTION:
 (Name)



 Date: 22/05/2026

P.A.T. Test results

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

Earth Continuity

0.067
 Ω

Insulation

>300
 $M\Omega$

Earth Leakage Current

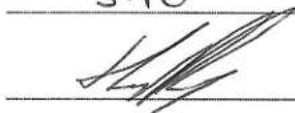
3.10

mA. @

0.15

kVA.

Tested by:



Date:

19/02/26.



Date: 18/02/2026

Production Handover Checklist

Unit Name	H52022
Product Code	20402/4
Customer	Louisiana State University.
Unit IN/Stock Number	Stock 24

Visual Inspection

REF	Description	Initial
V1)	All external cover/Panels present	HR
V2)	Cabinet and panels free from dents/scratches/damage	HR
V3)	Doors and panels fitted right and correctly alignment	HR
V4)	All instrument controls/fuse holders/connections all marked according to the schematic	HR
V5)	Sercon Logo/Vinyls fitted correctly to door and panels	HR
V6)	Unit rating/serial sticker correct and fitted to fixed rear panel	TBF
V7)	Mains isolation sticker fitted to all removable panels	HR
V8)	internal compartments free from dust and debris	HR

Mechanical Inspection

REF	Description	Initial
M1)	All fastenings fitted correctly I.E Flat washers and shakeproof washer ETC	HR
M2)	All fastenings tight and tightened to the correct torque where applicable	HR
M3)	All cooling fans fitted correctly with air flow in the right direction and guards present	HR
M4)	All plumbing bulkheads and fittings fitted correctly and tightend to required torque	HR
M5)	All piping secure and free from kinks ETC	HR
M6)	All Valves/Pipework/Fittings labelled correctly	HR

Electrical Inspection

REF	Description	Initial
E1)	Equipotential earth bonding to all removable panels	
E2)	All cable terminations tight and correctly crimped	HR
E3)	All Cable identifications and sizes correct to the schematic drawing	HR
E4)	Ribbon cables fitted and "Checked" label applied	HR
E5)	All fuses fitted to holders and are correct rating as schematic drawing	HR
E6)	All instrument cables supplied with unit	HR

Testing

REF	Description	Initial
T1)	Use 24V test power supply to run and check correct operation of the unit cooling fans	HR
T2)	P.A.T unit	HR
T3)	P.A.T Sticker filled in and applied to the rear of unit	HR
T4)	P.A.T results logged in the blue book	HR

[illegible]

Works Order Picking List

Date: 02/02/2026

Time: 08:24:07

Works Order: WO02612
Stock Code: 20402/4
Description: HS2022 + Hd Collector + E-Mag + Tr
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK6/2026
Due Date: 26/03/2026

Stock Code / Description **Qty to Pick** **Unit** **Location** **Qty Picked / By**
Manufacturing Instructions: Stock 24 HS2022

9099/1 Instrument Packing	1.00	Each		
SI1754 Emag Drive Panel with Cable	1.00	Each		1
70101/11 20-22 Head Amp Inverter PCB Cable	1.00	Each	B-H1	1
70101/13 Standard Head Amp Cable	1.00	Each	B-H1	1
SI2579 20-22 Cabinet Wave Assy Rev 004	1.00	Each	C1	1
SI2614 HS2022 Artwork	1.00	Each	C1	
SI1052 3 Way MOLEX Clip	1.00	Each	Carousel 1 M-1	1
SI1255 M5 Plug	2.00	Each	Carousel 1 M-1	2 (3)
SI1548 4A Fuse, Anti Surge 5x20mm	1.00	Each	Carousel 1 M-1	1
SI2285 Mag Terminal Cover Black	4.00	Each	Carousel 1 M-3	
SI0687 1/8" PTFE Ferrules - Blank	1.00	Each	Carousel 1 P-1	1
SI0701 1/4" PTFE Ferrules Pk/1	2.00	Each	Carousel 1 P-1	2
SI0710 VALCO Tee - 1/16	2.00	Each	Carousel 1 P-1	2
SI1900 Dowty Seal - M5	20.00	Each	Carousel 1 P-1	20
SI1244 Seal Kit	1.00	Each	Carousel 1 P-2	1
SI1595 37 Way D Plate	3.00	Each	Carousel 1 P-2	3

Works Order Picking List

Date: 02/02/2026

Time: 08:24:07

Works Order: WO02612
Stock Code: 20402/4
Description: HS2022 + Hd Collector + E-Mag + Tr
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK6/2026
Due Date: 26/03/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
SI0703 1/8-1/16" PTFE Reducing Ferrule Pk/1	7.00	Each	Carousel 1 P-3	7
SI0196 Reducing Union 1/4 x 1/16 SS	2.00	Each	Carousel 1 Q-1	2
SI0197 Reducing Union 3/16 OD x 1/16 OD SS	2.00	Each	Carousel 1 Q-1	2
SI0762 PSR16-16 PTFE Sealing Rings Pk/20	0.60	Each	Carousel 1 Q-1	0.6
SI0022 Capillary Crimp Parts A & B	7.00	Each	Carousel 1 Q-2	7
SI0198 Tee Union 1/16 SS	1.00	Each	Carousel 1 Q-2	1
SI0204 Bulkhead Union 1/16 SS	2.00	Each	Carousel 1 Q-2	2
SI0205 Bulkhead Union 1/8 SS	5.00	Each	Carousel 1 Q-2	5
SI0049 Big Magnet Adjusting Foot	1.00	Each	Carousel 1 Q-3	1
SI0050 Magnet Foot	2.00	Each	Carousel 1 Q-3	2
SI1812 E-Mag Screw	3.00	Each	Carousel 1 Q-3	3
SI1899 1/16 x M5 Fitting	18.00	Each	Carousel 1 Q-3	18
SI3133 3/16 OD X M5-0.8 MALE CONNECTOR SS	2.00	Each	Carousel 1 Q-3	2
SI1196 Female NiPt D screwlock assembly, 8mm	6.00	Each	Carousel A-1	
SI1482 34 Way IDC Bump Polarised Socket, 1A	1.00	Each	Carousel A-3	
SI0086 Ref Gas Bracket Mounting Bracket slot	5.00	Each	Carousel B-1	
SI0794 Female NiPt D Screwlock assembly, 13mm	2.00	Each	Carousel B-1	

Works Order Picking List

Date: 02/02/2026

Time: 08:24:07

Works Order: WO02612
Stock Code: 20402/4
Description: HS2022 + Hd Collector + E-Mag + Trz
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK6/2026
Due Date: 26/03/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
SI1004 Right-Angled Bracket 25mm	2.00	Each	Carousel B-1	
SI0631 9 Way D Hood	2.00	Each	Carousel B-3	
SI0632 15 Way D Hood	2.00	Each	Carousel B-3	
SI0900 25 Way D Hood	1.00	Each	Carousel B-3	
SI0524 3 Way Socket Housing, 2.54mm Pitch	1.00	Each	Carousel C-1	
SI0777 Nylon Pillars Male-Female M4x25mm	4.00	Each	Carousel C-1	
SI0385 25 Way Machine Cont Straight D Skt, 750Vac	1.00	Each	Carousel D-3	
SI0387 9 Way Machine Cont Straight D Plug, 750Vac	1.00	Each	Carousel D-3	
SI0388 9 Way Machine Cont Straight D Skt, 750Vac	1.00	Each	Carousel D-3	
SI0570 15 way Solder Contact ZD skt 5A 400 Vac	3.00	Each	Carousel D-3	
SI1794 37 Way IDC D Socket - Metal	1.00	Each	Carousel D-3	
SI1795 37 Way IDC D Plug - Metal	2.00	Each	Carousel D-3	
SI1580 Source Mounting Pillar	2.00	Each	D-U2	
SI3271 Straight IEC C13 Socket to Straight IEC C14	1.00	Each	Stores A-1	1
SI0847 IEC Cord - Socket	2.00	Each	Stores A-2	2
SI0374 Terminal Block Section	8.00	Each	Stores A-3	8
SI0375 Terminal Block End Plate	2.00	Each	Stores A-3	2

Works Order Picking List

Date: 02/02/2026

Time: 08:24:07

Works Order: WO02612
Stock Code: 20402/4
Description: HS2022 + Hd Collector + E-Mag + Tr
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK6/2026
Due Date: 26/03/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
SI2631 End Bracket	2.00	Each	Stores A-3	2
SI0620 IEC Insulated Cover	1.00	Each	Stores A-4	1
SI0903 I.E.C Socket Mount	1.00	Each	Stores A-4	1
SI1328 Mains Filter	1.00	Each	Stores A-4	1
SI1491 IEC Insulation Cover	1.00	Each	Stores A-4	1
SI1344 IEC Connector Clamp Kit	2.00	Each	Stores A-5	2
SI1797 Fuse Holder Insulation Cover	2.00	Each	Stores A-5	2
SI2304 Screwdriver bayonetcap fuseholder 5x20mm	2.00	Each	Stores A-5	2
SI0630 80mm Fan Guard	6.00	Each	Stores A-6	6
SI0793 80mm DC Fan	6.00	Each	Stores A-6	6
SI1418 80mm Fan Screen Filter	6.00	Each	Stores A-6	6
SI3126 Traco Power 24volt PSU	1.00	Each	Stores A-7	1
SI0373 34 Way IDC Terminal Block	1.00	Each	Stores A-8	1
SI0508 24V PSU - Add Finger Cover	1.00	Each	Stores A-8	1
SI0534 3307 Telescopic Slide 457mm L 483mm	1.00	Each	Stores A-8	1
SI1236 Levelling Foot - M10x38mm (-on unit)	5.00	Each	Stores A-8	5
SI0112 NW10/16 Clamping Ring Stainless Steel - Edwards	1.00	Each	Stores B-1	1

Works Order Picking List

Date: 02/02/2026

Time: 08:24:07

Works Order: WO02612
Stock Code: 20402/4
Description: HS2022 + Hd Collector + E-Mag + Trz
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK6/2026
Due Date: 26/03/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
SI0113 NW10/16 Adapt/Cent Viton® SS - Edwards	1.00	Each	Stores B-1	1
SI2289 Oil Mist Eliminator **requires SI2294**	1.00	Each	Stores B-1	1
SI2294 NW10 x 3/8" Bsp Adapter	1.00	Each	Stores B-1	1
SI0346 SPDT plug-in power Relay - 10A 24V DC coil	3.00	Each	Stores B-2	3
SI0347 SPCO Relay Base	3.00	Each	Stores B-2	3
SI0355 DPCO Plug-in Relay, 10A 24V DC coil	1.00	Each	Stores B-2	1
SI0376 DPCO Relay Base	1.00	Each	Stores B-2	1
SI0344 2P red illuminated round rocker switch, 10A	4.00	Each	Stores B-5	4
SI2411 KVT 20 Split Cable Gland (inc locknut)	1.00	Each	Stores B-6	1
SI2412 KT 5 insert	1.00	Each	Stores B-6	1
SI1247 4-Station Manifold - M5	1.00	Each	Stores B-8	1
SI1481 4 WAY REF GAS MANIFOLD	1.00	Each	Stores B-8	1
SI0366 Flow Meter PMFc3100V	1.00	Each	Stores D-2	1
SI2296 Precision Flow Control	1.00	Each	Stores D-2	1
SI1241 3 Way Solenoid Valve	2.00	Each	Stores D-3	2
SI1245 SOL Cable	7.00	Each	Stores D-3	7
SI1821 3 Port valve	7.00	Each	Stores D-3	7

Works Order Picking List

Date: 02/02/2026

Time: 08:24:07

Works Order: WO02612
Stock Code: 20402/4
Description: HS2022 + Hd Collector + E-Mag + Tr
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK6/2026
Due Date: 26/03/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
SI0697 MOVPT-S-1-50 Pneumatic Valve (EF3240-R1-001)	4.00	Each	Stores D-4	4
SI1478 Double Flange	1.00	Each	Stores E-8	1
SI2663 nEXT85 HS2022 KIT	1.00	Each	Stores G	1
SI0961 System Controller - Electronics Box	1.00	Each	Stores I3	1
SI2391 Dell 24" Monitor - P2425H	1.00	Each	Stores J1	
SI2918 Dell Slim Intel Core I3 14100 Processor	1.00	Each	Stores J1	
SI0895 Blue Cat5e UTP patch lead, 2m	1.00	Each	Stores J-3	1
SI0896 Yellow Cat5e UTP patch lead, 2m	1.00	Each	Stores J-3	1
SI2288 Internal USB 4.5m	1.00	Each	Stores J-3	1
SI1513 VFC PCB	1.00	Each	Stores J-4	1
SI0685 20-20 ElectroMagnet Assembly	1.00	Each	Stores K	1
70101/12 Source Cable	1.00	Each	Stores K-1	1
SI0005 20-20 H/D Flight Tube Assembly	1.00	Each	Stores L-2	1
41902 Single channel 100G amp assy (Use SI2527)	1.00	Each	Stores M2	1
41903 Three channel 100M/5G/5G amp assy (Use SI2526)	1.00	Each	Stores M2	1
20102 HS Source Assy	1.00	Each	Stores M4	
20301 Standard Collector Assy	1.00	Each	Stores M4	

Works Order Picking List

Date: 02/02/2026

Time: 08:24:07

Works Order: WO02612
Stock Code: 20402/4
Description: HS2022 + Hd Collector + E-Mag + Trc
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK6/2026
Due Date: 26/03/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
20501 Hd Collector Assy	1.00	Each	Stores M4	
SI2512 3 Metre UK 13 amp Fused plug to IEC C 13	1.00	Each	Stores NCB	1
70201-1 Analyser spares kit - Included	1.00	Each	Z	

All items picked and packed as marked:

Date: ____/____/____ Signed: _____

Stock Allocated, Issued, Completed:

Date: ____/____/____ Signed: _____

7: ASSEMBLY AND TEST RECORD

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

 PRODUCT: Cryoprep

 SERIAL NUMBER: 10802/4-2026/1378

 ASSEMBLED:
 (Name) [Signature]

 Date: 21/4/26

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

 Date: 21/4/26

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

 Date: 21/4/26

 SYSTEM TEST:
 (Name) [Signature]

 Date: 18/05/2026

 PRE-DESPATCH
 INSPECTION:
 (Name) [Signature]

 Date: 22/05/2026

P.A.T. Test results

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

 Earth Continuity 0.074 Ω

 Insulation >300 $M\Omega$

 Earth Leakage Current 0.25 1.00 mA. @ 0.05 kVA.

 Tested by: [Signature]

 Date: 21/4/26



Date: 21/04/2026

Production Handover Checklist

Unit Name	Cryoprep
Product Code	1080214
Customer	
Unit IN/Stock Number	IN1378

Visual Inspection

REF	Description	Initial
V1)	All external cover/Panels present	MR
V2)	Cabinet and panels free from dents/scratches/damage	MR
V3)	Doors and panels fitted right and correctly alignment	MR
V4)	All instrument controls/fuse holders/connections all marked according to the schematic	MR
V5)	Sercon Logo/Vinyls fitted correctly to door and panels	MR
V6)	Unit rating/serial sticker correct and fitted to fixed rear panel	MR
V7)	Mains isolation sticker fitted to all removable panels	MR
V8)	internal compartments free from dust and debris	MR

Mechanical Inspection

REF	Description	Initial
M1)	All fastenings fitted correctly I.E Flat washers and shakeproof washer ETC	MR
M2)	All fastenings tight and tightened to the correct torque where applicable	MR
M3)	All cooling fans fitted correctly with air flow in the right direction and guards present	MR
M4)	All plumbing bulkheads and fittings fitted correctly and tightend to required torque	MR
M5)	All piping secure and free from kinks ETC	MR
M6)	All Valves/Pipework/Fittings labelled correctly	MR

Electrical Inspection

REF	Description	Initial
E1)	Equipotential earth bonding to all removable panels	MR
E2)	All cable terminations tight and correctly crimped	MR
E3)	All Cable identifications and sizes correct to the schematic drawing	MR
E4)	Ribbon cables fitted and "Checked" label applied	MR
E5)	All fuses fitted to holders and are correct rating as schematic drawing	MR
E6)	All instrument cables supplied with unit	MR

Testing

REF	Description	Initial
T1)	Use 24V test power supply to run and check correct operation of the unit cooling fans	
T2)	P.A.T unit	
T3)	P.A.T Sticker filled in and applied to the rear of unit	
T4)	P.A.T results logged in the blue book	

[illegible]

Works Order Picking List

S10762

Date: 25/02/2026

Time: 08:34:33

Works Order: WO02639
 Stock Code: 10802/4
 Description: CryoPrep
 Qty Required: 1.00 Each
 Qty Outstanding: 1.00
 Plan Period: WK9/2026
 Due Date: 23/04/2026

Part Used
 05/03/26
 -SS

S10807
 ✓ x 1
 S10707
 x 5

Stock Code / Description Qty to Pick Unit Location Qty Picked / By

Manufacturing Instructions: IN1378 - Louisiana State University

60101/4 verSA 4 (Cryoprep No Plumbing)	1.00	Each		
9099/1 Instrument Packing	1.00	Each		
SI2414 Bulkhead union 1/32 .5mm bore, SS	10.00	Each		
SI2656 Snap fit Bushe 38x3.2x27 Black	1.00	Each		
71001-1 Cryoprep Spares Kit	1.00	Each	@	
SI2578 Cryoprep Cabinet Assemble	1.00	Each	C1	1
SI1052 3 Way MOLEX Clip	1.00	Each	Carousel 1 M-1	1
SI1255 M5 Plug	2.00	Each	Carousel 1 M-1	2
SI2413 Pneumatic Straight Tube Adapter, Plug In 4mm-8mm	1.00	Each	Carousel 1 M-1	1
SI1602 Speed Controller (5mm)	6.00	Each	Carousel 1 N-1	6
SI0701 1/4" PTFE Ferrules Pk/1	8.00	Each	Carousel 1 P-1	8
SI0708 SSUE 16/16 Stainless Steel Union Pk/1	10.00	Each	Carousel 1 P-1	10
SI1727 8mm Plug	1.00	Each	Carousel 1 P-1	1
SI1900 Dowty Seal - M5	25.00	Each	Carousel 1 P-1	25
SI2244 Male Elbow 4mm to M5	6.00	Each	Carousel 1 P-1	6
SI1595 37 Way D Plate	1.00	Each	Carousel 1 P-2	1

Works Order Picking List

Date: 25/02/2026
Time: 08:34:33

Works Order: WO02639
Stock Code: 10802/4
Description: CryoPrep
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK9/2026
Due Date: 23/04/2026

Stock Code / Description	Qty to Pick	Unit	Location	Qty Picked / By
SI0703 1/8-1/16" PTFE Reducing Ferrule Pk/1	2.00	Each	Carousel 1 P-3	2
SI0196 Reducing Union 1/4 x 1/16 SS	8.00	Each	Carousel 1 Q-1	8
SI1603 Bulkhead Fitting 4mm - 1/8 (RS 7714923)	1.00	Each	Carousel 1 Q-1	1
SI1604 Male Connector 1/8 UNION 1/8	1.00	Each	Carousel 1 Q-1	1
SI0022 Capillary Crimp Parts A & B	3.00	Each	Carousel 1 Q-2	3
SI0198 Tee Union 1/16 SS	5.00	Each	Carousel 1 Q-2	5
SI0205 Bulkhead Union 1/8 SS	2.00	Each	Carousel 1 Q-2	2
SI1899 1/16 x M5 Fitting	25.00	Each	Carousel 1 Q-3	25
SC0030 Thermocouple K-Type 1.5mm Pk/1 (Send with 2 pin/2 Bullet Crimps)	2 1.00	Each	P-A2	2
SI1757 EXE-12 Needle For CTAC	1.00	Each	P-A2	1
SI1628 6 Way Manifold Assy	1.00	Each	PAUL OFFICE C4	1
SC2495 Scrubber Tube 220mm	2.00	Each	P-B3	2
SC0085 Cap Kit for Threaded Joints Caps & PTFE Backed Sil Seals pk2	2.00	Each	P-B4	2
SI0076 Tube Coupling	4.00	Each	Stores A	4
SI0374 Terminal Block Section	14.00	Each	Stores A-3	14
SI0375 Terminal Block End Plate	3.00	Each	Stores A-3	3
SI0620 IEC Insulated Cover	1.00	Each	Stores A-4	1

Works Order Picking List

Date: 25/02/2026

Time: 08:34:33

Works Order: WO02639
 Stock Code: 10802/4
 Description: CryoPrep
 Qty Required: 1.00 Each
 Qty Outstanding: 1.00
 Plan Period: WK9/2026
 Due Date: 23/04/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
SI1328 Mains Filter	1.00	Each	Stores A-4	1
SI1344 IEC Connector Clamp Kit	1.00	Each	Stores A-5	1
SI1797 Fuse Holder Insulation Cover	2 1.00	Each	Stores A-5	1
SI2304 Screwdriver bayonetcap fuseholder 5x20mm	2 1.00	Each	Stores A-5	1
SI0629 120mm Fan Guard	3.00	Each	Stores A-6	3
SI0630 80mm Fan Guard	2.00	Each	Stores A-6	2
SI1737 B/bearing axial fan, 119sqx25mm 24V med	3.00	Each	Stores A-6 (2)	3
SI0373 34 Way IDC Terminal Block	1.00	Each	Stores A-8	1
SI0508 24V PSU - Add Finger Cover	1.00	Each	Stores A-8	1
SI0345 SSR Safety Cover	1.00	Each	Stores B-3	1
SI0559 Solid State Relay 10A rms 24-280 Vac	1.00	Each	Stores B-3	1
SI0344 2P red illuminated round rocker switch,10A	1.00	Each	Stores B-5	1
SI2411 KVT 20 Split Cable Gland (inc locknut)	1.00	Each	Stores B-6	1
SI2412 KT 5 insert	0.10	Each	Stores B-6	1
SI0704 on order Rt-Molsieve 5A Plot Column 15m x 0.53ID x 20um	1.00	Each	Stores C-1	1
SI1198 Rt-Q-BOND PLOT Column 30m, 0.53mm ID, 20um	1.00	Each	Stores C-1	1
SI2790 Halogen Heating Element Bulb with 3X Clips & Ceramic Connect	2.00	Each	Stores C-1	2

Works Order Picking List

Date: 25/02/2026
Time: 08:34:33

Works Order: WO02639
Stock Code: 10802/4
Description: CryoPrep
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK9/2026
Due Date: 23/04/2026

Stock Code / Description	Qty to Pick	Unit	Location	Qty Picked / By
SI1405 GVF 16-008 Ferrule Pk/10	1.00	Each	Stores C-3	1
SI0767 6 Way VALCO	2.00	Each	Stores D-1	2
SI0768 4 Way VALCO	1.00	Each	Stores D-1	1
SI2435 Electronic Pressure Regulator	1.00	Each	Stores D-1	1
SI0366 Flow Meter PMFc3100V	1.00	Each	Stores D-2	1
SI2296 Precision Flow Control	3.00	Each	Stores D-2	3
SI1241 3 Way Solenoid Valve	7.00	Each	Stores D-3	7/6
SI1242 2 Way Solenoid Valve	3.00	Each	Stores D-3	3
SI0580 Toroidal Transformer 500VA 2x30V o/p	1.00	Each	Stores D8	1
SI0837 Nafion Dryer	1.00	Each	Stores E-1	1
SI2557 MAGNETICALLY COUPLED RODLESS	3.00	Each	Stores E-1	3
SI1466 Magnetic catch	2.00	Each	Stores E-4	2
SI0967 Bottle Rack Shelf Set - 16mm Diameter	1.00	Each	Stores G	1
SI1390 <i>on order</i> Frame	1.00	Each	Stores G	
SI1391 Bottom Shelf	1.00	Each	Stores G	1
SI1804 <i>Removed</i> Rack Ø22 Bottle	1.00	Each	Stores G	
SI1805 Rack Ø41 Bottle	1.00	Each	Stores G	1

Works Order Picking List

Date: 25/02/2026

Time: 08:34:33

Works Order: WO02639
Stock Code: 10802/4
Description: CryoPrep
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK9/2026
Due Date: 23/04/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
SI1806 Rack Ø53.5 Bottle	1.00	Each	Stores G	
SI2039 Rack Ø61Bottle	1.00	Each	Stores G	
SI0219 - on order AGIL 3 DEWAR - Cryopal	1.00	Each	Stores G1	
SI2288 Internal USB 4.5m	1.00	Each	Stores J-3	
SI2582 EArth System PCB	1.00	Each	Stores J-4	
SI2512 3 Metre UK 13 amp Fused plug to IEC C 13	1.00	Each	Stores NCB	
SI0733 - on order 1100 Deg C Stainless Steel Tube Furnace	1.00	Each	T-4	

All items picked and packed as marked:

Date: ____/____/____ Signed: _____

Stock Allocated, Issued, Completed:

Date: ____/____/____ Signed: _____

Works Order Picking List

Date: 03/03/2026

Time: 10:50:41

Works Order: WO02644
Stock Code: 71001-1
Description: Cryoprep Spares Kit
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK10/2026
Due Date: 24/03/2026

Stock Code / Description **Qty to Pick** **Unit** **Location** **Qty Picked / By**
Manufacturing Instructions: IN1378 - Louisiana State University

SI0700 1/16" PTFE Ferrules Pk/1	5.00	Each	Carousel 1 P-1	/
SI0708 SSUE 16/16 Stainless Steel Union Pk/1	2.00	Each	Carousel 1 P-1	2
SI0762 PSR16-16 PTFE Sealing Rings Pk/20	1.00	Each	Carousel 1 Q-1	/
SI1757 EXE-12 Needle For CTAC	1.00	Each	P-A2	/
SI1800 WES Needle For CTAC	1.00	Each	P-A2	/
SI2072 Capillary Ceramic Tube Cutter Pk/3	1.00	Each	P-A3	/
SC0091 Alumina Tubes 1.6 x 0.8 x 400mm Pk/1	2.00	Each	P-B3	2
SC2495 Scrubber Tube 220mm	2.00	Each	P-B3	2
SC1410 O Ring Schott Type Silicone/PTFE 29013603 Pk/10	1.00	Each	P-B4	/
SC0088 Copper Wire 10m	1.00	Each	P-B5	/
SC0089 Nickel Wire 10m	1.00	Each	P-B5	/
SC0121 Platinum Wire 1m	1.00	Each	P-B5	/
SC2667 EMASorb II A Granular 20-30 mesh 25g	4.00	Each	P-C3	4
SC9791 Schutze Reagent 30g	3.00	Each	P-C4@	3
SC0006 Quartz Wool Very Fine 10g	1.00	Each	PD-1	/
SC8500A 12ml 15.5x101mm Breath Sampling Vial. Blue Open Top Screw Cap with Butyl Septa, pk/100	2.00	Each	PF-5	2

Works Order Picking List

Date: 03/03/2026
Time: 10:50:41

Works Order: WO02644
Stock Code: 71001-1
Description: Cryoprep Spares Kit
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK10/2026
Due Date: 24/03/2026

Stock Code / Description	Qty to Pick	Unit	Location	Qty Picked / By
SC0141 Amber Glass Bottles for TG 2oz (approx 60ml) Pk/24	1.00	Each	PG-2	/
SC0140 Amber Glass Bottles for TG 1oz (approx 30ml) Pk/24	1.00	Each	P-G2	
SC0142 Amber Glass Bottles for TG 4oz (approx 120ml) Pk/24	1.00	Each	P-G3	/
SC0143 Amber Glass Bottles for TG 8oz (approx 240ml) Pk/24	1.00	Each	P-G4	/
SC0144 Seprseal Teflon/Silicone Septa 11/16" for 1oz&2oz Pk/50	1.00	Each	P-G4	/
SC0145 Seprseal Teflon/Silicone Septra 3/4" for 4oz <i>pk/50</i>	1.00	Each	P-G4	/
SC0146 Seprseal/Silicone Septa 27/32" for 8oz Pk/50	1.00	Each	P-G4	/
SI0712 Tubing SS 1/16" ODX 0.75mm ID pk/1M	5.00	Each	Production	5
SI0769A Peek Tubing 1m	2.00	Each	Production	2
SI0691 GVF 16-16 Vespel Ferrule Pk/10	1.00	Each	Stores C-2	/
SI0707 SSNE-16 Stainless Steel Nut Pk/5	1.00	Each	Stores C-2	/
SI1405 GVF 16-008 Ferrule Pk/10	1.00	Each	Stores C-3	/

All items picked and packed as marked:

Date: 13/3/26 Signed: *Ry*

Stock Allocated, Issued, Completed:

Date: / / Signed:

7: ASSEMBLY AND TEST RECORD

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

PRODUCT:

VerSA h

SERIAL NUMBER:

60101/4-2026/1378

 ASSEMBLED:
 (Name)



Date:

25/3/2026

 PRE-TEST
 INSPECTION:
 (Production name)



Date:

25/3/2026

 PRE-TEST
 INSPECTION:
 (Test name)



Date:

30/3/2026

 SYSTEM TEST:
 (Name)



Date:

18/05/2026

 PRE-DESPATCH
 INSPECTION:
 (Name)



Date:

22/05/2026

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:

Works Order Picking List

Date: 25/02/2026

Time: 08:33:32

Works Order: WO02640
Stock Code: 60101/4
Description: verSA 4 (Cryoprep No Plumbing)
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK9/2026
Due Date: 26/03/2026

Part-Issued
05/03/26

Stock Code / Description **Qty to Pick** **Unit** **Location** **Qty Picked / By**
Manufacturing Instructions: IN1378 - Louisiana State University

SI3088 Base Locator Rack/Heater	1.00	Each		1
SI2584 XYZ Control Box Assy	1.00	Each	C1	1
SI3258 Panel Mount XLR Connector, Female, 3 Way	1.00	Each	Carousel 1 - N1	1
SI3259 Cable Mount XLR Connector, Male, 250 V ac, 3 Way, Silver Plating	1.04	Each	Carousel 1 - N1	1
SI0708 SSUE 16/16 Stainless Steel Union Pk/1	1.00	Each	Carousel 1 P-1	1
SI0762 PSR16-16 PTFE Sealing Rings Pk/20	0.20	Each	Carousel 1 Q-1	0.2
SI2515 uCarbs Single Needle	1.00	Each	P-A2	1
SI0374 Terminal Block Section	4.00	Each	Stores A-3	4
SI0375 Terminal Block End Plate	1.00	Each	Stores A-3	1
SI0341 SPST Blue Visi Rocker switch, 6(4)A	1.00	Each	Stores B-4	1
SI3061 GREEN 24V LED INDICATOR	1.00	Each	Stores B-4	1
SI3049 Des 10 Cable Entry frame (2 rows of 3 inserts)	1.00	Each	Stores B-6	1
SI3050 Despred 32 Spilt gland and Lock nut.	1.00	Each	Stores B-6	1
SI3053 SPP 6G single insert 6-7mm grey	6.00	Each	Stores B-7	6
SI3055 SPP 2X6G double insert 2 x 6mm grey	1.00	Each	Stores B-7	1
SI3047 Single Head XYZ Assy.	1.00	Each	Stores I	1

Works Order Picking List

Date: 25/02/2026
Time: 08:33:32

Works Order: WO02640
Stock Code: 60101/4
Description: verSA 4 (Cryoprep No Plumbing)
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK9/2026
Due Date: 26/03/2026

Stock Code / Description	Qty to Pick	Unit	Location	Qty Picked / By
SI3022 24Volt 250W AC/DC PSU AHM250PS24	1.00	Each	Stores J-3	1
SI3039 StarTech 7x USB A Port Hub, USB 3.0 - Terminal Connector	1.00	Each	Stores J-3	1
SI3040 StarTech 1 Port USB 3.0 Ethernet Adapter, 10/100/1000Mbit/s	1.00	Each	Stores J-3	1
SI3042 Cat6 Ethernet Cable, RJ45 to RJ45 300mm	1.00	Each	Stores J-3	1
SI3043 Ethernet Cable, Cat6a, 150 mm, 5.9", RJ45 Plug to RJ45 Plug	2.00	Each	Stores J-3	2
SI3062 USB RS232-PCBA	2.00	Each	Stores J-3	2
SI3063 Male USB A to Male USB B Cable, USB 3.0, 3m	1.00	Each	Stores J-3	1
SI2971 150 ELECTRIC ACTUATOR WITH SCREW DRIVE	1.00	Each	Stores K3	1
SI2973 300 ELECTRIC ACTUATOR WITH SCREW DRIVE	1.00	Each	Stores K3	1
SI2974 300 SUPPORT GUIDE FOR ELECTRIC ACTUATOR	1.00	Each	Stores K3	1
SI3012 450 ELECTRIC ACTUATOR WITH SCREW DRIVE	1.00	Each	Stores K3	1

57Way Blankplate SI1595
15Way Blankplate SI1594

All items picked and packed as marked:

Date: ____/____/____ Signed: _____

Stock Allocated, Issued, Completed:

Date: ____/____/____ Signed: _____

Works Order Picking List

Date: 03/03/2026

Time: 10:50:16

Works Order: WO02643
Stock Code: 70501-1
Description: Consumables for C and N for Combu:
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK10/2026
Due Date: 24/03/2026

Stock Code / Description **Qty to Pick** **Unit** **Location** **Qty Picked / By**
Manufacturing Instructions: IN1378 - Louisiana State University

SC0012	3.00	Each	P-B2	3
Reaction/Reduction Tube Transparent Heavy Wall Pk/1				
SC0011	4.00	Each	P-B3	4
Quartz Liner Sleeve Insert Open Both Ends 15x180mm Pk/1				
SC2495	3.00	Each	P-B3	3
Scrubber Tube 220mm				
SC0074	1.00	Each	P-B4	1
O-Ring Set - ANCA SL/GSL (5xSC0046,5xSC0047,5xSC1395)				
SC1410	1.00	Each	P-B4	1
O Ring Schott Type Silicone/PTFE 29013603 Pk/10				
SC1421	1.00	Each	P-B4	1
Seal Viton Chamfered Square Profile-upper reaction tube Pk/5				
SC0162	4.00	Each	PC-1	4
Magnesium Perchlorate Gran 0.7to1.2mm H2O Absorbent 25g				
SC0001/E	2.00	Each	P-C1	2
Chromium Oxide Granular 0.85-1.7mm 25g				
SC0004	1.00	Each	P-C1	1
Quartz Chips Granular 50g				
SC0003	1.00	Each	P-C2	1
Copper Oxide Fine Wires 100g				
SC0024	1.00	Each	P-C3	1
Chromosorb W 30-60 Mesh Acid Washed 10g				
SC2667	4.00	Each	P-C3	4
EMASorb II A Granular 20-30 mesh 25g				
SC2668	4.00	Each	P-C3	4
EMASorb II B Granular 1.6-3mm 8-20 mesh CO2 25g				
SC0006	1.00	Each	PD-1	1
Quartz Wool Very Fine 10g				
SC0007	1.00	Each	PD-1	1
Silver Wool Very Fine Wire Unreeled 89 sqcm/g 10g				
SC0009	2.00	Each	PD-1	2
Tin Capsules Pressed Std Wt 8 x 5mm Pk/250				

Works Order Picking List

Date: 03/03/2026

Time: 10:50:16

Works Order: WO02643
Stock Code: 70501-1
Description: Consumables for C and N for Combu:
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK10/2026
Due Date: 24/03/2026

Stock Code / Description	Qty to Pick	Unit	Location	Qty Picked / By
SC0010 Tin Capsules Pressed Std Wt 6 x 4mm Pk/500	1.00	Each	PD-2	1
SC0002 Copper Wires Fine Wires Reduced 4 x 0.5mm 100g	2.00	Each	PD-3	2

All items picked and packed as marked:

Date: 6/3/26 Signed: Per

Stock Allocated, Issued, Completed:

Date: / / Signed:

* PAWA GOODS
PACKED SEPARATELY

Works Order Picking List

Date: 03/03/2026

Time: 10:44:44

Works Order: WO02641
Stock Code: 70201-1
Description: Analyser spares kit - Included
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK10/2026
Due Date: 24/03/2026

Stock Code / Description Qty to Pick Unit Location Qty Picked / By
Manufacturing Instructions: IN1378 - Louisiana State University

SI0703 1/8-1/16" PTFE Reducing Ferrule Pk/1	5.00	Each	Carousel 1 P-3	5
SC0032A Copper Gasket DN63CF Pk/1	5.00	Each	P-A3	5
SC0033A Copper Gasket DN40CF Pk/1	5.00	Each	P-A3	5
SC0038 Source Tool Kit	1.00	Each	P-B5	1
SC8407 Snoop Liquid Leak Detector 2oz	1.00	Each	PC-5	1
SC0063 Edwards Rotary Pump Oil - Ultra grade 15 - 1L	1.00	Each	P-E1	1
SC0028 Filament, 20-20 Pk/1	1.00	Each	Stores A-1	1

All items picked and packed as marked:

Date: 6 / 3 / 26 Signed: PC

Stock Allocated, Issued, Completed:

Date: / / Signed:

Works Order Picking List

Date: 03/03/2026

Time: 10:49:45

Works Order: WO02642
Stock Code: 70501-3
Description: Sample Preparation Kit
Qty Required: 1.00 Each
Qty Outstanding: 1.00
Plan Period: WK10/2026
Due Date: 24/03/2026

<u>Stock Code / Description</u>	<u>Qty to Pick</u>	<u>Unit</u>	<u>Location</u>	<u>Qty Picked / By</u>
---------------------------------	--------------------	-------------	-----------------	------------------------

Manufacturing Instructions: IN1378 - Louisiana State University

SC0127 Micro spatula 154mm long Pk/1	1.00	Each	P-B5	/
SC0128 Mirror Tiles 6in x 6in Pk/1	1.00	Each	P-B5	/
SC1605 Forceps Stainless Steel Curved Points Pk/1 125mm	1.00	Each	P-B5	/
SC1606 Forceps Stainless Steel Straight Points Pk/1	1.00	Each	P-B5	/
SC1630 Cell Well 96 Flat Bottom Pk/1	1.00	Each	P-B5	/
SI0709A Syringe Model SK-10F 10ul Pk/1	1.00	Each	Stores D-4	/

All items picked and packed as marked:

Date: 12/3/26 Signed: Per

Stock Allocated, Issued, Completed:

Date: ____/____/____ Signed: _____



sercon
innovators in isotopes

Sercon Ltd, Europa House, Coppicemere Drive,
Crewe, Cheshire CW1 6GZ, UK
Tel: +44 (0)1270 580008
Company Registration No. 4290072 Vat No. 771 1100 74

Serial Numbers - 8

8 - Serial Numbers Record Document

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

Units	S/N
MS/ABCA	
Integra 2	
Prep Unit 1	
Prep Unit 2/Misc	
Electronics Upgrade	
CETAC	
Gas Box	
Autosampler	
BCR	
Dual Heater Block	

Pump Kit and Optics	S/N
Turbo pump S	250747431
Turbo pump A	250732117
Rotary Pump	250591751 ²
Voltage	110 / (240)
Gauge S	250590018
Gauge A	250590016
Source	20102HS-270
Collector 1	20301-189
Collector 2	20501-085
Magnet	149

Parts	S/N
Fan PSU	
24V PSU	

PCBs	S/N
Electronics Box	20260002
Prep PCB	2505-20260006
VFC PCB	25010
Watchdog PCB	
Head Amp PCB 1	25018
Head Amp PCB 2	24018
Electromagnet RP	

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

PC	S/N
PC	3K6PKC4
Monitor	BZxWD94
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:

Cryo Furnace - F4795 22



Packing List

Customer Reference: PO-0000329485

Shipper / Exporter:

Sercon Limited
Europa House
Coppicemere Drive
Crewe
CW1 6GZ
UK

Tel: +44 (0)1270 580008
Reference: IN1378

Consignee:

Louisiana State University and Agricultural
and Mechanical College
CC00316 LSUAM, Col of Coast and Envir,
Oceanography and Coastal
ECE - Rm3197, 93 South Quad
Baton Rouge, LA 70803, USA

Contact Name: Thomas Blanchard
Contact Tel Number: + (225) 578-9370

BOX: 1

Quantity	Product Code	Product Description	Serial Number: if available
☒ 1	20402/4	HS2022	
☒ 1		External Pipes	20402/4-2026/1378

Packed by: 

Date: 22/05/16

Claims for damage or shortages must be made within 3 days



S035b_v6

Sercon Limited
Europa House, Coppicemere Drive
Crewe, Cheshire
CW1 6GZ, U.K.
Company Registration No.: 4290072

Phone: +44 (0) 1270 580008

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



Packing List

Customer Reference: PO-0000329485

Shipper / Exporter:

Sercon Limited
Europa House
Coppicemere Drive
Crewe
CW1 6GZ
UK

Tel: +44 (0)1270 580008
Reference: IN1378

Consignee:

Louisiana State University and Agricultural
and Mechanical College
CC00316 LSUAM, Col of Coast and Envir,
Oceanography and Coastal
ECE - Rm3197, 93 South Quad
Baton Rouge, LA 70803, USA

Contact Name: Thomas Blanchard
Contact Tel Number: + (225) 578-9370

BOX: 2

Quantity	Product Code	Product Description	Serial Number: if available
☒ 1	10202/11	Iso-Earth	10202/11-2026/1378

Packed by: 

Date: 22/05/26

Claims for damage or shortages must be made within 3 days



S035b_v6

Sercon Limited
Europa House, Coppicemere Drive
Crewe, Cheshire
CW1 6GZ, U.K.
Company Registration No.: 4290072

Phone: +44 (0) 1270 580008

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



Packing List

Customer Reference: PO-0000329485

Shipper / Exporter:

Sercon Limited
Europa House
Coppicemere Drive
Crewe
CW1 6GZ
UK

Tel: +44 (0)1270 580008
Reference: IN1378

Consignee:

Louisiana State University and Agricultural
and Mechanical College
CC00316 LSUAM, Col of Coast and Envir,
Oceanography and Coastal
ECE - Rm3197, 93 South Quad
Baton Rouge, LA 70803, USA

Contact Name: Thomas Blanchard
Contact Tel Number: + (225) 578-9370

BOX: 3

Quantity	Product Code	Product Description	Serial Number: if available
☒ 1	10802/4	CryoPrep	10802/4-2026/1378
☒ 1	SI0219	Dewar	
☒ 1		External Pipes	
☒ 1	SI2918	PC	3K6PKC4
☒ 1		Software backup USB (inside PC BOX)	
☒ 1		Windows recovery (inside PC box)	

Packed by: 

Date: 22/09/26

Claims for damage or shortages must be made within 3 days



S035b_v6

Sercon Limited
Europa House, Coppicemere Drive,
Crewe, Cheshire
CW1 6GZ, U.K.
Company Registration No.: 4290072

Phone: +44 (0) 1270 580008

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



Packing List

Customer Reference: PO-0000329485

Shipper / Exporter:

Sercon Limited
Europa House
Coppicemere Drive
Crewe
CW1 6GZ
UK

Tel: +44 (0)1270 580008
Reference: IN1378

Consignee:

Louisiana State University and Agricultural
and Mechanical College
CC00316 LSUAM, Col of Coast and Envir,
Oceanography and Coastal
ECE - Rm3197, 93 South Quad
Baton Rouge, LA 70803, USA

Contact Name: Thomas Blanchard
Contact Tel Number: + (225) 578-9370

BOX: 4

Quantity	Product Code	Product Description	Serial Number: if available
☒ 1	60101/4	Versa 4	60101/4-2026/1378
☒ 1	SI3022	Versa PSU	

Packed by: 

Date: 22/05/26

Claims for damage or shortages must be made within 3 days



S035b_v6

Sercon Limited
Europa House, Coppicemere Drive
Crewe, Cheshire
CW1 6GZ, U.K.
Company Registration No.: 4290072

Phone: +44 (0) 1270 580008

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

Packing List

Customer Reference: PO-0000329485

Shipper / Exporter:

Sercon Limited
Europa House
Coppicemere Drive
Crewe
CW1 6GZ
UK

Tel: +44 (0)1270 580008
Reference: IN1378

Consignee:

Louisiana State University and Agricultural
and Mechanical College
CC00316 LSUAM, Col of Coast and Envir,
Oceanography and Coastal
ECE - Rm3197, 93 South Quad
Baton Rouge, LA 70803, USA

Contact Name: Thomas Blanchard
Contact Tel Number: + (225) 578-9370

BOX: 5

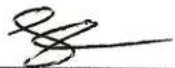
Quantity	Product Code	Product Description	Serial Number: if available
☒	1	70201-1	Analyser Spares Kit
☒	1	70501-3	Sample Preparation Kit
☒	1	70501-1	Consumable Kit for C and N
☒	1	71001-1	Cryoprep Spares Kit
☒	1	SI2737	Solid Auto Sampler
☒	1		Engineer Pack
☒	1	SI2515	Versa Needle + Peak Tube
☒	6	SI2510	US Mains Cables
☒	2	SI1198	GC Columns
☒	1		Extra Versa Racks
☒	1	SI2391	Monitor
☒	1	SI0103	Edwards Rotary Pump + Cable
☒	1	SI0685	Electromagnet
☐			
☐			
☐			
☐			
☐			
☐			

42725

BZXWD94

250597757

149

Packed by: 

Date: 22/05/26

Claims for damage or shortages must be made within 3 days



COLLECTION NOTE

Job Number: **IN1378**
Customer: Louisiana State University
Contact: Tommy Blanchard

Collection on
Date:

26/05/2026

No. **5**
of boxes:

By:
Company:

NG TRANSPORT

Vehicle
Reg No.

SM14AED

Signature:

[Signature]

Print:

RAFAN



11 – Installation Report

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

Contact:	Thomas Blanchard		
Date of Visit:	13 th – 17 th July 2026	No. of Days:	5
Engineer:	David Harris		

Details of visit:

Engineer arrived on site and inspected delivered boxes. No damage noted – All OK.

Unboxed instruments and setup on desktop. Desktop space is limited, VerSA setup on top of CryoPrep as required – All OK.

Unboxed PC, setup on desktop. Established comms with all instruments – All OK.

Issue with power supply IEC cables to UPS unit. Only cables supplied by Sercon were to 115V power outlets. Instrument has been built to 230V specifications (IEC c20-c13 required for 230V power outlets). Adaptors ordered by customer and arrived by Wednesday during the week install. Comms was able to be established with the units on 115V but unable to start vacuum pumps. Also no MFC/EPC or Furnace control. Unable to establish comms with VerSA.

Customer required back line plumbing installing. 1/8th Stainless Steel tubing and fittings used. Engineer built lines, customer fitted to gas cylinders.

Software edited as required for bespoke unit layout. Node for IsoEarth set to U, E node required. Altered dip switch settings on Prep PCB. Unit now set to node E.

CryoPrep set to node U also. Unable to reach Prep PCB due to lack of access to rear of CryoPrep. Altered all events to operate with node U command.

Power adaptor arrived and installed onto power lines. All systems now have 230V and function as expected – All OK.

No issues with software. All components and controls are as expected – All OK.

Pumped down instrument. Turbo-pump speeds reached 93k RPM. Vac pressure of 1.7×10^{-8} mBar achieved overnight. 6.0×10^{-9} mBar achieved over 2 days – All OK.

Activated Ion source & fired filament. No issues – All OK.

User does not require Ref Gas on system. Closed Ref Gas He carrier flow to save on He usage. If Ref Gases are installed on system at a future date, engineer advises to set flow to 15ml/min.

Adjusted isolation valve crimps as required. Issue with blocked trapping loop valve. Replaced for spare part. Issue resolved.

Peak shapes tuned from trapping loop via IsoEarth combustion method (AS Beet Mix samples used). Magnet moved as required and system tuned for optimum linearity, sensitivity and peak shapes – All OK

2/1 Peak shapes all good – Pass

11 – Installation Report

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

2/1 stability checks all good – Pass

CryoPrep

Setup CryoPrep system. No faults noted. Plumbed in connections between systems as required – All OK.
Fitted GC columns and baked out at 140°C overnight. No leaks noted post-bake out. Set GC oven to room temp for analysis.

Demonstrated to users how to make up CryoPrep combustion tube and fit to system/furnace (1 tube damaged in process) – All OK.

Changed VerSA sample bed to 12ml exetainer function. Screws missing for correct build of sample bed.

Parts provided by customer. Adjusted XY coordinates as required – All OK.

Issue with VerSA sampling needle, part damaged. Sercon had been sent incorrect spare parts. (WES needle type). User has old needle from Gilson autosampler setup from previous (decommissioned) instrument. Fitted older needle and adjusted Z depth settings as required – All OK.

N.B. If the user changed to larger sample bottle types they will need to check the XY coordinates and the Z depth for injection.

Calibrated He flow meter – All OK.

User is interest primarily in ^{13}C & ^{15}N analysis applications on the CryoPrep.

Peak shapes tuned from trapping loop via IsoEarth combustion method and copied over to CryoPrep Project.

Adjusted methods and timings as required to optimise sample retention – All OK.

Tested batches from air for N_2 and CO_2 – Results good. (see below for details).

LN_2 used for ^{13}C batches. LN_2 not required for subsample trapping loop method with the ^{15}N method.

Customer ran N_2 samples as part of training session. Results also good.

IsoEarth

Made up reaction tubes for IsoEarth. User has experience of making tubes from previous systems.

All tubes installed. System He leak checked – No He leaks present – All OK.

Issue with Reduction furnace. No response from commands. Investigated issue – found power input cable to be detached. Reattaching restored control. Furnaces heat with no issue.

GC column baked out at 140°C overnight – All OK.

Furnaces heated up to required temps. (Comb, 1000°C, Reduc 600°C). GC oven set to 60°C for analysis – All OK.

Calibrated He flow meters – All OK.

MFC readback displays lower value than entered, but does produces correct set speed. Bug to be investigated by Sercon. Currently main He carrier flow correct at approx. 60ml/min, 25PSI. O_2 set to matching flows of 60ml/min & 25PSI.

O_2 leak present on system. No leaks detected on back line plumbing or within instrument. Customer swapped over cylinder gauge. Leak seemed to be resolved.

11 – Installation Report

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

Leak was also yielding high blank peak during testing. This issue was also resolved with the change in cylinder gauge – All OK. Blank peak under $>3.0 \times 10^{-10}$ (Major beam response) during final day of installation – All OK.

Ran DUAL analysis for precision & linearity. Results good (see below for details) – All Pass.

Precision batch: AS Beet Mix (n=5, N=100 μ g, C=400 μ g, Ref - N=100 μ g, C=400 μ g).

Linearity batch: AS Beet Mix (n=6, N=10-200 μ g, C=25-500 μ g, Ref- N=100 μ g, C=250 μ g).

Results:

IsoEarth + HS2022

CO₂ 2/1 Peak Shape = OK

N₂ 2/1 Peak Shape = OK

AS Beet Mix ¹³C Precision = 0.081‰ S.D.

AS Beet Mix ¹⁵N Precision = 0.139‰ S.D.

CO₂ 2/1 Stability = OK

N₂ 2/1 Stability = OK

AS Beet Mix ¹³C Linearity = 0.218‰ S.D.

AS Beet Mix ¹⁵N Linearity = 0.261‰ S.D.

CryoPrep

CO₂ from air ¹³C Precision = 0.054‰ S.D.

N₂ from air ¹⁵N Precision = 0.044‰ S.D.

Training

Gave overview of MS system and the component parts, (Flight tube, magnet, turbo pumps, gauges, etc)

Gave overview of GSL and component parts.

Demonstrated how to change source filament. This includes...

- How to power off Ion Source correctly.
- How to safely vent the instrument and monitor pump speed readbacks via Callisto.
- How to pump down instrument to correct pressure levels to condition filament.
- How to successfully condition filament and how long to allow system to out gas for.
- How to make up and fit reaction/scrubber tubes.
- Explained different plumbing setups on all systems
- How to leak check system and check background levels.

Gave training in Callisto usage. This includes...

- Navigation of Callisto & Reprocessor software
- Comms, settings and calibration functions.
- Overview of Bitmap, flow/pressure/temp readbacks and valve setup.
- Explanation on what the beams demonstrate and the isotopic ratio meanings.

11 – Installation Report

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

- Scan functions (Peak shape, stability, background scans, etc)
- Method building (timings, events, reference files, etc)
- Demonstrated how to edit Event & timing files.
- Sample list building and saving of data.
- How to set XY coordinates and set Z depth within method building.
- "Normal mode" for data analysis. (System does not have Ref Gases installed for RGI mode).
- How to reprocess data and improve standard deviation/mean of gathered data.
- Location of data within PC, (original data vs reprocessed data locations. Raw vs drift corrected data).
- Preferred set up of Blank, Test/Ref, sample during a sample list.
- Explained the importance of the magnet position in the tuning of the beams.
- Advised on preferred daily peak shape/stability checks that should be performed on system before use.

Visit complete. Systems installed and passed specifications.

Recommendations:

- Install Ref Gases for ease of tuning and stability checks.
- Check XY coordinates on VerSA sample bed if changing sample bottle type. Also check and set Z depth within method.

Faults and Shortages:

- IEC c20-c13 required for 230V power outlets.
- Screws for VerSA sample bed build.
- Exe12 replacement needles for CryoPrep (Only WES needles supplied).

Follow up:

N/A

Engineer: David Harris

Date: 17th July 2026

Signed:



11 – Installation Report

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

Notes:

N/A

12 – Installation Acceptance and Warranty Certificate

Client:	Louisiana State University		
Quotation Number:	18309	Date:	18/02/2026
Job Number:	IN1378	Date:	20/02/2026

Contact:	Thomas Blanchard
System:	HS2022, CryoPrep with VerSA, IsoEArth
Software:	Callisto v6001, Reprocessor v5000
Engineer:	David Harris
Installation Date:	17 th July 2026

Warranty commences:	17 th July 2026
Warranty Expires:	17 th July 2028

Customer Acceptance:

Name: Thomas Blanchard
 Signature: [Signature]
 Date: 7/23/2026

Engineer's Signature:

On behalf of Sercon Limited

Name: David Harris
 Signature: [Signature]
 Date: 17th July 2026

Notes:

Purchase Order

Purchase Order 25385
Order date 19/12/2024
Supplier Ref.
Job No.

Delivery and Invoice Address:-

Sercon Limited
 Europa House
 Coppicemere Drive
 Crewe
 Cheshire
 CW1 6GZ
 United Kingdom

Phone: +44 (0) 1270 580008
 Fax: +44 (0) 1270 252310
 e-mail: sales@sercongroup.com
 Visit us at: www.sercongroup.com
 VAT Reg No: 771 1100 74

Supplier Details:-

Lab Power Solutions
 (Xtreme Power Conversion)
 14. Vista Dr.
 Salinas
 CA 93907

Tel:
 Fax:
 A/c code: MIS004

Sercon Code	Product Description	Supplier Part Number	Qty Ordered	Unit Price \$	Net Amount \$
SI2376	Xtreme Power TX91 Series 6kVA/6kW Isolated Online UPS	ABCDEF10.0	1	6,930.000	6,930.00
CON002	Xtreme Power XPDU Series Basic Power PDU with 12' Input line cord		1	143.000	143.00
CON002	XPC Wood Shipping Crate		1	225.000	225.00

Quote: 120224
Payment by Credit Card 23/12/2024

IF DELIVERY IS TO BE DELAYED FOR ANY REASON, PLEASE ADVISE US IMMEDIATELY BY TELEPHONE ON +44 (0) 1270 580008

Authorised by: Sam
 for SERCON LTD

Date: 19/12/2024

Total Net Amount	7,298.00
Shipping	453.73
Total VAT Amount	0.00
Order Total	7,751.73



Phone - (408) 722 1885

14 Vista Dr.
Salinas, CA 93907
www.labpowersolutions.com

LPS Quote Form

X-TREME
Power Conversion

XPC Authorized Distributor

To:	Sercon
Sam Stockton	

Quote #	030426
Date	March 4, 2026
Contact	Scott Jensen scott@xpcc.com (408) 722 1885

QTY	Part Number	Description	Net Price	Total	
1	TX91-6KP	Xtreme Power TX91 Series 6kVA/6kW Isolated Online UPS, 208V input voltage; 240/120V; L6-30R input ine cord included; Full Load Runtime = 8 minutes; ECO mode; Isolation transformer; Tower; internal maintenance bypass; lockable casters; RS232, USB, Intelligent Ports, EPO Port: Communications Cable and Shutdown Software; UL1778, cUL, FCC Class A, RoHS Listed.; TAA Compliant; 3-Year Electronics, 3-Year Battery Warranty (USA and Canada); 9.8"W x 23.2"D x 32.4"H, 278 lbs.	\$7,054	\$7,054	
1	TX91-OBOX3	Power Distribution Unit (PDU) for the TX91-6kP. Includes (8) 5-20R 12-V receptacles, (3) 230V 6-15R receptacles and (1) IEC-C19 receptacle	\$594	\$594	
1	XPC Crate	Wood shipping crate	\$225	\$225	
		F.O.B	Denver, CO / Raleigh, NC	Amount	\$7,873.00
		LEAD TIME	4-5 Weeks - Ocean Freight to London Docks	Shipping	TBD
		TERMS	Payment due on receipt of Invoice - ACH or Credit Card	Total	\$7,873.00

Quotes expire after 30 days

XTREME POWER CONVERSION TX91

Isolated Online Tower UPS // 240/120VAC or 230/115VAC

For more information, visit <https://www.xpcc.com/tx91-3-10k>



Isolated online UPS provides protection from all 10 common power problems

Isolated online UPS provides the cleanest power in the most demanding conditions. The TX91 galvanic isolation transformer prevents common mode noise which is left exposed by typical transformerless online designs.

Isolated online applications include retail, industrial environments, laboratories, and any installation with grounding or noise issues.

TX91 provides dual output voltages and optional configurable PDU to meet a wide range of receptacle requirements.

For Isolated Online Voltage Regulation without internal batteries reference www.xpcc.com/txvr

PRODUCT SNAPSHOT

- › Available models: 3.8kVA/3.8kW, 5kVA/5kW, 6kVA/6kW, 10kVA/10kW
- › Optional extended batteries
- › Auto restart
- › UL1778, cUL, FCC Class A, RoHS, TAA compliant
- › 3 years electronics, 3 years battery warranty (USA and Canada)

FEATURES

Maintenance bypass—manually transfer critical loads from UPS power to utility power, enabling TX91 UPS maintenance

Galvanic isolation transformer—eliminates common mode noise and the need to install expensive dedicated circuits and provides power conditioning during normal and bypass operation

Extended battery runtimes—optional 580W internal batteries (XR models). External battery cabinets can also be added for extended runtime

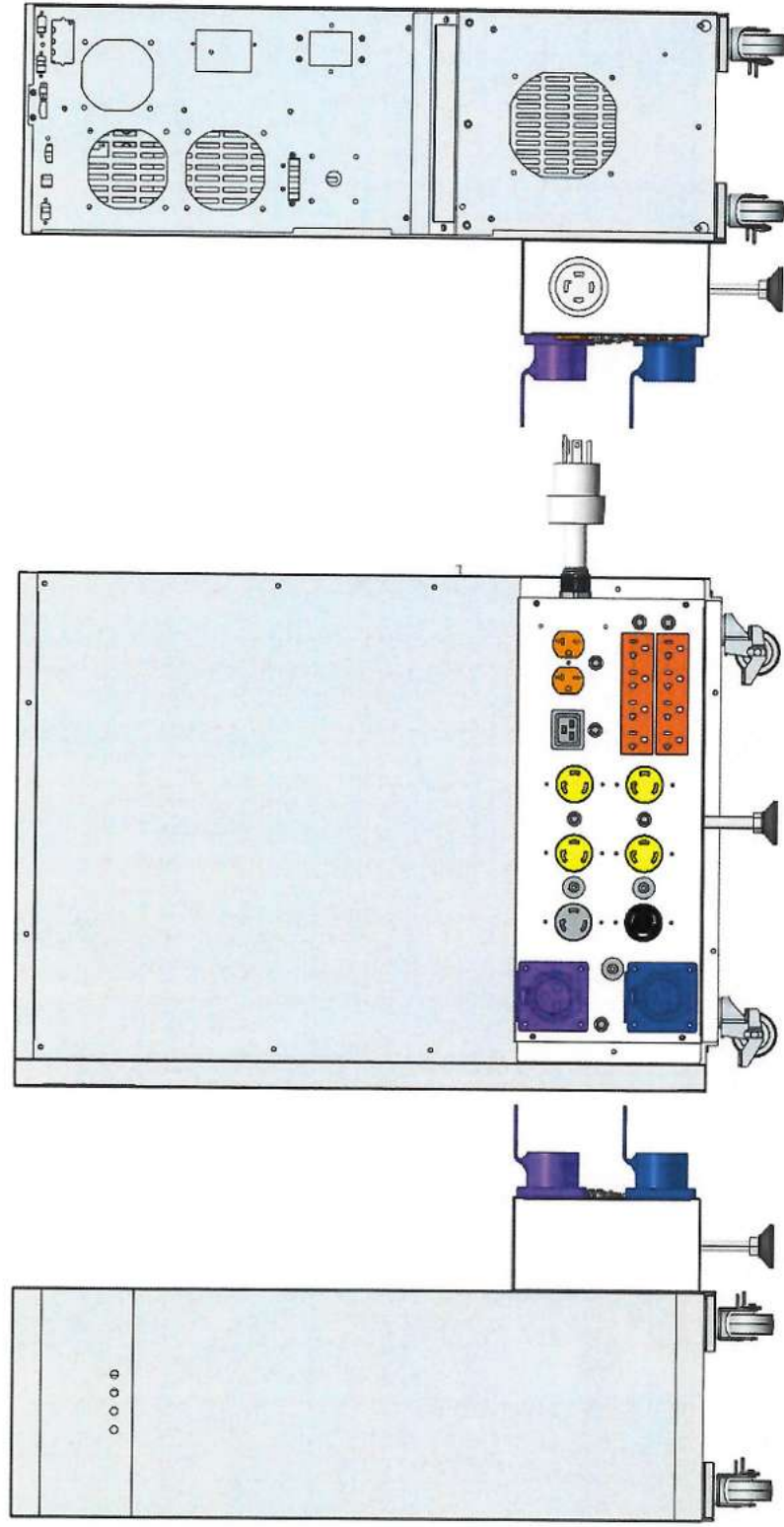
Surge voltage let-through (max)—< 10V normal mode (L-N), < 0.5V common mode (N-G) when subjected to 6kV ANSI/IEEE C62.41 Cat. A

Static switch—automatically transfers output from inverter to the isolated bypass source in the event of an overload or fault

Surge voltage withstand capability—ANSI/IEEE C62.41 Category A & B, 6kV/200 & 500A, 100kHz ringwave

LCD display—monitor vital and precise information

XTRME
Power Conversion®
Reliable. Safe. Efficient.

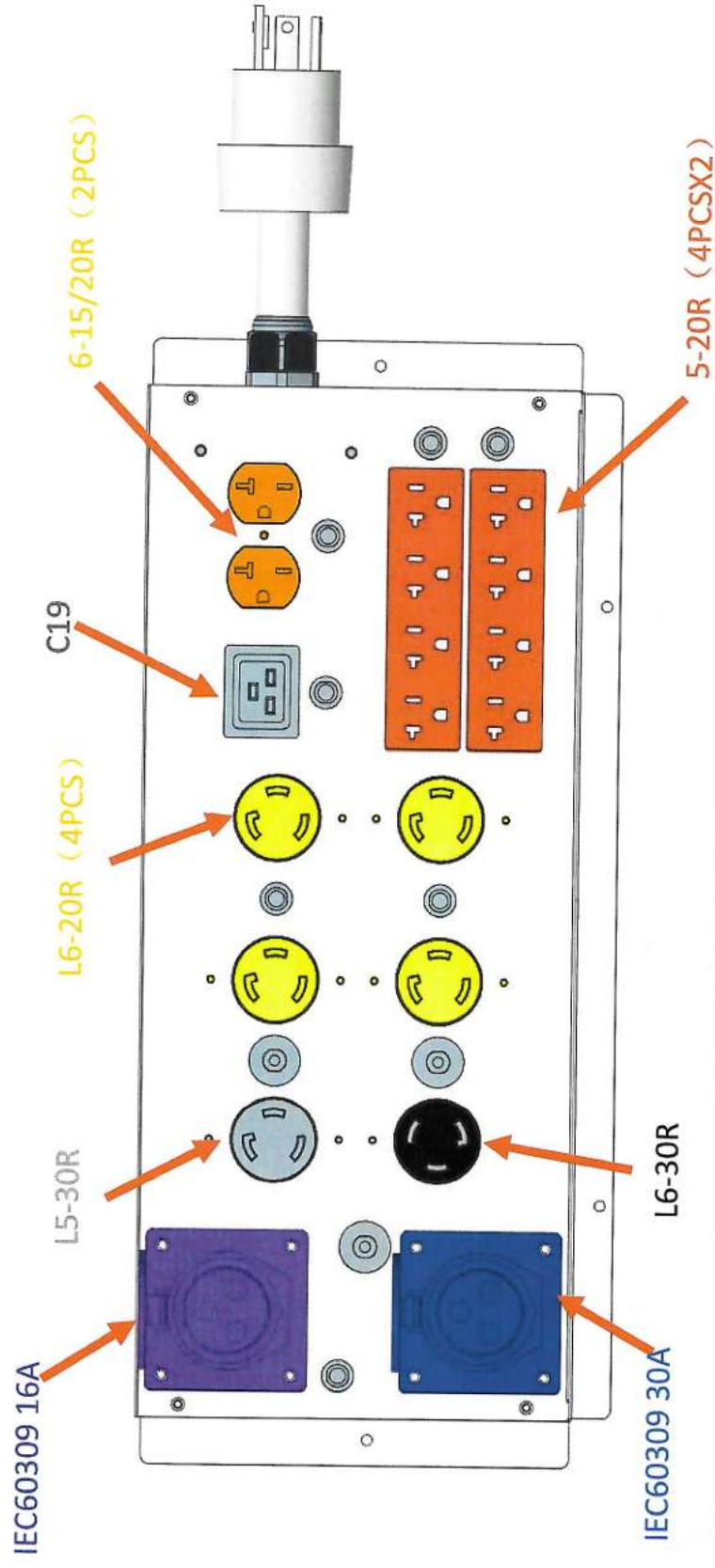


FRONT

SIDE

REAR

UPS and PDU assembly view



Socket type

