

SERVICE REPORT

Job Number:	IN1333		Quote:	Sage:
Customer:	University of Nottingham Royal Derby Hospital			
Contact:	Dan Wilkinson			
Instrument:	HTEA			
Date of Visit:	30 th October 2024		Days:	1
Engineer:	James Hanson			
Reason for Visit:				
Trigger mechanism installation.				
Service Contract?	No	Expires:		
Warranty?	Yes	Expires:	19 th September 2025	
Tick as Applicable:	Warranty			
Details of Visit:				
Thermo Conflo IV system is what sends a 24v DC signal from EXT2 (on the back at the bottom) outputting from a 9 way female D type connection. Cable made using 16s wire connecting to a 9 way male D type connector, red on pin 5 and black on pin 1. That pair of wires needs to connect to a single pole relay on the input side with a 24v relay top fitted, red to (1) side and black to (5) side. Routed through back panel between the chassis. Then connect a 25 way male d type connector to J21 on the prep board, have pins 16 and pins 4 connected with opposite coloured wires long enough to reach the relay. Connect either wire to the top position (3) and the other to the bottom position (4). When the Conflow runs, it sends 24v to trigger the relay and short between those 2 connections. Handshake visually observed changing on Callisto and relay triggers with LED indicator. Software updated to v50.0.1 patch for trigger to work. System set to receive trigger via prep using relay in the settings. Tested with Kenneth and confirmed functional. <i>Analysis time amended to 300s.</i>				
Recommendations:				
Email service@sercongroup.com with any issues.				
Follow Up:				
Parts Used:	Stock Number:	Quantity:	Charge:	
			Total:	
Engineer:	James Hanson		Date:	30/10/24
Signed:	<i>[Signature]</i>			
Customer:	KENNETH SMITH		Date:	30/10/24
Signed:	<i>[Signature]</i>			

Order Date 13/02/2024
Order Ref. 17922
Cust. Ref. 4614724
Account Ref. UNI034

Invoice address

University of Nottingham
Payment Services-Financial Control
King's Meadow Campus
Lenton Lane
Nottingham
NG7 2NR

VAT No.

Order Acknowledgement

Delivery address

Room 3003, Finance and Research Office
School of Medicine & Health Sciences
University of Nottingham
Royal Derby Hospital Ctr, Uttoxeter Rd
Derby, Derbyshire
DE22 3DT

Contact: Paula Scaife
Tel: 01332 724731

Quantity Ordered	Product Code	Product Description	Unit Price £	Net Price £
Proposal for liquid autosampler				
1	CON001	Automatic Liquid Sampler 121 pos	5,000.000	5,000.00

Total Net Amount £ 5,000.00
Total VAT Amount £ 0.00
Order Total £ 5,000.00

Order Date 13/02/2024
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Cust. Ref. 4614722
Account Ref. UNI034

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Derby, Derbyshire
DE22 3DT

Contact: Paula Scaife
Tel: 01332 724731

Quantity Ordered	Product Code	Product Description	Unit Price £	Net Price £
Proposal for liquid sampler				
1	CON001	MOUNTING PLATE & ACCESSORIES: Universal	4,500.000	4,500.00
1	SHIPPING	Shipping Charges	500.000	500.00

Total Net Amount £ 5,000.00
Total VAT Amount £ 100.00
Order Total £ 5,100.00

Order Date 13/02/2024
Order Ref. 17924
Cust. Ref. 4614779
Account Ref. UNI034

Invoice address

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Nottingham
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University of Nottingham
Royal Derby Hospital Ctr, Uttoxeter Rd
Derby, Derbyshire
DE22 3DT

Contact: Paula Scaife
Tel: 01332 724731

Quantity Ordered	Product Code	Product Description	Unit Price £	Net Price £
Proposal for liquid sampler				
1	INST	Installation and start up training at Customer's site	1,238.000	1,238.00

Total Net Amount £ 1,238.00
Total VAT Amount £ 0.00
Order Total £ 1,238.00

Order Date 24/06/2024
Order Ref. 18255
Cust. Ref. 4631607
Account Ref. UNI034

Order Acknowledgement

Invoice address

University of Nottingham
Payment Services-Financial Control
King's Meadow Campus
Lenton Lane
Nottingham
NG7 2NR

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Delivery address

Room 3003, Finance and Research Office
School of Medicine & Health Sciences
University of Nottingham
Royal Derby Hospital Ctr, Uttoxeter Rd
Derby, Derbyshire
DE22 3DT

Contact: Dan Wilkinson
Tel: 01332 724694

Quantity Ordered	Product Code	Product Description	Unit Price £	Net Price £
Proposal for HT-EA				
1	11501/8	HT-EA With Liquid Injection Port For high temperature pyrolysis for H & O. Additional autosampler required for liquid injections. 70801-1 - Pyrolysis start up kit high temp for solids. 71501-1 - HT-EA Pyrolysis start up kit O and H (Used In Build)	5,000.000	5,000.00

Total Net Amount £ 5,000.00
Total VAT Amount £ 0.00
Order Total £ 5,000.00

Order Date 24/06/2024
Order Ref. 18256
Cust. Ref. 4631609
Account Ref. UNI034

Order Acknowledgement

Invoice address

University of Nottingham
Payment Services-Financial Control
King's Meadow Campus
Lenton Lane
Nottingham
NG7 2NR

VAT No.

Delivery address

Room 3003, Finance and Research Office
School of Medicine & Health Sciences
University of Nottingham
Royal Derby Hospital Ctr, Uttoxeter Rd
Derby, Derbyshire
DE22 3DT

Contact: Prof Ken Smith
Tel: 01332 724694

Quantity Ordered	Product Code	Product Description	Unit Price £	Net Price £
Proposal for HTEA				
1	INST	Installation and start up training at Customer's site	5,000.000	5,000.00

Total Net Amount £ 5,000.00
Total VAT Amount £ 0.00
Order Total £ 5,000.00

Order Date 24/06/2024
Order Ref. 18257
Cust. Ref. 4631332
Account Ref. UNI034

Invoice address

University of Nottingham
Payment Services-Financial Control
King's Meadow Campus
Lenton Lane
Nottingham
NG7 2NR

VAT No.

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Delivery address

Room 3003, Finance and Research Office
School of Medicine & Health Sciences
University of Nottingham
Royal Derby Hospital Ctr, Uttoxeter Rd
Derby, Derbyshire
DE22 3DT

Contact: Prof Ken Smith
Tel: 01332 724694

Quantity Ordered	Product Code	Product Description	Unit Price £	Net Price £
Proposal for HTEA				
1	CON001	Instrument Accesories	3,245.000	3,245.00

Total Net Amount £ 3,245.00
Total VAT Amount £ 0.00
Order Total £ 3,245.00

COPY

Purchase Order

Order Number 4614724
Order Date 09/02/2024
Your Reference Quotation 17922 - Paula Scaife
Your Account No
Agreement No



University of Nottingham
UK | CHINA | MALAYSIA

Page 1 of 1

Supplier Address SERCON LIMITED UNIT 3B CREWE TRADE PARK GATEWAY CREWE CREWE CHESHIRE CW1 6JT	Delivery Address Room 3003, Finance and Research Office School of Medicine & Health Sciences University of Nottingham Royal Derby Hospital Ctr, Uttoxeter Rd Derby Derbyshire DE22 3DT
Invoice Address University of Nottingham Payment Services - Financial Control University of Nottingham King's Meadow Campus Lenton Lane Nottingham NG7 2NR pdfinvoices@nottingham.ac.uk	Instructions F.A.O Paula Scaife In the event of a query related to this order please contact: BB-FM-FinanceQMC@exmail.nottingham.ac.uk

Qty	Unit	Item Description	Delivery Date	Vat %	Unit Value GBP	Line Value GBP
		F.A.O Paula Scaife				
The University of Nottingham, AS a charitable research institution, claims zero rating on the items identified on this order AS EXEMPT under Item 5 or 10 of Group 15, Schedule 8 of the VAT Act 1994, namely relevant goods AS defined by Note 3, or parts and accessories thereof, for use in medical or veterinary research, training diagnosis or treatment and/or substances directly used for synthesis or testing in the course of medical or veterinary research.						
1	Each	Automatic liquid sampler, 121 position; Product code CON001	08/02/2024	EXEMPT(M)	5,000.00	5,000.00

You must quote the above purchase order number when sending your invoice.

This purchase order is subject solely and exclusively to the University's standard conditions of purchase unless otherwise expressly stated within this purchase order. The standard conditions of purchase can be found at <https://www.nottingham.ac.uk/fabs/procurement/documents/standard-terms-of-purchase-uon.pdf> or alternatively a copy is available on request.

Important - if goods are being shipped from outside the UK, please advise your chosen courier to contact Imports@nottingham.ac.uk for assistance with customs clearance documentation.

Net Total	5,000.00
VAT Total	0.00
Total Order Value	5,000.00

Vat Reg. No. GB 690 3912 25

12 – Installation Acceptance and Warranty Certificate

Client:	University of Nottingham Royal Derby Hospital		
Quotation Number:	17924	Date:	19/06/2024
Job Number:	IN1333	Date:	17/09/2024

Contact:	Dan Wilkinson
System:	HTEA (Standalone- connected to Thermo Mass Spec)
Software:	Callisto V50.0.0
Engineer:	Henry Cooke
Installation Date:	19 Sep 2024

Warranty commences:	19 Sep 2024
Warranty Expires:	19 Sep 2025

Customer Acceptance:

Name: Dan Wilkinson

Signature: 

Date: 20 Sep 24

Notes:

Engineer's Signature:

On behalf of Sercon Limited

Name: Henry Cooke

Signature: 

Date: 20 Sep 24

SERVICE REPORT

Job Number:	IN1333		
Customer:	Uni of Nottingham Royal Derby Hospital		
Contact:	Dan Wilkinson		
Instrument:	HTEA with Liquid Autosampler (standalone – going into Thermo Mass Spec)		
Date of Visit:	17 Sep 24	Days: 3	
Engineer:	Henry Connell Cooke		
Reason for Visit:			
Install HTEA with liquid autosampler, and plumb into their Thermo Mass Spec			
Service Contract?	No	Expires:	N/A
Warranty	12 Months		
Tick as Applicable:	Install		
Details of Visit:			
Day 1 • PC installed, Callisto loaded • No communication between HTEA and Callisto, turning HTEA on had blown the breaker • Breaker flipped, HTEA came on and communication with Callisto started • HT300A liquid autosampler mounted and connected up • Compressed air lines in the lab are too thick for HTEA compressed air inlet. After failed attempts to find a volume conversion union in DIY shops around Derby, the conversion was made stepwise, using volumes of tube that fit tightly inside each other, sealed together with tape • Reaction tube and scrubber tube made up • He turned on, set to 70 mL/min at the flow valve and inlet going into the furnace tube • No He detected at the bottom of the furnace, He turned off overnight			

SERVICE REPORT

Day 2

- He turned back on, still 70 mL/min going into furnace, 0 mL/min coming out
- Inlet into furnace tube snapped off at metal joint, spare needed
- Started setting up liquid autosampler, needle broken when 'touch plunger zero' test crushed the needle into the bottom of a sample vial
- RK arrives with spare liquid sampling furnace inlet
- New inlet plumbed in, still no He flow out of the reaction tube
- No septa in the inlet, He flow 70 out of the 'to MS' port of the HTEA once septa is added
- He allowed to fill the system before blanking and testing for leaks, no leak detected
- Heating started, HT reaction furnace started heating after restart of instrument and software, GC furnace did not heat up
- Software, PC, prep board all restarted with no change to GC temperature
- Continuity tested for fuses and wires, no issues detected
- Thermocouple readback proved to be working by holding the GC to watch the temperature increase, suggesting problem with SSR (never lit up green) or prep board

Day 3

- New 0.5 μ L syringe added at the customers request, fitted to the correct height and passed, 'touch plunger zero test'
- Customer (Dan) was introduced to Callisto and HTA software, and given information on reaction/scrubber tube preparation
- Discussion had regarding how to set a trigger between Sercon HTEA and Thermo Mass Spec, with customer arranging their own engineer to have a look the following week
- RK arrives with spare prep board and SSR
- Prep board jumpers changed from R type to K type, thermocouple readbacks lost
- Jumpers changed back to original, and swapped out for new prep board, readbacks returned but GC still did not heat
- SSR replaced for new, but GC still did not heat
- It was noticed that the wires from the GC SSR into the prep board had been soldered into the wrong pins of the D-type connection. This connection was changed, and GC started heating once the wires were soldered into the correct pins
- Injection depth of needle into the sample vial was changed to 30, matching the injection depth into the reaction tube inlet
- Customer (Kenny) was introduced to Callisto and HTA software
- System left on with temperatures high, ready to supply sample to the Thermo Mass Spec

Notes

- Injection inlet on top of HTEA came without septum
- Power lead for PC came with EU plug
- HTEA location is not ideal. All four legs fit of the table but the front door overhangs, with no room to reach around the back

SERVICE REPORT

Follow Up:			
Please email me henry.cooke@sercongroup.com or support@sercongroup.com if you have any questions in the future			
Parts Used:	Stock Number:	Quantity:	Charge:
N/A			N/A
Total:			N/A
Engineer: Henry Connell Cooke		Date: 20 Sep. 24	
Signed:			
Customer:		Date:	
Signed: 			