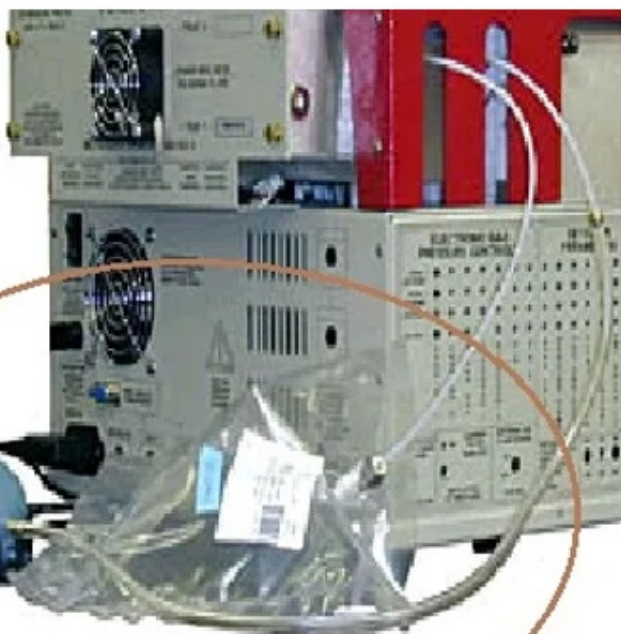


Gas Analysis Hints-2 2022

SRI



Vacuum Pump Interface

#8690-0073

**2022-1
\$1175.00**

SRI VACUUM PUMP INTERFACE

includes Vacuum Pump
Helps semi automate Gas Sample Injection
via >
Gas-tight Syringe or Gas Sampling Bag
re Calibration Standards
(1cc GSV Sample Loop requires 3cc purge)
Solenoids/PCB Built-in to Chassis

requires pre-installation By SRI-USA
DIY > NOT easy !

Far better than Manual Syringe Gas Injection
re reproducibility > duplicates etc
NO Septum "issues"

required for any later auto-Gas Sample
Options > upgrades
10/20cc SRI VialAutosampler / Bandalero etc



Chromalytic
Specialists in Gas Chromatography
Australian Distributors, Importers & Manufacturers
232 Forrest Rd, Bononia, Victoria 3155 Australia
Tel: +61-3-9762-2034 Email: sales@chromtech.net.au
Internet: <https://www.chromalytic.net.au>

HR55-A-350-GGP-T10-2S-He
Helium High Purity Regulator | Brass Body | SS
Diaphragm | 350kPa Outlet Pressure | Inlet & Outlet
Gauge plus Pressure Relief Valve | T10 (AS2473
Type 10) Inlet Fitting | 1/8in Outlet Tube Fitting

Batch / Lot #	
Quantity	ea

for Australian Use
GasCON

**Helium Press
Regulator
- High Purity
SS Diaphragm
NiP-Brass Body**

added
recommended
On/Off Valve
1/8 SL

**2023-1>
\$690.00**

some GC Operating PRECAUTIONS SRI TCD

expected MAX Sensitivity (for 1cc Sample)
to within most VOCs are within +/-10% response
LOD ~ 100-300ppM (3 x Noise)
50% may overload the TCD Signal > flat top peak
> a smaller sample loop 500>100uL ?
or an Inlet Splitter or dilute the sample
DIRTY Sample ? : use a 0.2um Syringe Filter
on the Sample Syringe

SRI recent > ~2018

> Filament Protection Circuit > NO Inlet Pressure TCD Cell AUTO-OFF & for Safety

! ie IF column outlet disconnected / leaks

> AIR burns Out filaments

TURN OFF Filament

> for column bake out !

IF GC is "just" On Standby

Use Medium // Low Sensitivity / GAIN commensurate with Sensitivity requirements

eg > 1% for Trace Gases 1cc injection <1000ppM High (tends to reduce lifetime !)

Use

- an Indicating Trap close to GC

- Minimise fittings

- Use Isolation Valves on both the High Purity Reg (SS diaphragm recommended !)

AND Carrier Gas Inlet to the GC > to conserve the Oxytrap Life)

(over hours back-diffusion of air occurs through the GC

NO GC from any OEM Is perfectly sealed from Air Diffusion

- IF GC Used regularly leave Carrier Gas turned ON and TCD Filaments OFF

From GC Turn ON first turn on carrier Gas & check Columns Inlet

AND flow coming OUT the TCD Exit Pipe (should be ~10cc/min MIN)

allow at least 30mins purge at ambient T before turning filaments ON

Helium normally used for MOST Apps > Highest Sensitivity

Oxyfree H2 IS Also recommended

for extra safety use a HYDROGEN GENERATOR

else a Mass Flow Controller and NOT EPC flow control !

If Water in sample columns and TCD > 120degC recommended to prevent condensation AND for MAX Sensitivity

**> Can be a DIY job with extreme care as filaments are
EXTREMELY FRAGILE and can be NOT easy ! and time- consuming !**

Be-a-WARE !

(generally the column Filament is more prone)

Replacement filament are expensive (>\$150each) & spares are recommended > for beginners

H2 Analysis using Helium Carrier > anomolous Non linerarit reversal if TCD Signal 1t 1-10% normal on ALL OEM TCD

USE Argon AND for much higher Sensitivity for H2 (very poor for most other permanant gases and eg VOCs etc

More-so !

ALL YOUR consequences !

**up to 4 gases ?
- keep ends capped**



GC Installation Kit

This kit contains the tubing and fittings needed to add an additional GC to your lab bench. Kit includes: tubing cutter, one 1/8-inch x 1/4-inch reamer, one 1/4-inch x 1/8-inch brass tube end reducer, one 7/16-inch wrench, one 1/2-inch wrench, four 1/8-inch brass tees, ten 1/8-inch brass nuts, ten brass front and back ferrules, and 50 feet (15.2 meters) of our instrument-grade cleaned 1/8-inch copper tubing.

Description	qty.	cat.#
GC Installation Kit	kit	21325

2023-1 #21325 \$760.00 ASK!

High-Capacity Indicating Oxygen Trap *for Ultra High Purity GC/ TCD, ECD, MS etc (<1ppM required !)*

- Indicator changes color from dark blue to black as oxygen & water are trapped.
- Lasts longer than three smaller traps.
- Use with all carrier gases.
- Ambient operating temperature, 100psi (689kPa) operating pressure.
- Built-in frit traps microparticles.
- Outlet gas purity: O₂ < 0.1ppm when inlet does not exceed 15ppm.
H₂O < 0.5ppm when inlet does not exceed 10ppm.
- Includes cartridge housing and one cartridge.
- Maximum operating pressure: 150psi (1034kPa).
- Maximum flow: 16.5L/min.

Restek #20624



Dimensions: 9 1/4" x 2"
(23.5 x 5.1 cm)

use Ultra-clean "refrig grade"
- 1/8"OD Copper for GC carrier gas Lines
- HighPurity Gas Regs (SS Diaphragm)

- Tran Isolation Valves (minimise air infusion changing cylinders)

Description	qty.	cat.#
High-Capacity Indicating Oxygen Trap, 1/8" Compression Tube Brass Fittings	ea.	20624
High-Capacity Indicating Oxygen Trap, 1/4" Compression Tube Brass Fittings	ea.	20623
Replacement Cartridge (fits 1/4" or 1/8" housing)	ea.	20625
Replacement O-Rings (5 small O-rings and 5 large O-rings)	kit	22081

> Or similar "Combi" Trap (Moisture / HC / OXY) in addition to ANY Closed Main OXYTrap if %as necessary !

**Restek Shut-off
Valve Options
\re GC/Trap Isolation
or ALT**



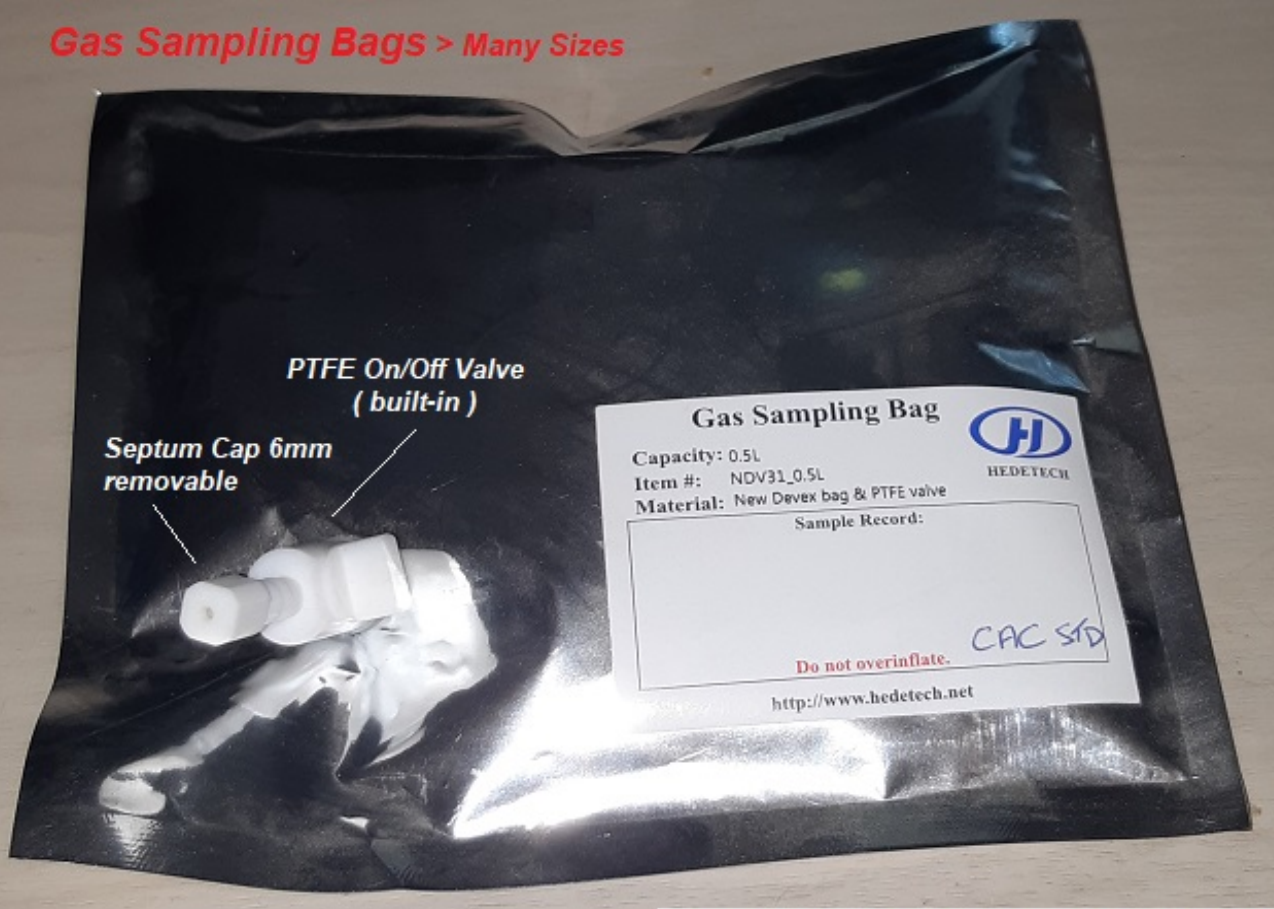
Shut-Off Gas Valves Swagelok®

	1/8"	1/4"	1/8"	1/4"
	Brass	Brass	Stainless Steel	Stainless Steel
Valve Type	cat.#	cat.#	cat.#	cat.#
Toggle	23142	23143	23198	23199
Ball	23144	23145	23200	23201
Plug	23146	23147	23202	23203

#23142 \$177.40 as per 2023-1

Gas Analysis Hints-2 2022

Gas Sampling Bags > Many Sizes



Gas Sampling Bag
500cc Laminated Foil (permanent gases)

NDV31.0.5l
\$19.80ea

stock Melb > 100ea

also 30Litre
>30ea in stock

safe storage !
0 to 10days & >

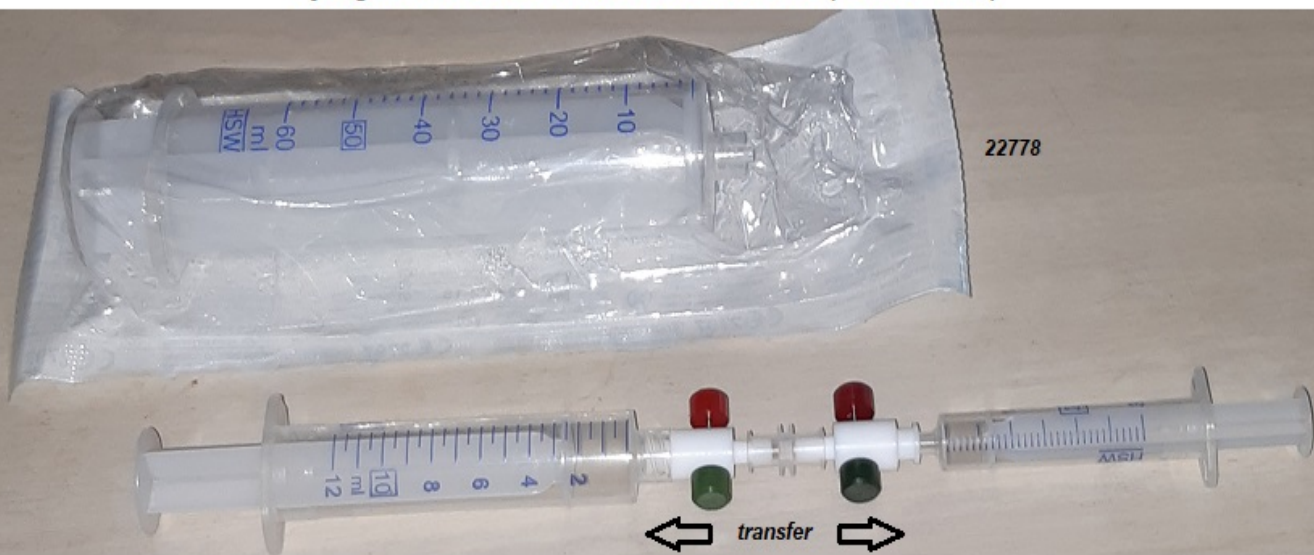
Tedlar (PTFE-like)
500cc&30-L
also in stock

Other Sizes >
generally imported
MOQ applies
RFQ!

Septum Cap OR use Luer Adaptors for Syringes

1/4-28F(6mm) to 1/4-28F VICI JR-050 + BSFTLL-6005 FemLL-1/4-28M
\$4.40each \$1.35ea

Syringe Dilution > re Gas Reference Standards (Inert Gases !)



NormJet PP	2023-1
LuerLok Syringe	
50ml 22778	\$4.40ea
10ml 22775	1.30
3ml 22773	1.02
Luer On/Off Valve PS654051	43.00
FTLLC	0.99

also in Stock Melb

1ml SlipLuer	
5ml LL	
20ml LL	NormJet
30ml LL	
Terumo-Type	
100ml	
140ml	

Syringes > Example ONLY 22775

PS654051 FTLLC-6 PS654051 22773

Glass Teflon-Tip SGE Syringes > RFQ



Membrane Solutions

Sizes :
 13, 25mmD
 some 33, 50mmD
Membrane Material
 PTFE
 PVDF
 Nylon
 PP
 MCE
Pore Size
 0.22, 0.45um
 others >ASK!

Also see >
Removable SF Holders 25, 50mm Membrane Filter Discs > various

Syringe Filters 13mm, 0.22um, PTFE M/F Luers, Sterile:No! #SFPTFE013022NB, 100-pk **2023-1 \$1.20each**

MinInert Valve for Luer(Syringe #654501



BSFTLL (-1 -6 -J1A)

Female Luer Thread Style with 5/16" Hex to 1/4-28 UNF Bottom Sealing Thread



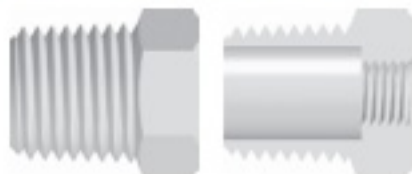
FTLLC (-1 -6 -9 -9002 -J1A)

Female Luer Thread Style Coupler

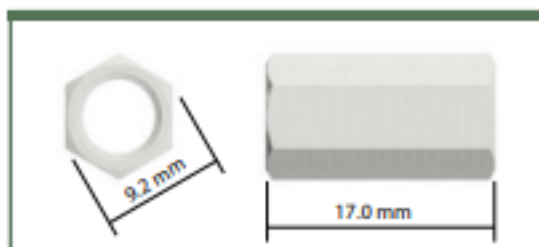


I402 (-1 -2 -6 -J1A)

Reducer with 1/4-18 NPT Male Thread and 9/16" Hex to 1/4-28 UNF Female Thread



(Package/5)	Union body, polyamide	JR-060-5
-------------	-----------------------	----------



SRI H2 Gen

#2014H2-100-2 \$6050.00

22x14x12" 52lb/24kg
in Carrying Case ???

New 2020-1

#2020H2-100-2(mini)

\$5500.00

12x12x8" 33lb/15Kg

> for that extra portability "factor"
& fits in SRI Red Carrying Case ???

Specs :

100cc/min > 60psig

240VAC

isolation valve

SilicaGel / MolSieve Traps built-in

Purity: > 99.95% : Oxytrap recommended
for H2 as carrier gas !



ideal for (some) SRI GCs with built-in Air compressor
for FID & > some "bottle-less" APPs

[SRI-Gas VialAutosamplerNov2013 PDF](#)



**GH-Headspace
Vial AutoSampler**

10 x 20 / 40 ml vials

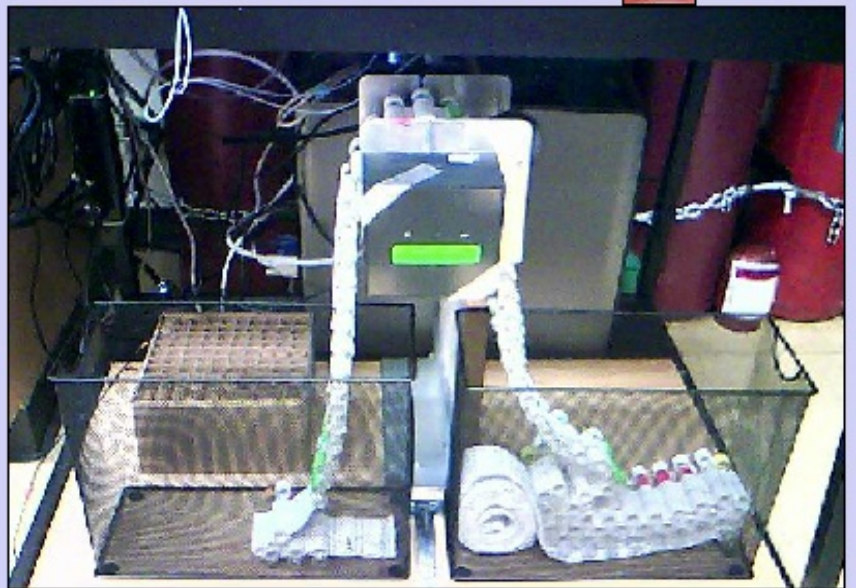


[SRI Bandolero Greenhouse Gas Autosampler PDF](#)



**Bandolero Tube
GreenHouse Gas
Autosampler**

- - 500 belt cartridge belt feed
- 7ml "Exetainer:Tube ("Vacuum Tight") sample in the field > analyse in the Lab (specifically designed for SRI 8610C GH-GC
- Exetainer Vials now supplied via us !



HRoMalytic +61(0)3 9762 2034
ECHnology Pty Ltd

Australian Distributors
Importers & Manufacturers
www.chromtech.net.au

Website NEW : www.chromalytic.net.au E-mail : info@chromtech.net.au Tel: 03 9762 2034 . . . in AUSTRALIA

Gas-tight Syringes LuerLok *needles separate !*

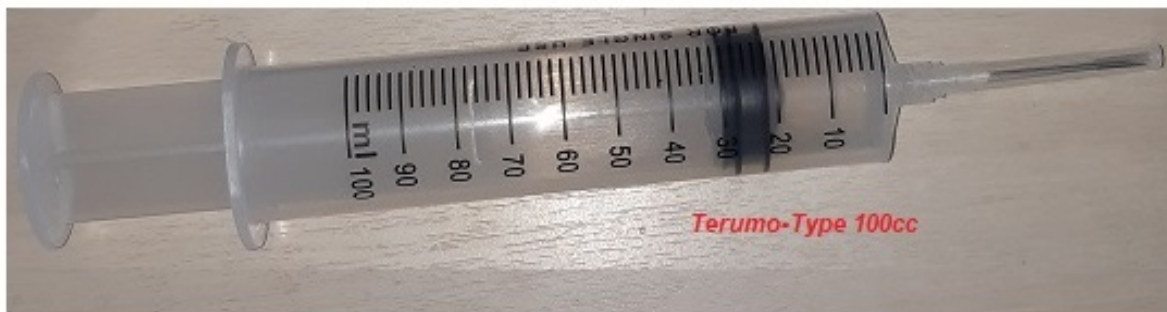


Gas Syringes

**VICI 5ml GasTight
Teflon-tip
On/Off Valve
LuerLok**

**050055-LL ~\$200.00?
Other sizes to
Import generally
Similar to SGE
Gas-Tight**

100, 250, 500ul, 1,
2,5,10,25,50,100ml
TeflonTipGasTight
with/&o Valve
500, 1000, 2000cc Jumbo SGE
ASK



Terumo-TYPE (Rubber-Tip)

**OK Inert Gases
Not for solvents**

"Disposable" / limited use
100cc 1AP2645
140cc to Import
ex NewEra

Terumo-Type 100cc

**1cc Tuberculin (slip)
3, 5, 10cc
29. 30. 50cc**



**LuerLok
&
Slip Luer**

see also

**Norm-Jet ALL PP
more durable
multiple Use >**

