

E2300382 Hub for Clean and Bake Vacuum Bake Oven Diagrams

Please enter information for your site's C&B VBOs. Shaded grey areas are optional.
KEY: RGA = Residual gas analyzer (pink), Cal leak (yellow), TP = Turbo pump (purple), SP = Scroll pump (green), IP = Ion pump (teal), PG = Pressure gauge (brown)

Conversion Factor, atm-cc/s to torr-l/s 0.76

CIT				
VBO	Equipment (Line)	Make/Model/Compos./Descr.	Value/Range	Unit
C	RGA	SRS RGA200	200	amu
	TP1 (Main)	Agilent TwisTorr 84 FS	67	L/s
	TP2 (RGA)	Agilent TwisTorr 84 FS	67	L/s
	SP1 (Main)	Agilent IDP 7	152	L/min
	SP2 (RGA)	Agilent IDP 3	60	L/min
	PG1 (Main)	Inficon BPG 400		
	PG2 (Main)	Pirani		
	Cal Leak	50/50 Ar/He	2.79E-08	atm-cc/s
		Depletion Rate	0.10%	
		Years since Calibration	4.97	years
D	RGA	SRS RGA200	200	amu
	TP1 (Main)	Agilent TwisTorr 304 FS	250	L/s
	TP2 (RGA)	Pfeiffer HiPace 80	80	L/s
	SP1 (Main)	Agilent IDP 7	152	L/min
	SP2 (RGA)	Agilent IDP 3	60	L/min
	PG1 (Main)	Inficon BPG 400		
	PG2 (Main)	Pirani		
	Cal Leak	3% Kr/Xe/He/H2 1.78%N2 in Ar	3.42E-08	atm-cc/s
		Depletion Rate	3.50%	
		Years since Calibration	7.21	years
F	RGA	SRS RGA200	200	amu
	TP1 (Main)	Agilent TwisTorr 304 FS	250	L/s
	TP2 (RGA)	Agilent TwisTorr 84 FS	67	L/s
	SP1 (Main)	Agilent IDP 7	152	L/min
	SP2 (RGA)	Agilent IDP 3	60	L/min
	PG1 (Main)	Inficon BPG 400		
	PG2 (RGA)	Inficon BPG 400		
	PG3 (Main)	Pirani		
	PG4 (Main)	Pirani		
	Cal Leak	3% Kr/Xe/He/H2 1.78%N2 in Ar	1.70E-08	atm-cc/s
	Depletion Rate	1.40%		
	Years since Calibration	5.45	years	
	Ar LR	1.35E-08	atm-cc/s	
		1.03E-08	torr-l/s	

LHO				
VBO	Equipment (Line)	Make/Model/Compos./Descr.	Value/Range	Unit
C	RGA	Pfeiffer PrismaPlus	200	amu
	TP1 (Main)	TURBOVAC MAG W 300 IP	300	L/s
	TP2 (RGA)	Agilent TwisTorr 84	67	L/s
	SP1 (Main)	Edwards nSDX10i	190	L/min
	SP2 (RGA)	Anest Iwata ISP 250C	250	L/min
	PG1	Instrutech Stinger		
	PG2	mks HPS 423		
	Cal Leak	3% Kr/Xe/He/H2 1.8%N2 in Ar	9.12E-08	torr-l/s
		Depletion Rate	1.70%	
		Years since Calibration	15.98 [1]	years
D	RGA	SRS RGA100	100	amu
	TP1 (Main)	TURBOVAC MAG W 300 IP	300	L/s
	TP2 (RGA)	Edwards STP H301c		
	SP1 (Main)	Anest Iwata ISP 250C	250	L/min
	SP2 (RGA)	Anest Iwata ISP 250C	250	L/min
	PG1	InstruTech Stinger		
	PG2	InstruTech Stinger		
	Cal Leak	3% Kr/Xe/He/H2 1.8%N2 in Ar	3.69E-08	torr-l/s
		Depletion Rate	1.90%	
		Years since Calibration	14.98 [4]	years
B	RGA	SRS RGA100	100	amu
	TP1 (Main)	Agilent TwisTorr	300	L/s
	TP2 (RGA)	Pfeiffer HiPace 80		
	SP1 (Main)	Anest Iwata ISP 250C	250	L/min
	SP2 (RGA)	Anest Iwata ISP 250C	250	L/min
	PG1	Pfeiffer FullRange		
	PG2			
	Cal Leak	3% Kr/Xe/He/H2 1.8%N2 in Ar	1.43E-07	torr-l/s
		Depletion Rate	0.90%	
		Years since Calibration	3.38 [6]	years
	Ar LR	1.20E-07	torr-l/s	

LLO				
VBO	Equipment (Line)	Make/Model/Compos./Descr.	Value/Range	Unit
C	RGA	SRS RGA100	100	amu
	IP1 (RGA)	Gamma Vacuum Titan 10 DI/DIX	8	L/s N2
	TP1 (Main)	Edwards nEXT 300D	300	L/s N2
	TP2 (RGA)	Pfeiffer HiPace 80	67	L/s N2
	SP1 (Main)	Anest Iwata ISP 250C	4.16 (250)	L/s (L/min)
	SP2 (RGA)	Anest Iwata ISP 250C	4.16 (250)	L/s (L/min)
	PG1 (Main)	Inficon AG BPG402-S	5E-10 to 1E+3	mBar
	PG2 (RGA)	mks HPS 423 I-Mag	1E-10 to 1E-2	Torr
	PG3 (RGA)	InstruTech Stinger	1E-4 to 1,000	Torr
	Cal Leak	3% Kr/Xe/He/H2 1.8%N2 in Ar	1.90E-07	atm-cc/s
B	RGA	SRS RGA100	100	amu
	IP1 (RGA)	Gamma Vacuum Titan 10 DI/DIX	8	L/s N2
	TP1 (Main)	Edwards EXT 255DX	220	L/s N2
	TP2 (RGA)	Pfeiffer HiPace 80	67	L/s N2
	SP1 (Main)	Anest Iwata ISP 250C	4.16 (250)	L/s (L/min)
	SP2 (RGA)	Anest Iwata ISP 250C	4.16 (250)	L/s (L/min)
	PG1 (Main)	Inficon AG BPG402-S	5E-10 to 1E+3	mBar
	PG2 (RGA)	mks HPS 423 I-Mag	1E-10 to 1E-2	Torr
	Cal Leak	3% Kr/Xe/He/H2 1.8%N2 in Ar	2.00E-07	atm-cc/s
		Depletion Rate	1.90%	
P	RGA	SRS RGA100	100	amu
	IP1 (RGA)	Agilent Valcon 10	10	L/s N2
	TP1 (Main)	Edwards STP-H301C	300	L/s N2
	TP2 (RGA)	Varian TV 81-M	77	L/s N2
	SP1 (Main)	Anest Iwata ISP 250C	4.16 (250)	L/s (L/min)
	SP2 (RGA)	Anest Iwata ISP 250C	4.16 (250)	L/s (L/min)
	PG1 (Main)	mks HPS 423 I-Mag	1E-10 to 1E-2	Torr
	PG2 (RGA)	Inficon AG BPG402-S	5E-10 to 1E+3	mBar
	Cal Leak	3% Kr/Xe/He/H2 1.8%N2 in Ar	1.09E-07	atm-cc/s
		Depletion Rate	0.70%	
	Years since Calibration	2.72 [7]	years	
	Ar LR	9.22E-08	atm-cc/s	
		7.00E-08	torr-l/s	

MIT				
VBO	Equipment (Line)	Make/Model/Compos./Descr.	Value/Range	Unit
B	RGA	SRS RGA200	200	amu
	TP1 (Main)	Agilent Turbo V 3	250	L/s N2
	TP2 (RGA)	Pfeiffer HiPace 80	67	L/s N2
	SP1 (Main)	Edwards ESDP 3	600	L/min
	SP2 (RGA)	Adixen ACZP 15	232	L/min
	PG1 (Main)	Balzers PKS 251	4E-9 to 750	Torr
	PG2 (Main)	KUL275071	1E-4 to 1000	Torr
	PG3 (RGA)	KUL275071	1E-4 to 1000	Torr
	Cal Leak	Ar	2.01E-08	torr-l/s
		Depletion Rate	0.10%	%
	Years since Calit	8.22 [2]	years	
	Ar LR	1.99E-08	torr-l/s	

Oven Geometry and Drawing Numbers

Even Geometry and Drawing Numbers

Please enter information for your site's C&B VBOs and ABOs geometries.
Some entered values are from G2202045
Volume and surface area values are calculated from values listed under Dimensions; exact values should be confirmed using exact measurements from Solidworks drawings (if applicable).

SITE	CIT					LHO					LLO					MIT								
VBOs	VBO	Dimensions	Volume (in^3)	Surface Area (in^2)	Drawing #	Notes	VBO	Dimensions	Volume (in^3)	Surface Area (in^2)	Drawing #	Notes	VBO	Dimensions	Volume (in^3)	Surface Area (in^2)	Drawing #	Notes	VBO	Dimensions	Volume (in^3)	Surface Area (in^2)	Drawing #	Notes
	C	Ø20609.6 mm x 1148.1 mm length] Ø24" x 45.2"	20447.998	4312.778	Q1700448		C	23.5" Diameter, 36.0" Long Cylinder	15614.501	3525.260	Q2300014		C	23.5" Diameter, 36.0" Long Cylinder	15614.501	3525.260	Q2300014	42" rod fits	B	13.5" Diameter, 22.0" Long Cylinder	3149.054	1219.331		
	D	Ø14" body x ~ 20" length Ø16.5" CF flange	3078.761	1187.522			D	23.5" Diameter, 36.0" Long Cylinder	15614.501	3525.260	Q2300014		B	23.5" Diameter, 36.0" Long Cylinder	15614.501	3525.260	Q2300014	42" rod fits						
	F						B						P	10" Diameter, 16" Long Cylinder	1256.637									
ABOs	ABO	Dimensions	Volume (in^3)	Surface Area (in^2)	Drawing #	Notes	ABO	Dimensions	Volume (in^3)	Surface Area (in^2)	Drawing #	Notes	ABO	Dimensions	Volume (in^3)	Surface Area (in^2)	Drawing #	Notes	ABO	Dimensions	Volume (in^3)	Surface Area (in^2)	Drawing #	Notes
	M	36" x 48" x 60" (W x D x H)	103680	13536			A	102" x 102" x 36" (W x D x H)	374544	35496			A	102" x 102" x 36" (W x D x H)	374544	35496			X	18.3" x 27.9" x 20.4" (W x D x H)	10415.628	2906.1		Heratherm OMH180-S
	G																		Y	15.9" x 19.1" x 21.1" (W x D x H)	6407.859	2084.38		VWR 414005-116
	A																		Z	31.7" x 26.0" x 60.9" (W x D x H)	50193.78	8676.26		Cascade Tek TFO-28

Oven inventory, Product Info, Maintenance, Etc.

Please enter information for your site's C&B VBOs equipment.

KEY: RGA = Residual gas analyzer (pink), Cal leak (yellow), TP = Turbo pump (purple), SP = Soot pump (green), IP = Ion pump (blue), PG = Pressure gauge (brown)

SITE	CIT						LHO						LLO						MIT									
	Make	Model	Serial Number	Maintenance/Composition/Notes	Due/Hours	Oven	Spares	Make	Model	Serial Number	Maintenance/Composition	Due/Hours	Oven	Spares	Make	Model	Serial Number	Maintenance/Composition	Due/Hours	Oven	Spares	Make	Model	Serial Number	Maintenance/Composition	Due/Hours	Oven	Spares
RGA	Stanford Research Systems	RGA200		Sent for repair? 05/08/23		C		Pfeiffer	PrismaPlus				C		Stanford Research Systems	RGA100				C		Stanford Research Systems	RGA200				B	
	Stanford Research Systems	RGA200				D		Stanford Research Systems	RGA100				D		Stanford Research Systems	RGA100				B		Stanford Research Systems	RGA100					1
	Stanford Research Systems	RGA200				F									Stanford Research Systems	RGA100				P								
Cal Leak	Vacuum Technology	CLG-8-MIX-2CFF-300D01-MPV	021996	50/50 Air/H ₂		C					3% Kr/Xe/He/H ₂ 1.8%/N ₂ in Ar		C					3% Kr/Xe/He/H ₂ 1.8%/N ₂ in Ar		C		JACO Technologies	CMS32.0-8144E-VH5	13073	Ar		B	
	Vacuum Technology	CL-8-Std-Mix-2CFF-300D01-MPV	019568	3% Kr/Xe/He/H ₂ 1.78%/N ₂ in Ar		D					3% Kr/Xe/He/H ₂ 1.8%/N ₂ in Ar		D					3% Kr/Xe/He/H ₂ 1.8%/N ₂ in Ar		B								
	Vacuum Technology	CL-8-Std-Mix-2CFF-300D01-MPV	018802	3% Kr/Xe/He/H ₂ 1.78%/N ₂ in Ar		F							D					3% Kr/Xe/He/H ₂ 1.8%/N ₂ in Ar		P								
TP	Agilent	TwoTor 84 FS				C		Leybold	TURBOVAC MAG W 300 IP				C		Edwards Vacuum	nEXT 300D				C		Pfeiffer	HPace80	16847491				B
	Agilent	TwoTor 84 FS				C		Leybold	TURBOVAC MAG W 300 IP				D		Edwards Vacuum	EXT 250DX				B		Agilent Technologies	TV 301-Navigator	245433				B
	Agilent	TwoTor 304 FS				F									Edwards Vacuum	STP-4001G				P		Pfeiffer	TMD 071 P	13073817				1
	Agilent	TwoTor 304 FS				D									Pfeiffer Vacuum	HPace 80				C								
	Pfeiffer Vacuum	HPace 80				F									Varian	TV 81-M				B								
SP	Agilent	ISP 7		Replaced 03/08/23		C		Anest Iwata	ISP 250C				C		Anest Iwata	ISP 250C				C		Pfeiffer adixen	ACP15					B
	Agilent	ISP 7		Replaced 04/14/23		D		Anest Iwata	ISP 250C				D		Anest Iwata	ISP 250C				B		Edwards	ESCP30	TK075				B
	Agilent	ISP 7				F		Anest Iwata	ISP 250C						Anest Iwata	ISP 250C				B		Edwards	GVSP30	YK001				1
	Agilent	ISP 3		Replaced 09/14/22		C									Anest Iwata	ISP 250C				P								
	Agilent	ISP 3				D									Anest Iwata	ISP 250C				P								
IP															Gamma Vacuum	TiTan 10 DHDIX				C								
															Gamma Vacuum	TiTan 10 DHDIX				B								
PG	Inficon	BPG 400				C,D,DxP		Instrutech	Stinger				C,DxP		Inficon	AG BPG402-S				C,B,P		Balzers	PK3.251					B
	K.J.L. (7)	Prani				C,D,DxP		mks	HPS 423				C		instru-Tech	HPS 423 i-Mag				C,B,P		K.J.L.	275071					B
								Pfeiffer	FRG				B			Stinger				C								

[1] You can enter your Cal Leak's calibration date in the formula and it will calculate the years since.

[2] You can enter your Cal Leak's calibration date in the formula and it will calculate the years since.

[3] You can enter your Cal Leak's calibration date in the formula and it will calculate the years since.

2.66

[4] You can enter your Cal Leak's calibration date in the formula and it will calculate the years since.

[5] You can enter your Cal Leak's calibration date in the formula and it will calculate the years since.

2.66

[6] You can enter your Cal Leak's calibration date in the formula and it will calculate the years since.

[7] You can enter your Cal Leak's calibration date in the formula and it will calculate the years since.

0.83