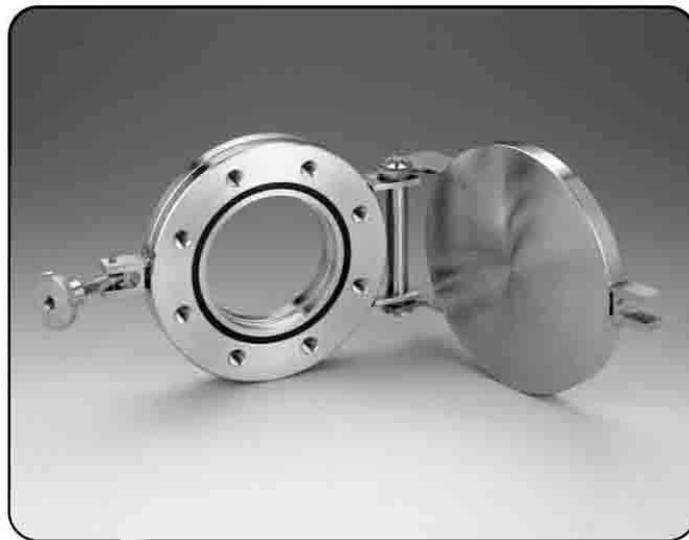


	DOCUMENT NAME				VERSION	UI52194A
	Operating and Maintenance Handbook - ZIB Internal Bakeout Heaters				1.1	
	FILE NAME		REVISED DATE & INITIALS		REPLACE	CLASSIFICATION
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Operating and Maintenance Handbook HD Series Loadlock Doors



REVISION	DATE	COMMENTS	INITIALS
1	Jan 1994	Original release	MJD

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WARRANTY

1. Subject to fair wear and tear and the due, observance of any installation user, storage, operating or maintenance instructions the Seller undertakes to replace or, at its option repair free of charge to the purchaser, any goods which the purchaser can establish are defective by reason of defective workmanship or materials which are returned to the Seller, carriage paid, within 12 months of the date of dispatch by the Seller. In the event, however, that the Seller supplies spare parts either direct, or that are fitted or installed or replaced by the Sellers' service center such spare parts will be subject to a warranty period of six months only.
2. The Purchaser cannot return any product for warranty repair without the prior approval of VG Scienta and the issue of a Goods Return Number (GRN). This shall be obtained by contacting the service center at VG Scienta. All returned products must be accompanied by a completed Declaration of Contamination form. Customers must, in the first instance, contact the local selling agent.
3. We reserve the right to decline to service equipment, we consider is in any way hazardous until a clearance or safety certificate, in a form satisfactory to VG Scienta, has been completed and returned by the customer.

REPAIR

The following additional terms and conditions apply in the event that the customer elects to use the services of VG Scienta workshop on a chargeable basis.

1. At its own cost the customer shall dispatch the equipment to the workshop, carriage paid, suitably packaged, protected and insured, bearing, a Goods Return Number (GRN) and a completed Declaration of Contamination certificate obtained from VG Scienta in advance of shipment.
2. During the period that the equipment is on VG Scienta premises, VG Scienta will insure the equipment against all risks.
3. Vacuum Generator will provide an acknowledgement of the receipt together with an estimate of the repair charges. Such estimates are carried out on a visual basis and are therefore intended as a guide only. Formal fixed price repair quotations are available and involve the disassembly of the equipment to determine the full extent of the work necessary to restore the equipment to an acceptable standard. In the event that the customer chooses not to proceed with the repair VG Scienta will make a charge to cover this examination effort.

Note:

The above are extracts from VG Scienta Conditions of sale. Complete copies can be obtained from:
VACGEN, Diamond Drive, Hailsham, BN27 4EL, UK – 01323 379335 .

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1.0 Introduction

The VG Scienta HD Series loadlock doors come in four sizes to suit a range of system requirements. They are available either as blank doors, or with an integral viewing window. The doors are O-ring sealed and can be baked to 200°C. Using the HD Series loadlock doors, a sample entry system can be readily constructed from other standard components such as rack and pinion (RLRP Series) or magnetically-coupled probes (MLRM Series), together with standard UHV four or six way crosses.

2.0 Specification (see figure 1)

Door Flange	OD (A)	Clear Bore (B)	Height (T)	Viewing diameter (C)
ZHD64	114.0	61.2	28.0	-
ZHD100	152.0	99.4	30.5	-
ZHD150	203.0	149.7	32.5	-
ZHD200	252.0	200.4	35.0	-
ZHD64V	114.0	61.2	28.0	38.0
ZHD100V	152.0	99.4	30.5	64.0
ZHD150V	203.0	149.7	32.5	90.0
ZHD200V	252.0	200.4	35.0	140.0

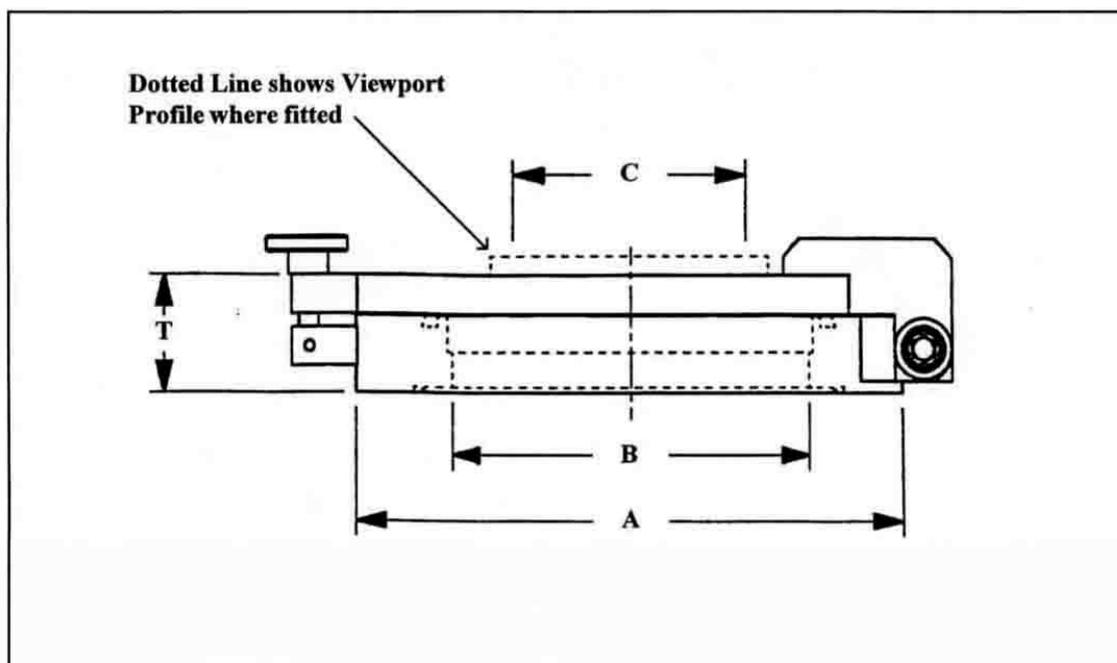


Figure 1- Dimensions of the HD and HD..V loadlock doors

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3.0 Using the HD Series Loadlock Doors

The doors are sealed by an O-ring which is located in the mounting flange. The door can be clamped shut during evacuation of the loadlock by the knurled thumbscrew. The hinge arrangement is preset and should require no adjustment. The door is bakeable to 200°C in the closed position.

Note:

The door clamping thumbscrew should only be used during loadlock evacuation. The clamping screw must be fully released before venting the loadlock for the following reasons:

- i) If the loadlock is vented with the clamp tightened, it may be difficult to release the clamp.
- ii) Releasing the clamp before venting provides additional system safety should the vent gas system be over pressurised (the door will open like a pressure relief valve).

Care should be taken not to scratch or damage in any way the O-ring and the door sealing face when operating the loadlock, as this may result in the door not sealing properly. Should it be necessary to replace the O-ring (see section 4 for replacements), ensure that the tool which is used to remove the old O-ring does not scratch the sealing face beneath it on the mounting flange (use a plastic or wooden tool - a tooth-pick works quite well).

4.0 Spares and Accessories

Part Code	Description
ZHD64S	Replacement O-ring for ZHD64/64V Loadlock Doors
ZHD100S	Replacement O-ring for ZHD 100/100V Loadlock Doors
ZHD150S	Replacement O-ring for ZHD 150/150V Loadlock Doors
ZHD200S	Replacement O-ring for ZHD200/200V Loadlock Doors
LRP Series	Linear Rack and Pinion Transporters
RLRP Series	Linear/Rotary Rack and Pinion Transporters
MLRM Series	Magnetically-coupled Transporters for Horizontal Mounting
MLRV Series	High-powered Magnetically-coupled Transporters for Vertical Mounting
BX4/BX6	Standard Range of 4 and 6-way UHV Crosses

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Service and Repair Form

Declaration of Contamination of Equipment and Components	
<p>Servicing and repairs will only be carried out if the conditions for Servicing and Repair are complied with in full, according to the VG Scienta Ltd. Conditions of Sale. A summary of these requirements are included on the inside front cover of the Operating Instructions. The manufacturer will refuse to accept any equipment without a signed declaration attached to the OUTSIDE of the packaging. This declaration can only be completed and signed by authorized and qualified staff.</p>	
1 Description of Equipment and Components	
Equipment Type.....Model Number..... Serial Number..... Your Reference Number.....	
2 Reasons for return	
.....	
.....	
3 Condition of Equipment	
YES () NO () Toxic?	YES () NO () Corrosive?
YES () NO () Explosive?	YES () NO () Biological Hazard?
YES () NO () Radioactive?	YES () NO () Other Harmful Substances?
Equipment and Components that have been contaminated, WILL NOT be accepted without written evidence of decontamination.	
5 Contamination Materials	
List all the substances, gases and by-products that may have come in contact with the equipment, giving trade name, manufacture, chemicals names or symbols. Please note that any of these listed, must be completely removed, so it is safe to handle and weld, without giving off health threatening gases. Please enter details below and/or attach data sheets	
6 Legally Binding Declaration	
I hereby declare that the information supplied on this form is complete and accurate. There by stating that the goods offer no risk to health or safety Organisation..... Name..... Country..... Job Title..... Post/ZIP code..... Telephone..... Email..... Signature..... Date.....	
Return goods to: VACGEN, Diamond Drive, Hailsham, BN27 4EL, UK – 01323 379335 (Form VGF33)	