

## Trimmer



## Operating Manual

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Version 1.2 Trimmer  
July 2004 English

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## 2 Owner Registration

**TO ENSURE SIBERT INSTRUMENTS SUPPLIES YOU WITH ANY NECESSARY HARDWARE, SOFTWARE OR DOCUMENTATION UPDATES, PLEASE ENTER YOUR COMPANY DETAILS, DETACH THIS PAGE AND FAX OR POST TO:-**

<b>SIBERT INSTRUMENTS</b>	<b>TELEPHONE:</b>	<b>+44 (0) 1483 739100</b>
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<b>GUILDFORD</b>	<b>EMAIL:</b>	<b>Sales@Sibert.co.uk</b>
<b>SURREY</b>		
<b>GU3 3BH</b>		
<b>ENGLAND</b>		

<p><b>COMPANY NAME:</b></p> <p><b>ADDRESS:</b></p> <p><b>CONTACT:</b></p>	
<p><b>FAX:</b></p> <p><b>PHONE:</b></p> <p><b>EMAIL:</b></p>	

**I would like to register for a username and password for the Sibert Customer web site (please specify email address above)**

**DO NOT WRITE BELOW THIS LINE**

<p><b>Trimmer</b> <b>SERIAL NUMBER</b></p>	
<p><b>DATE OF MANUFACTURE</b></p>	
<p><b>QA ENGINEER</b> <b>SIGNATURE and STAMP</b></p>	

### 3 Important Notices

#### 3.1 Safety Notices



Please do not switch on this equipment unless the operating manual has been fully read and understood. If there is any difficulty in understanding, or a translation is required, please contact the address below:



Ne mettez pas cet équipement sous tension avant d'avoir entièrement lu et compris le manuel d'utilisation. Si vous rencontrez des difficultés de compréhension ou avez besoin d'une traduction, contactez l'adresse suivante:



Bitte schalten Sie die Geräte nicht ein, bevor Sie das Bedienungshandbuch vollständig gelesen und verstanden haben. Wenn dabei Verständnisschwierigkeiten auftreten oder Sie eine Übersetzung benötigen sollten, wenden Sie sich bitte an die nachfolgende Adresse:



Non accendere questa apparecchiatura senza prima avere attentamente letto e compreso il Manuale delle istruzioni. In caso di difficoltà di comprensione, o se si richiede una traduzione, si prega di contattare il seguente indirizzo:



Deze apparatuur pas inschakelen als u de handleiding helemaal hebt gelezen en begrepen. Mocht er iets zijn dat u niet begrijpt, of mocht u een vertaling nodig hebben, neem dan contact op met het onderstaande adres:



No encienda este equipo antes de haber leído y comprendido El Manual de Funcionamiento correspondiente. Si tuviera alguna dificultad en comprenderlo o necesita una traducción, sírvase contactar con la dirección siguiente:

#### 3.2 Information Content

All rights reserved. Reproduction of any part of this manual, program or software in any form whatsoever without the express written permission of Sibert Instruments is strictly forbidden.

All efforts have been made to ensure the accuracy of the information in this manual, however the contents of this manual are subject to change without notice.

Sibert Instruments shall not be liable against any damages or problems arising from the use of options, consumables or spares, other than those supplied or designated by Sibert Instruments.

The above notwithstanding, Sibert Instruments can assume no responsibility for any errors in this manual or their consequences.

#### 3.3 Sales and Service Address

SIBERT INSTRUMENTS  
CENTRE HOUSE  
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FAX: +44 (0) 1483 302699  
EMAIL: Sales@Sibert.co.uk

### 3.4 Safety Instructions

#### 3.4.1 Site Selection

When selecting the installation site for the equipment and the pertaining components, relevant health and safety procedures should be followed.

Applicable technical and building regulations must also be observed.



**The Trimmer has been tested under “A” weighted continuous sound and does not exceed 70 decibel noise levels.**

The unit must be placed on a suitable level surface offering the system firm support.

Ensure there is sufficient surrounding clearance for maintenance and cleaning operations.

Sibert Instruments recognises the need for and produces a purpose made bench for the Trimmer accommodating machine together with the filter and regulation unit.



**Do not deposit any objects in front or on top of the unit.**



**Hoses and electrical cables must be laid in a manner to prevent tripping and damage.**

#### 3.4.2 General Notes on Safety

All persons concerned with the installation, commissioning, operation, maintenance and repair of the system and its components must have read the operating instructions, particularly those on Safety. If necessary, in-house instruction should be provided, specifically taking into account the qualifications of the individual persons.

Prior to commissioning the system, the user must ensure that all safety conditions are met.



**Both this Operating Manual and the Service Manual should be read before attempting to operate the Trimmer.**



**Only authorised personnel to carry out maintenance or adjustments to this Trimmer.**

The system must be maintained and repaired only by persons who are familiar with the system and have been informed about the potential hazards and possess the necessary qualifications.

The pertinent regulations for prevention of accidents and other generally recognised safety and industrial medical requirements must be observed.

#### 3.4.3 Notes on Safety for Operating Personnel

All working methods are forbidden, which:

- constitute a danger to the life and limb of the user or third parties,
- are detrimental to the system or others,
- are detrimental to the safety and proper function of the system,
- are not in compliance with the specified notes on safety.



**No safety devices may be removed or rendered inoperative.**

If it should become necessary to remove safety devices for setting, repair and maintenance purposes, the safety devices must be replaced immediately on completion of maintenance or repair works, prior to switching the Trimmer on.



**Safety devices must be replaced prior to re-connecting Electrical or Pneumatic supplies.**

The generally applicable safety rules and regulations for the prevention of accidents must be observed.



**Only those items that can be adjusted or maintained by non Sibert personnel are to be accessed or adjusted.**



Maintenance and repair may only be undertaken when the unit is switched off and disconnected from the Electrical input supply.



Hazardous voltages are present in this Trimmer.



This Trimmer must be earthed.



Repair work on the pneumatic system may only be carried out when relevant pressures are zero or the supply is disconnected.



The upper guard must be closed and all covers present during normal trimming operation.



When handling nickel Stampers, protective gloves should be worn.



Care should always be taken when handling Cutter Wheels.

### 3.4.4 Use for the Intended Purpose



This Trimmer is intended solely to trim the outer diameter of CD Matrices / Stampers up to a maximum of 0.40mm thickness (for optimum results, a hardness of 200 +/- 10% HV 0.5 is recommended), for a range of sizes between 145 and 255mm and only with the components supplied and approved by Sibert Instruments.

Use for any other than the intended purpose is considered improper. The manufacturer disclaims all liability for any damage resulting from such use; the user/operator is solely liable.

### 3.4.5 Spare Parts



Use recommended spare parts only. For a list of authorised spare parts please contact Sibert Instruments.

### 3.4.6 Terms of Guarantee

Use, other than for intended purpose and unauthorised changes or modifications to the unit and/or its components or programs which are part of the scope of supply of Sibert Instruments, exclude any liability of the Manufacturer for damage caused as a result of such changes or modifications. The warranty/ guarantee of the manufacturer is invalidated.

#### 4 Warning Labels



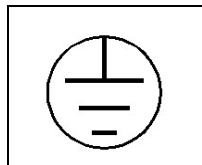
**WARNING**  
**DANGER OF INJURY FROM**  
**EDGE OF STAMPER**

FOUND ON  
LOWER GUARD  
ABOVE FRONT  
PANEL



**EMERGENCY**  
**STOP**

FOUND ON FRONT PANEL



FOUND INSIDE BASE  
ADJACENT TO  
PRIMARY EARTH POINT



**WARNING**  
**THIS EQUIPMENT**  
**MUST BE EARTHED**

FOUND ON REAR CASTING  
ADJACENT TO  
ELECTRICAL POWER INLET



**DANGER**



DO NOT REMOVE COVER UNLESS  
DISCONNECTED FROM MAINS  
SUPPLY

FOUND ON ALL  
REMOVABLE COVERS  
PROTECTING  
ELECTRICAL SYSTEMS

## 5 Equipment Diagram

### 5.1 Front of Machine



- |   |                                  |    |                    |
|---|----------------------------------|----|--------------------|
| 1 | <b>Upper Guard</b>               | 8  | Turntable          |
| 2 | <b>Lower Guard</b>               | 9  | Transfer Ring      |
| 3 | <b>Anti-Vibration Feet</b>       | 10 | Cutter Assembly    |
| 4 | Back Plate                       | 11 | Upper Cutter Wheel |
| 5 | Pneumatic Input                  | 12 | Lower Cutter Wheel |
| 6 | Electrical Input, including Fuse |    |                    |
| 7 | Alignment Ring                   |    |                    |

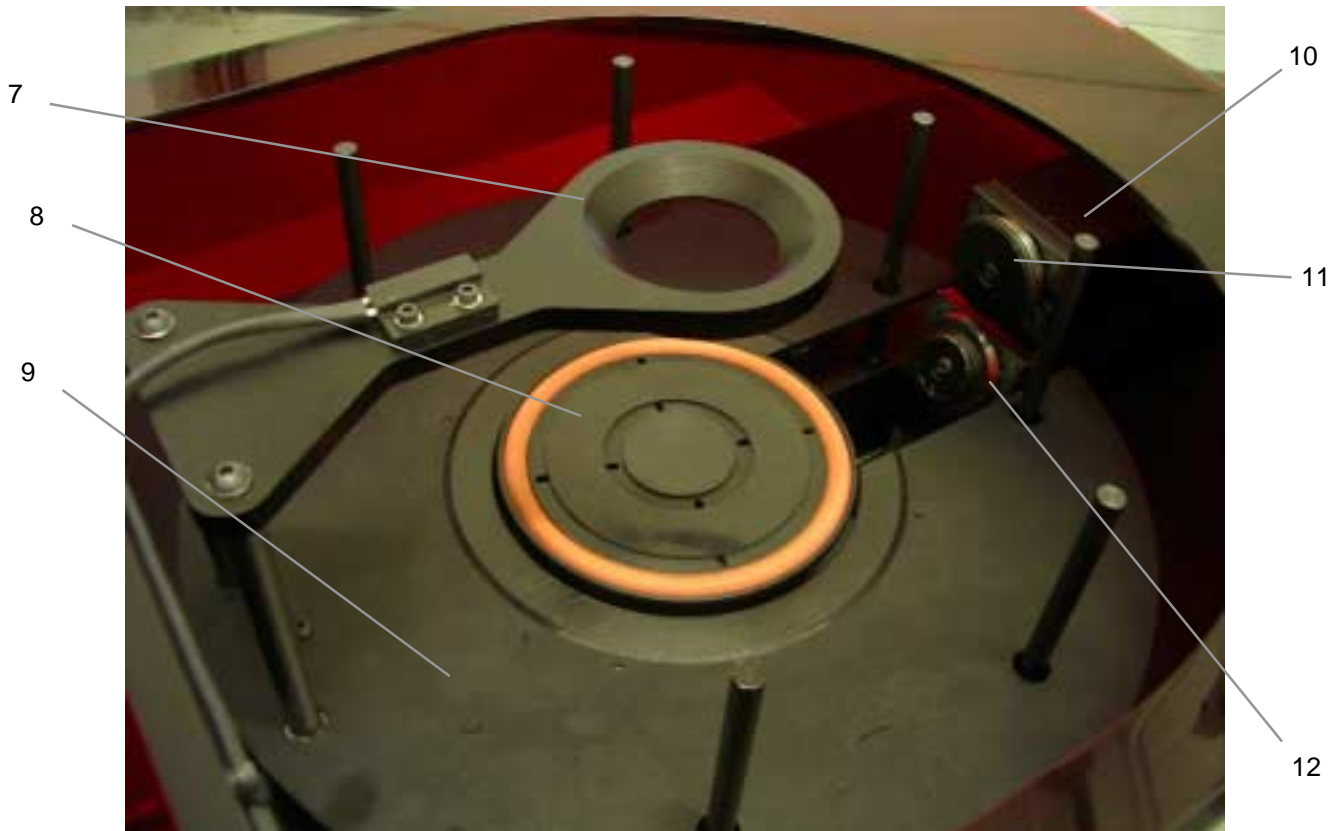
## 5.2 Rear of Machine



- 1 Upper Guard
- 2 Lower Guard
- 3 Anti-Vibration Feet
- 4 **Back Plate**
- 5 **Pneumatic Input**
- 6 **Electrical Input, including Fuse**
- 7 Alignment Ring

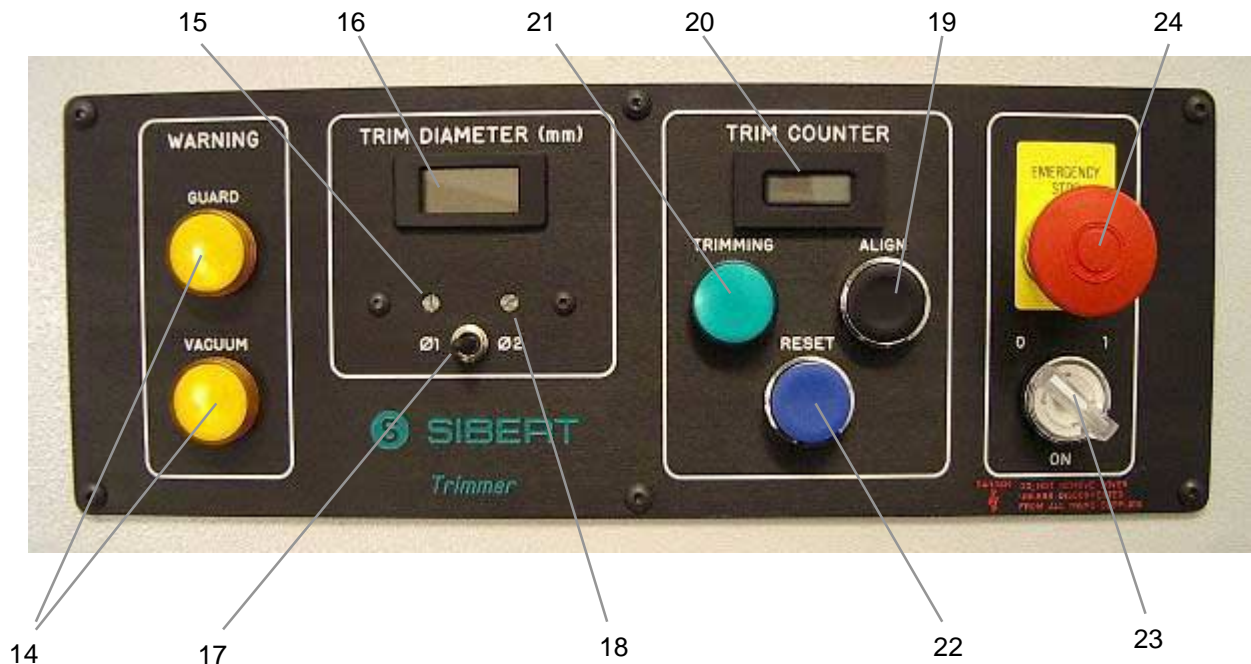
- 8 Turntable
- 9 Transfer Ring
- 10 Cutter Assembly
- 11 Upper Cutter Wheel
- 12 Lower Cutter Wheel

### 5.3 Top of Machine



- |   |                                  |    |                    |
|---|----------------------------------|----|--------------------|
| 1 | Upper Guard                      | 8  | Turntable          |
| 2 | Lower Guard                      | 9  | Transfer Ring      |
| 3 | Anti-Vibration Feet              | 10 | Cutter Assembly    |
| 4 | Back Plate                       | 11 | Upper Cutter Wheel |
| 5 | Pneumatic Input                  | 12 | Lower Cutter Wheel |
| 6 | Electrical Input, including Fuse |    |                    |
| 7 | <b>Alignment Ring</b>            |    |                    |

## 6 Control Panel



- |    |                           |   |
|----|---------------------------|---|
| 14 | Warning Indicators        | Illuminate if the upper guard is open or the vacuum is insufficient.  |
| 15 | Diameter 1 adjustment pot | Adjusts the Ø1 trim size.   |
| 16 | Trim diameter readout     | Displays the selected trimming size in 1mm diameter increments.   |
| 17 | Diameter selection switch | Selects between Ø1 and Ø2 trimming sizes  |
| 18 | Diameter 2 adjustment pot | Adjusts the Ø2 trim size.   |
| 19 | “Align” Button            | Raises transfer ring to enable the stamper to be aligned with the alignment ring.   |
| 20 | Trim Counter              | Indicates the total number of trim cycles.  |
| 21 | Trimming Indicator        | Illuminates while the automatic trim cycle is in progress.  |
| 22 | “Reset” Button            | Resets the trimming cycle at any time. Providing that the upper guard (1) is closed.  |
| 23 | Mains “on/off” switch     | Switches the machine on and off provided the emergency stop is pulled out. Illuminates when switched on.  |
| 24 | Emergency Stop Button     | The Trimmer can be stopped at any time by PUSHING the EMERGENCY STOP BUTTON. This will remove both electrical and pneumatic power from the Trimmer. |

## 7 Operation

### 7.1 Switching Power on

The Trimmer has one mains switch (23), which will turn on all parts of the machine.

Before operating the mains on/off switch (23) ensure that the emergency stop switch (24) is pulled out.

Operate the on/off switch (23) and it will illuminate.



**Check that the mains air pressure is connected and set between the specified limits (6 – 8 Bar).**

### 7.2 Adjusting Trimming diameters.

The Trimmer has two adjustable trimming diameters that are selected by the diameter selection switch (17). With the diameter selection switch (17) pushed to the left the current Ø1 trimming diameter is displayed by the trim diameter readout (16). This value can be changed by rotating the diameter 1 adjusting potentiometer (15) using the screwdriver supplied in the toolkit.

With the diameter selection switch (17) pushed to the right the current Ø2 trimming diameter is displayed by the trim diameter readout (16). This value can be changed by rotating the diameter 2 adjusting potentiometer (18) using the screwdriver supplied in the toolkit.



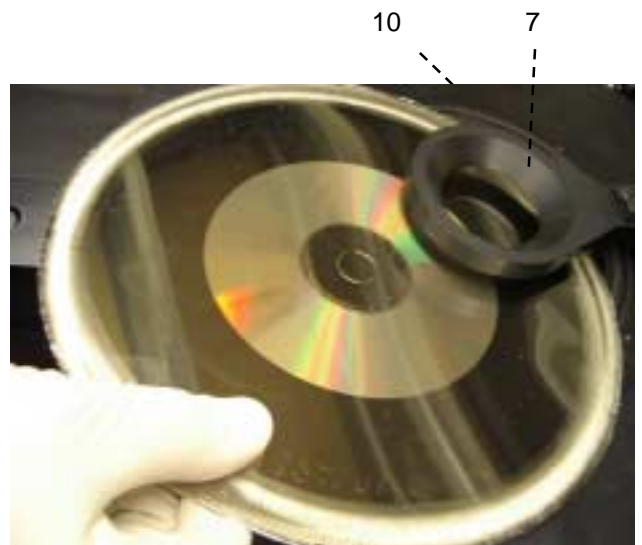
**Do not adjust potentiometers (15) or (18) once the trimming cycle has been started.**

### 7.3 Loading the Stamper

Stampers are loaded by raising the upper guard (1) and sliding the stamper between the transfer ring (9), and the alignment ring (7).



**When handling nickel Stampers, protective gloves should be worn.**



### 7.4 Aligning the Stamper

After loading the stamper press the align button (19). This raises the stamper to a position just below the alignment ring (7). The stamper can now be centralised by aligning the information diameter within the aperture of the wand. The diameter of this aperture has been designed to show approximately 1mm of information when the stamper is aligned.

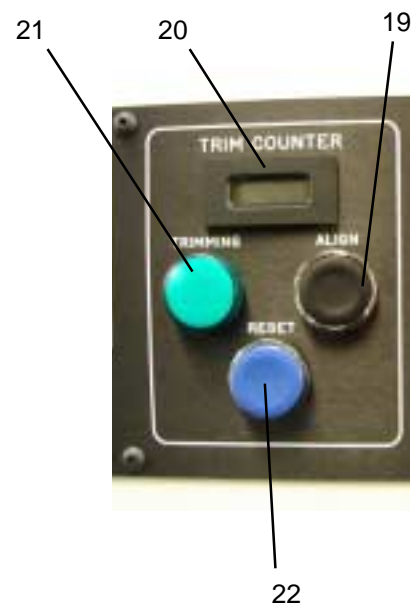
**Important: Careful alignment and placement of the Stamper using the Alignment Ring in these sections will achieve more consistent results.**



### 7.5 Trimming

Providing that the alignment of the stamper is acceptable, the automatic trimming cycle may be started by closing the upper guard (1).

While the automatic trimming cycle is in operation the trimming indicator (21) will illuminate. When the automatic trimming cycle has finished the trimming indicator will extinguish.



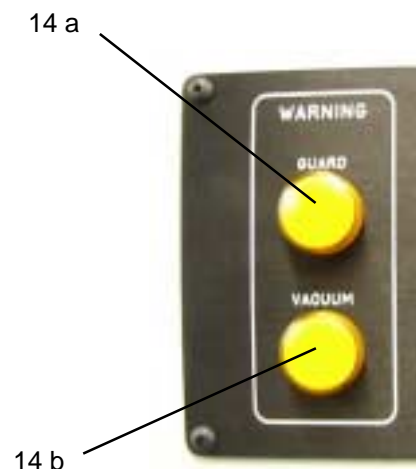
If the guard does not fully close the guard warning indicator (14 a) will illuminate.



If the vacuum is insufficient the vacuum warning indicator (14 b) will illuminate.



Once the trimming cycle has started no adjustment should be made to the machine.



## 7.6 Removing the stamper & waste

When the automatic trimming cycle has finished the trimming indicator (21) will extinguish and the stamper and waste will be returned to the loading position.

Raise the upper guard (1) and carefully remove both stamper and waste.



**When handling nickel Stampers, protective gloves should be worn.**



The trimmer is now ready to accept another stamper.

## 8 Cleaning



**It is recommended that inspection and cleaning to prevent a build up of dust and nickel particles should be carried out daily.**

### 8.1 Alignment Ring

The alignment ring should be wiped regularly with a lint free cloth that has Isopropanol applied sparingly. This will prevent any build up of dust or nickel particles, which could damage the information face of the Stamper.

Further details of cleaning operations may be found in the Commissioning and Service Manual.



### 8.2 Turntable mat & Transfer ring

Both of these items should be cleaned using a lint free cloth that has isopropanol applied sparingly. This will prevent the build up of dust or nickel particles, which could damage the back finish of the stamper.

### 8.3 Guards

All machine guards should be cleaned with warm soapy water only.



## 9 Documentation

### 9.1 Test Certificate

Trimmer SERIAL NO:		
CUSTOMER:		
COLOUR:		
	<b>ELECTRICAL</b>	<b>PNEUMATIC</b>
FUSE RATING:		
SUPPLY / CONSUMPTION:		
SCHEMATIC DRAWING NUMBER:		
SCHEMATIC ISSUE NUMBER:		
LAYOUT DRAWING NUMBER:		
LAYOUT ISSUE NUMBER:		
INSPECTED BY STAMP:		
SIGNED:		
DATE:		
TEST STAMPERS ENCLOSED:	<b>YES</b>	<b>NO</b>

## 9.2 CE Declaration of Conformity

### DIRECTIVE (89/392/EEC) AMENDED BY (91/368/EEC) AMENDED BY (93/44/EEC)

**Name of manufacturer:** Sibert Instruments

**Full postal address including country of origin:** Centre House  
The Pines  
Broad Street  
Guildford  
Surrey  
**Postcode:** GU3 3BH  
England

**Description of product:** Automated edge cutting for CD Matrix Stampers.

**Name, type or model, batch or serial number:** Trimmer

#### Standards used:

BS EN 292-1:1991	BS 4168-7:1982	BS 4278:1984	BS EN 60127
BS EN 292-2:1991	BS 4320:1968	BS EN 13602:2002	BS 2950:1958
BS EN 294:1992	BS 4320:1968	BS 3692:2001	BS 5584:1978
BS EN 418:1992	BS EN 10270-1:2001	BS EN 10270-3:2001	BS EN 61347:2001
BS EN 60204-1:1998	BS 970-1:1996	BS 5378: 1980	BS EN 60921:1991
BS EN 1050:1997	BS EN 485	BS EN 5499-5: 2002	
BS EN 953:1998	BS EN 515:1993	BS EN 954-1:1997	
BS EN 983:1996	BS EN 573:1995	BS EN 982:1996	
BS EN ISO 4762:1998	BS EN 12020-1:2001	BS ISO 6432:1985	
BS 4168-3:1994	BS EN 12020-2:2001	BS ISO 6431:1992	
BS 4168:1994	BS EN 755:1997	BS 5200:1997	
BS EN ISO 7380:1998	BS EN 754		
BS EN ISO 10642:1998	BS 5200:1997		

**Place of issue:** Sibert Instruments, Guildford

**Authorised representative** Paul Sibert Executive Chairman

**Name and Position of authorised signatories:**

James Gray	Managing Director
Stephen Knight	Product Manager
Allan Harvey	Operations Manager
Ian Locke	Project Manager
Richard Lewis	QA Supervisor
David Humm	Chief Inspector
David Gardner	Sales Co-ordinator

#### Declaration

I declare that as the authorised representative, the above information in relation to the supply/manufacture of this product is in conformity with the stated standards and other related documents following the provisions of 93/44/EEC Directives.

**Signature of authorised signatory** ..... **Date** .....

For further information Telephone +44 (0) 1483 739100  
Facsimile +44 (0) 1483 302699

### 9.3 EU Declaration of Conformity

**89/336/EEC Electromagnetic Compatibility Directive, amended by 92/31/EEC and 93/68/EEC**  
**72/23EEC Low Voltage Equipment Directive, amended by 93/68/EEC**

**Name of manufacturer:** Sibert Instruments

**Full postal address including country of origin:** Centre House  
 The Pines  
 Broad Street  
 Guildford  
 Surrey

**Postcode:** GU3 3BH  
 England

**Description of product:** Automated edge cutting for CD Matrix Stampers.

**Name, type or model, batch or serial number:** Trimmer

**Standards applied:**

EN 55011:-	1991/MEASUREMENTS IN RADIO INTERFERENCE ON IND. EQUIP./RAD'D. EM.
EN 55011:-	1991/MEASUREMENTS IN RADIO INTERFERENCE ON IND. EQUIP./COND. EM.
BS EN 61000-4-2 (Level 4):-	1995/EMC FOR INDUSTRIAL EQUIPMENT/ELECTROSTATIC DISCHARGE REQ.
BS EN 61000-4-4 (Level 4):-	1995/EMC FOR INDUSTRIAL EQUIPMENT/ELEC. FAST TRANSIENT REQ.

**Other standards required:**

BS EN 50081-2:-	1994/ ELECTROMAGNETIC COMP. GENERIC EM. STD./IND. ENVIRONMENT.
BS EN 50082-2:-	1995/ ELECTROMAGNETIC COMP. GENERIC IMM. STD./IND. ENVIRONMENT.
BS EN 60204 PT 1:-	1993/M/C SAFETY FOR ELEC. EQUIP./SPEC. FOR GENERAL REQUIREMENTS.

### Declaration

The technical documentation required to demonstrate that the product meets the requirements of EMC, which includes the Low Voltage Directive, has been confirmed by the signatory below and is available for inspection by the relevant enforcement authorities. The CE mark was first applied in 1995.

**Place of issue:** Sibert Instruments, Guildford

**Authorised representative** Paul Sibert Executive Chairman

**Name and Position of authorised signatories:**

James Gray	Managing Director
Stephen Knight	Product Manager
Allan Harvey	Operations Manager
Ian Locke	Project Manager
Richard Lewis	QA Supervisor
David Humm	Chief Inspector
David Gardner	Sales Co-ordinator

**Signature of authorised signatory** ..... **Date** .....

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 Facsimile +44 (0) 1483 302699