

Technical note 994-0016 Rev. 2.0

Cleaning Guide for NucleoCounter® Family

The present Technical Note applies to all instruments listed below

The NucleoCounter Instruments

- NucleoCounter® NC-100™
- NucleoCounter® SP-100™
- NucleoCounter® YC-100™
- NucleoCounter®SCC-100™

Maintenance of NucleoCounter	Regular cleaning of the NucleoCounter is recommended in order to protect its surface and assure the quality of the collected images. When cleaning the cabinet it is recommended to use a soft moist cloth and gently wipe the surface. Any contamination, which does not come off immediately, should be rubbed gently with a cloth wetted with mild detergent. Never use organic solvents or aggressive detergents to clean the exterior of the NucleoCounter.
Cassette insertion area	The cassette insertion area and the optical parts inside the NucleoCounter should be protected against dust and other contaminants. Therefore, great care must be taken to ensure that the lid covering the cassette insertion area is closed when cassettes are not being loaded into or removed from the NucleoCounter. If the insertion area becomes contaminated it should immediately be cleaned with a clean, dry and dust free cloth. When cleaning the cassette insertion area, great care must be taken against introducing any liquid or dust into the insertion slit of the NucleoCounter. Any liquid that enters the interior of the NucleoCounter can damage the optical parts and thus compromise the quality of the cell counts
Optical elements	A contaminant on the surface of an optical component can influence the appearance of the image obtained. A contaminant will normally be visible as a faint object in the image. Since it is also possible that such contamination is on the surface of the cassette, only objects, which are stationary in all images, are possible contaminations of the optical system. An example of a relatively large contamination is given in Figure 1

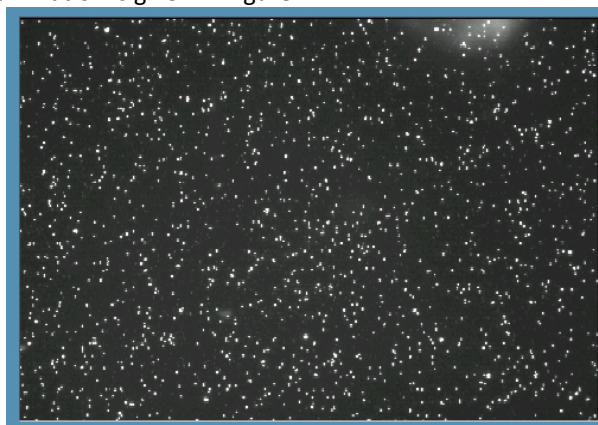


Figure 1 An image showing a contamination of the optical system, visible as a white cloudy phenomenon in the upper right hand corner. If the contamination is stationary it should be removed using compressed air.

Spill of liquid

If liquid has been spilled on the instrument it can contaminate elements of the optical system. This contamination can show up in the image in several ways and have many causes but a common feature is that it cannot be removed by the use of compressed air. Even though such phenomena are clearly visible on the image it rarely affects the results of the NucleoCounter. As it is possible to damage the optical system while attempting to clean the system it is recommended that ChemoMetec A/S should be consulted before the user attempts such cleaning.

Supplementary cleaning of the NucleoCounter

The Cleaning Kit NucleoCounter (part no. 911-0013) contains, beside from this Technical note a swab which can be used to perform additional cleaning of the surface of the optical excitation filter. The excitation filter is placed inside or underneath the cassette insertion area.

Location of the excitation filter

In order to perform the supplementary cleaning of the NucleoCounter, the “cleaning slit” at the cassette insertion area has to be located. First, you must remove the Lid. In figure 3 you can see the location of the slit. In Figure 4 a drawing shows where to find the cleaning slit.



Figure 2 The lid has to be removed first.

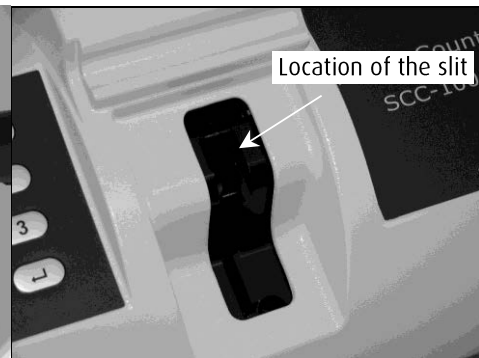


Figure 3 Location of the Slit

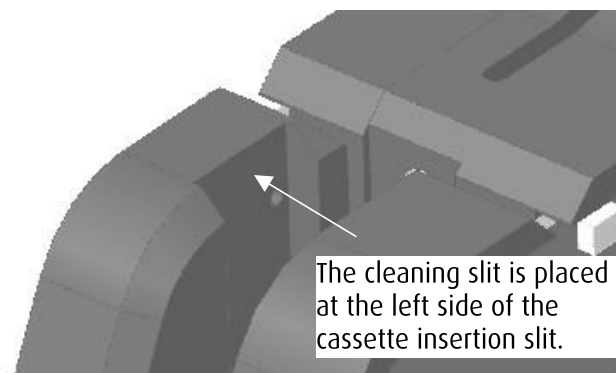


Figure 4 Detail from a drawing, showing the location of the cleaning slit

Cleaning with Alpha® Swab only

The TX714A Large Alpha® Swab is present in the “Cleaning Kit NucleoCounter”

IMPORTANT!

Do not use any liquids or solvents on the swab when used for the extensive cleaning procedure. The swab must be dry and used once only. Move the dry swab into the insertion slit, through the “cleaning slit”. When the swab meets the bottom of the insertion slit you can feel resistance. At this position approximately 45-50 mm. of the swab is inside the insertion slit. Once the dry swab is placed inside the insertion slit, through the “cleaning slit”, press the swab gently to the right-hand side in order to apply a gentle pressure on the excitation filter. Then move the swab as indicated with the directions in figure 5.

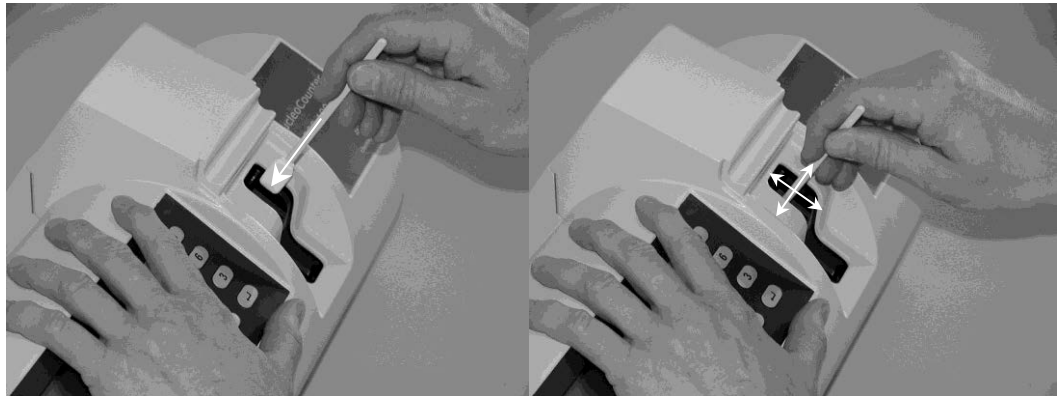


Figure 5 Insert the swab into cleaning slit and clean in the directions shown.

Note:

This Technical Note is intended to be used only as INSTRUCTIONS FOR THE CLEANING OF THE NUCLEOCOUNTER INSTRUMENT FAMILY WITH USE OF DRY SWABS AS INDICATED IN THE NOTE. This Technical Note does not warrant any use of the mentioned NucleoCounter Instrument or items except for the procedures as described herein. Use of the NucleoCounter Instrument or items for other purposes, lack of maintenance, use of un-recommended procedures, liquids or solvents can result in faulty and/or hazardous operation of the NucleoCounter Instrument and the items. ChemoMetec A/S reserves the right to introduce changes in the product to incorporate new technology. This Technical Note is subject to change without notice. ChemoMetec, NucleoCounter, NucleoCounter YC-100, NucleoCounter SP-100, NucleoCounter SCC-100, and NucleoView are trademarks and registered trademarks of ChemoMetec A/S. Copyright © ChemoMetec A/S 2003. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of ChemoMetec A/S, Gydevang 43, DK-3450 Allerød, Denmark.