



Service Manual

Lamp Replacement and Calibration

Corona extreme

Knowledge of this manual is required for operation of the device. Therefore, please familiarize yourself with its contents and pay special attention to information concerning safe handling of the device.
We reserve the right to make changes in the interest of technical advancement. The manual is not covered by an update service.

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Caution



GENERAL HAZARD

Observe the safety instructions in the "Corona extreme" User manual, publication number:
UM Corona extreme / E.

Note



Further information on the proper use of the spectrometer system can be found in the "Corona extreme" User manual.

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1 Preparing lamp replacement

Requirements

- Determine the hardware revision status of the Corona extreme measuring system

If possible, ask the customer for the serial number of the device.

You can obtain the hardware revision status of the device from the ZEISS Service department (service.spectroscopy@zeiss.com) by giving the serial number.

- Download the Test Center Software

Make sure that the latest version of the Test Center Software is installed on your test computer. This can be downloaded from <http://www.zeiss.com/info-ce>.

- Have the following service/maintenance parts ready/on hand.

- Maintenance package
 - Hardware revision 2: Maintenance Package 2, order no. 000000-2397-832
 - Hardware revision 3: Maintenance Package 3, order no. 000000-2402-119
- Ethernet cable, order no. 000000-2036-573
- Laboratory power supply unit, order no. 000000-2045-548

- Check the white, gray and black reference standards

Caution



SENSITIVE SURFACES

Do not touch the surface of the white reference standard.

Make sure that the white, gray and black reference standards are clean. If necessary, clean the reference standards with compressed air.

The white and gray reference standards are set in glass and can be cleaned using alcohol.

Note



Make sure that the white and gray reference standard certificates are not expired.

The corresponding certificate can be found on the USB memory stick included in the delivery package.

2 Getting device information

Procedure 1 Connect the device to the test computer and power supply

Connect the device to the measuring computer via Ethernet cable.

Use the laboratory power supply unit to power the device.

2 Open the OSIS software

Start **OSISManagementConsole.exe** which can be found in:

up to InProcess version 2.9:

⇒ C:\Program Files (x86)\ZEISS\InProcess

from InProcess version 2.10:

⇒ C:\Program Files (x86)\ZEISS\InProcess\OSIS\ManagementConsole\

3 Select device

Select the **Corona extreme** measuring system.

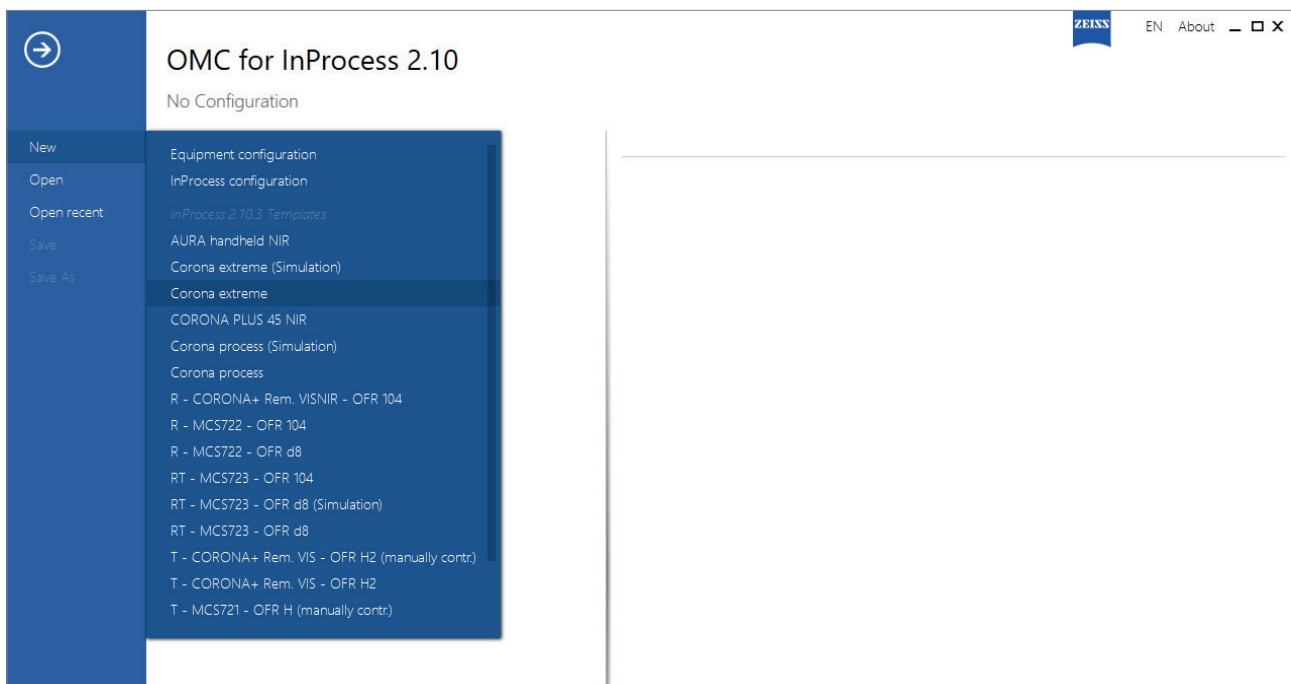


Fig. 1 Device selection

4 Enter the IP address of the measuring system or perform a scan



Note

IMPORTANT NOTE REGARDING THE IP ADDRESS RANGE

Make sure you are working in the same IP address range when you connect the device to the test computer. You may need to adjust the IP address range on the test computer.

Enter the IP address of your device under **Hardware settings** > **IP address** or click the **Scan** button to perform an address scan .

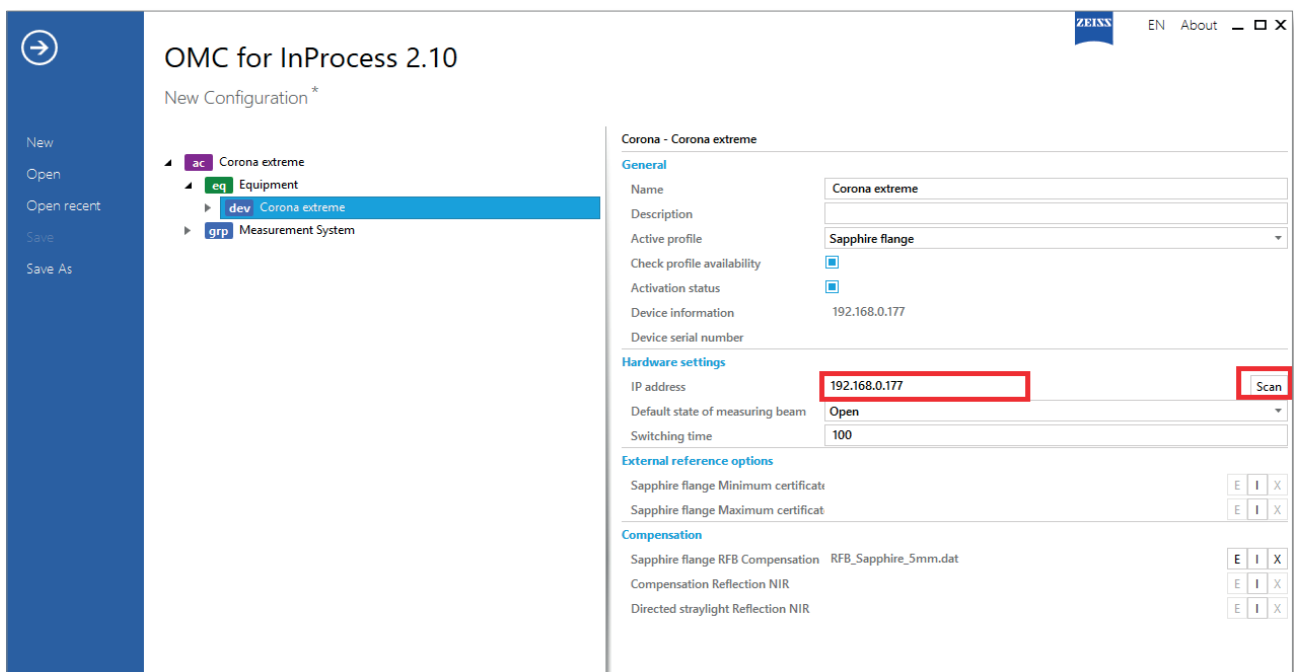


Fig. 2 Entering or scanning the IP address

5 Open the "Get device information" context menu

Right click on **dev** Corona extreme and then select **Get device information**.

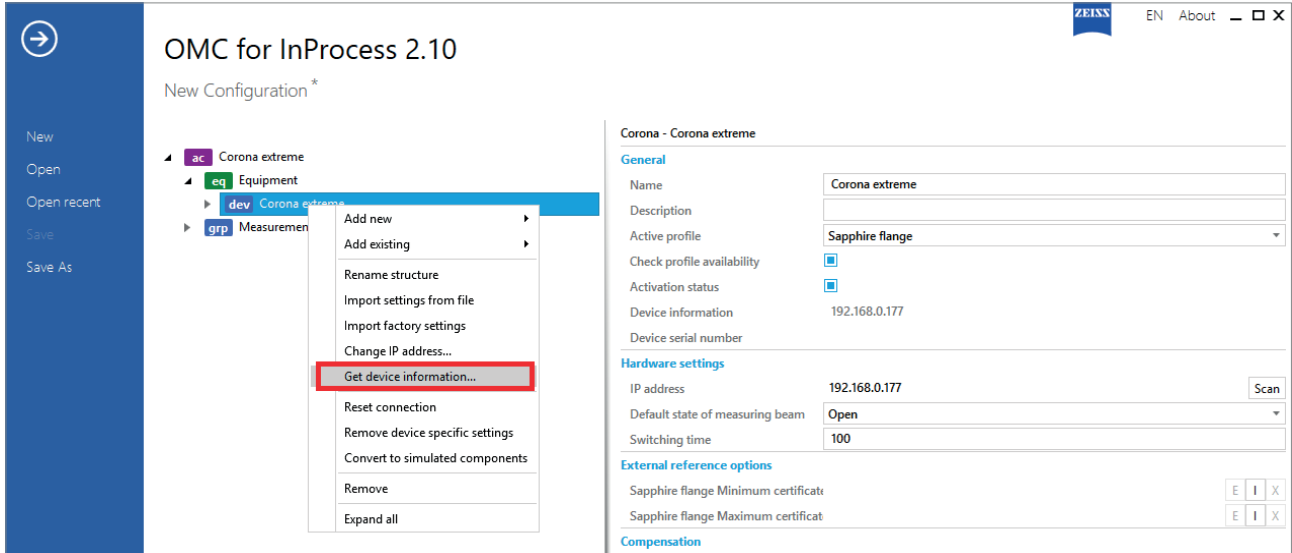


Fig. 3 Opening the "Get device information" context menu

6 Select device (measuring system)

Select **Corona extreme** under "Please select one entry ..." if necessary.

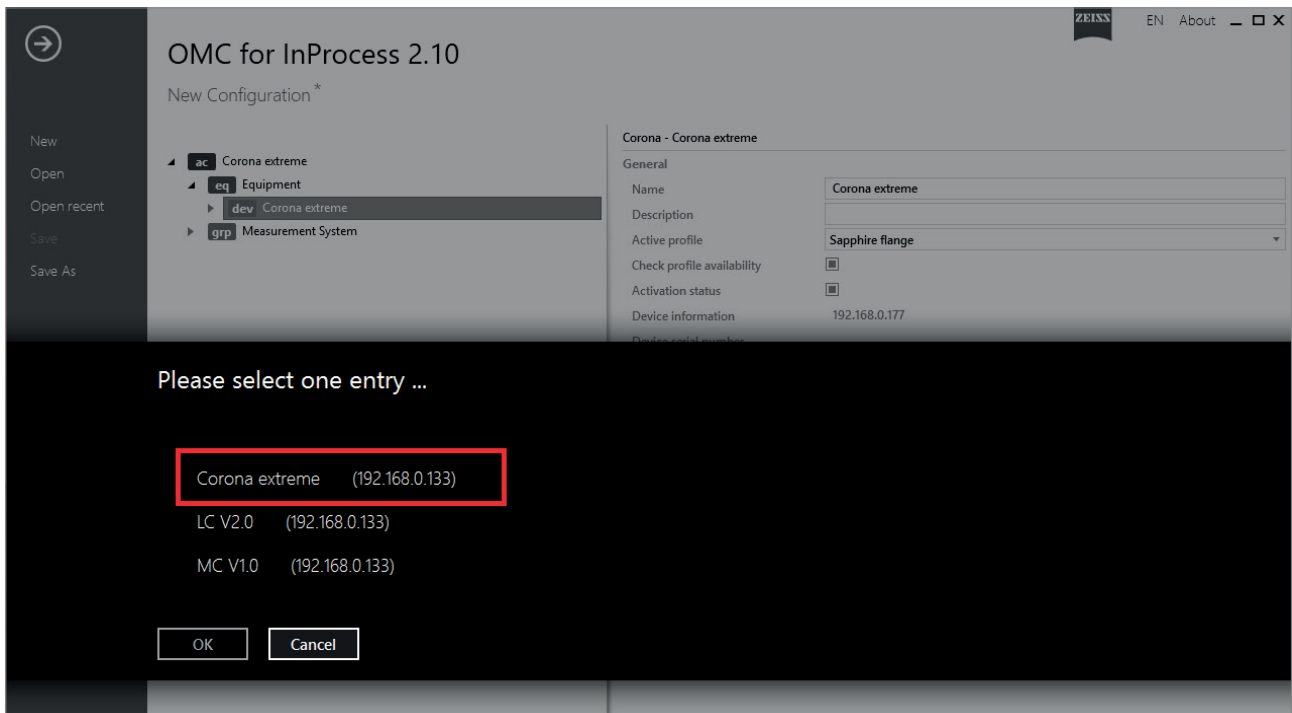


Fig. 4 Selecting device (measuring system)

7 Get the device information

Determine the hardware revision status under “Device info”. In this example: **Hardware Revision 3**.

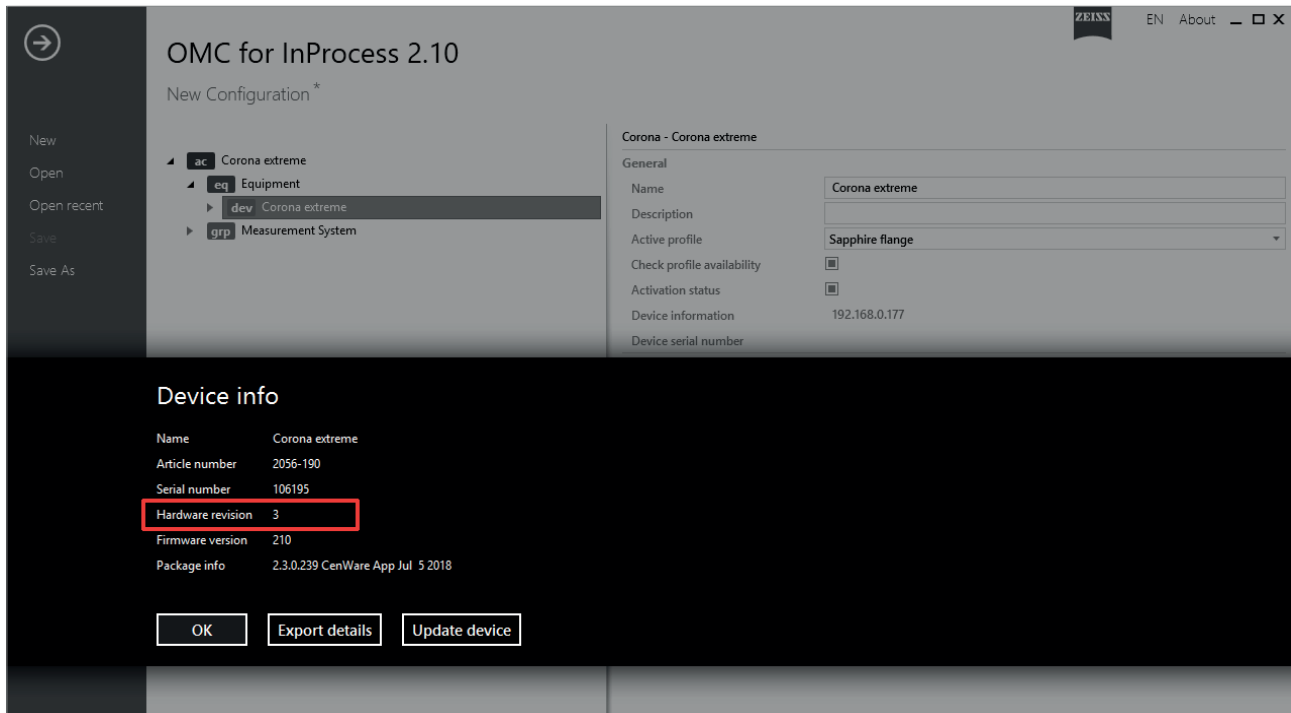


Fig. 5 Getting the device information

8 Decide on further action

- Hardware revision 1:** It is not possible to change the lamp on a Revision 1 sensor on your own. To have the necessary work performed, the sensor must be sent to Carl Zeiss Spectroscopy GmbH in Jena.
- Please contact the service department of Carl Zeiss Spectroscopy GmbH for this purpose.
⇒ service.spectroscopy@zeiss.com
- Hardware revision 2:** If **Hardware Revision 2** is displayed, the lamp can be replaced with a new lamp (type B).
⇒ You will need Maintenance Package 2 for this.
- Hardware revision 3:** If **Hardware Revision 3** is displayed, the lamp can be replaced with a new lamp (type B).
⇒ You will need Maintenance Package 3 for this.

9 Create *.ini file

Click on **Export details** under "Device info".

An *.ini file is created.

Save this file.

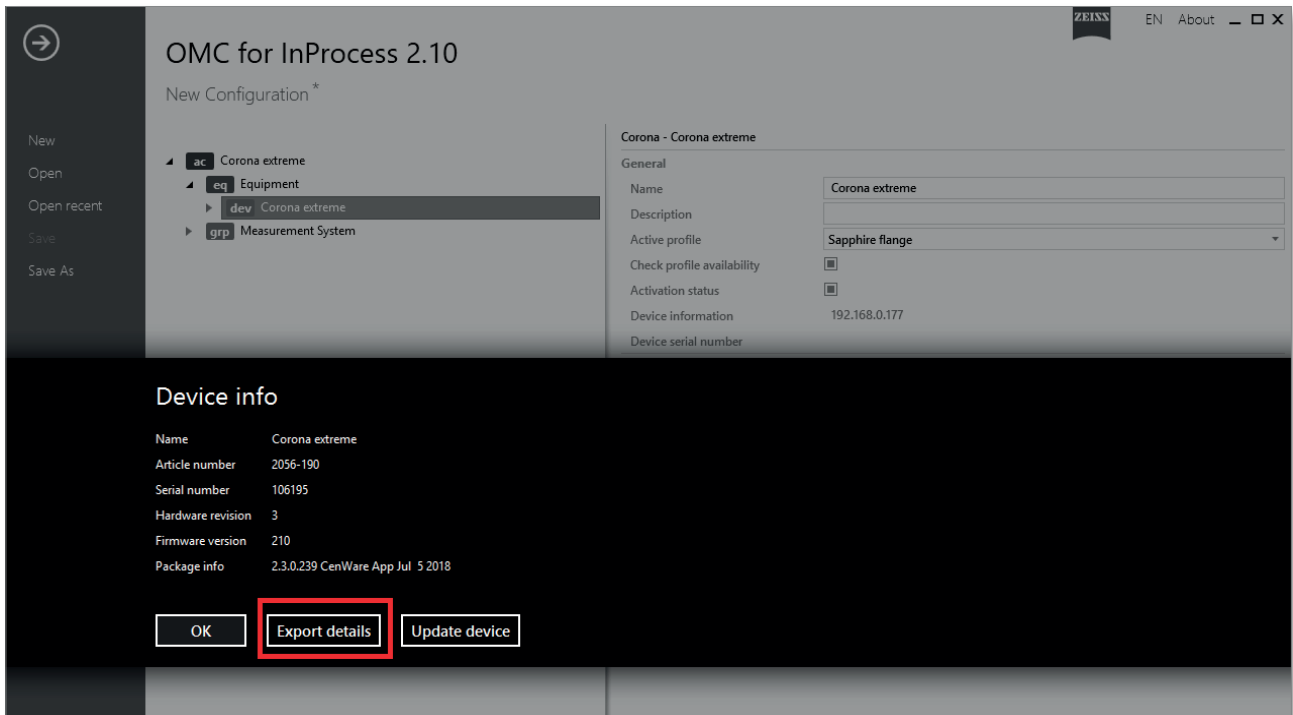


Fig. 6 Creation of *.ini file

3 Performing firmware update

Note



IMPORTANT NOTE REGARDING FIRMWARE UPDATE

Do not switch off the device or interrupt the network connection for the test computer during the update under any circumstances.

Note



The current firmware can be found on the Internet at <http://www.zeiss.com/info-ce>.

Procedure 1 Open the "Get device information" context menu

Right click on **dev** Corona extreme and then select **Get device information..**

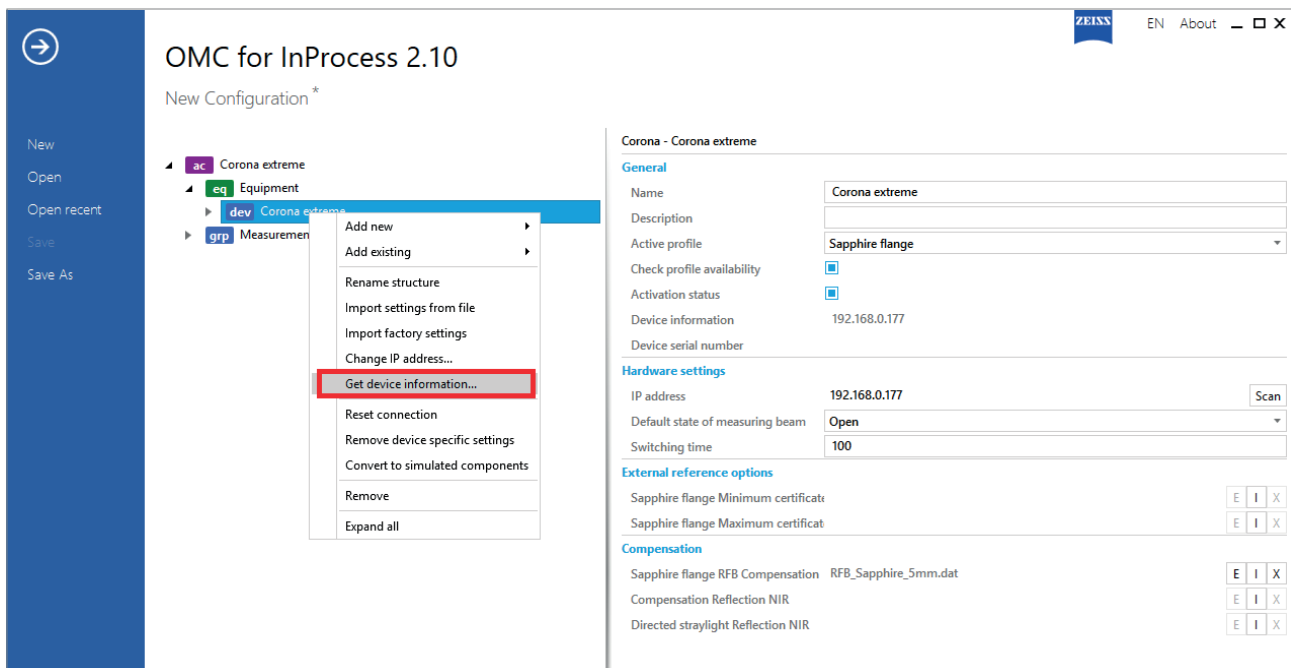


Fig. 7 Opening the "Get device information" context menu

2 Get the firmware version

Determine the firmware version under "Device info". In this example: **210**.

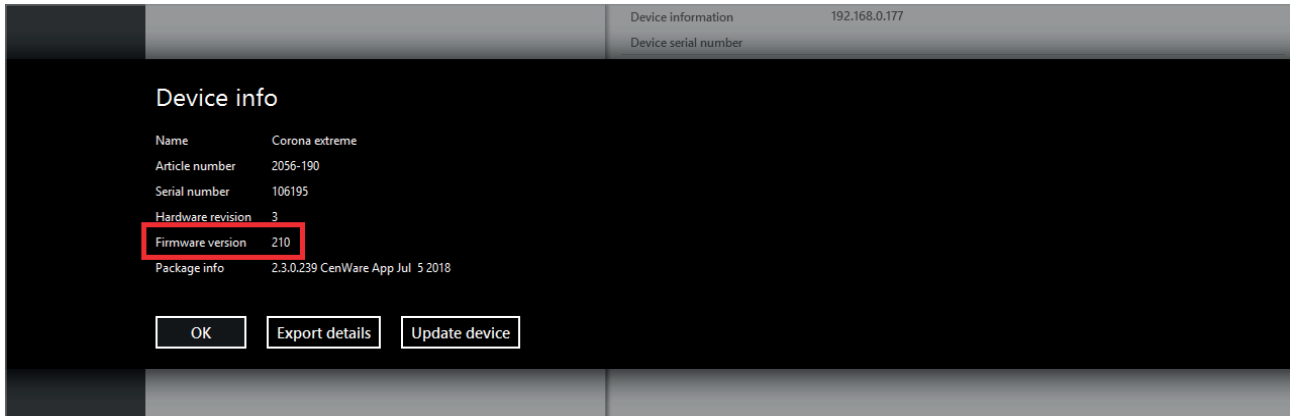


Fig. 8 Getting the firmware version

3 Decide on further action

Hardware revision 2: In this case a batch file must be run.

⇒ "Install.bat" (see step 5 in this chapter)

Hardware revision 3: If the displayed **firmware version is < 210**, we recommend updating to the latest version. ⇒ "V03.01_0210.fwx"

4 Perform firmware update



Note

IMPORTANT NOTE REGARDING FIRMWARE UPDATE

Do not switch off the device or interrupt the network connection for the test computer during the update under any circumstances.

Click on **Update device** under "Device info".

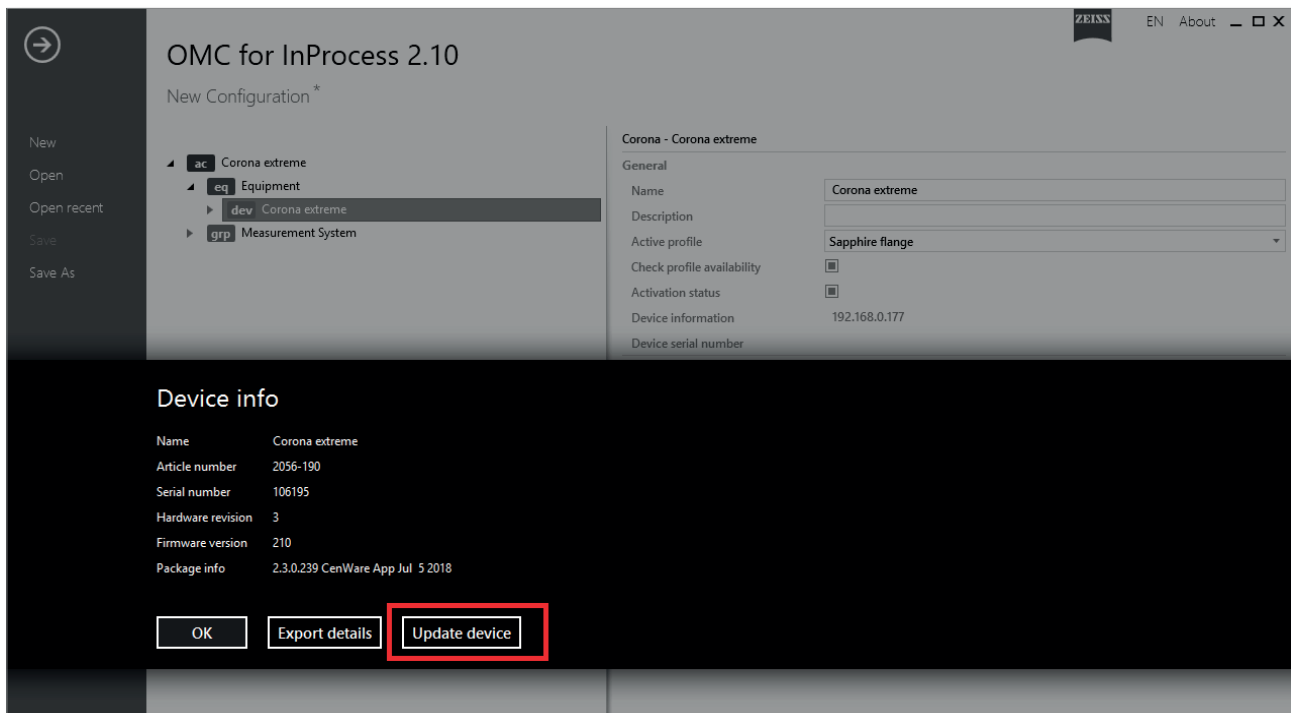


Fig. 9 Performing firmware update

Select the correct firmware.

If you try to install incorrect firmware, or if the latest version is already installed, the following window appears:

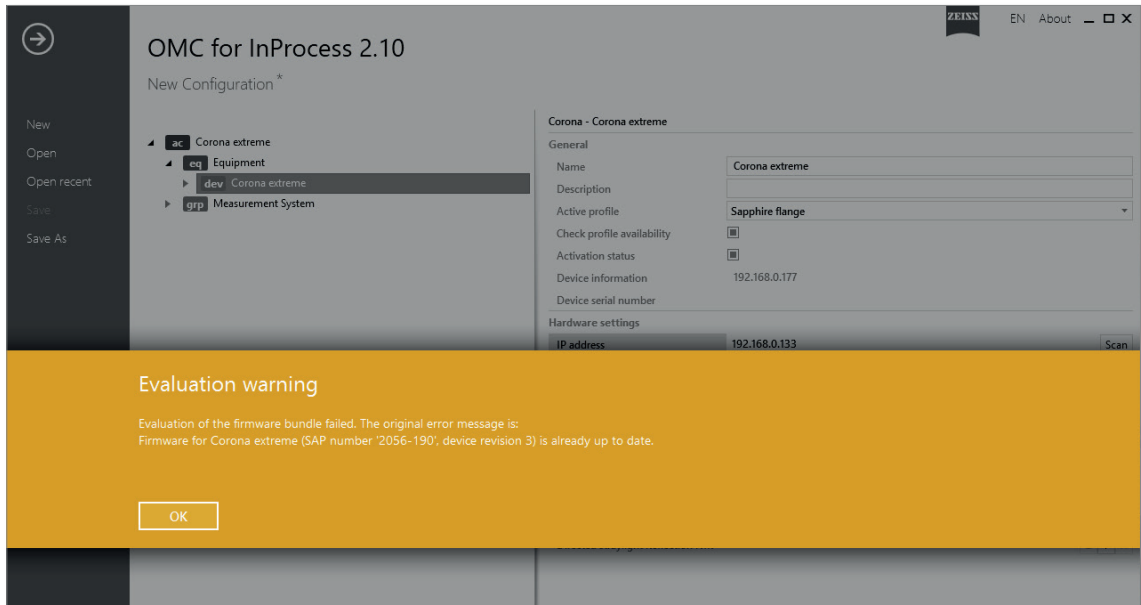


Fig. 10 Firmware version warning

Once you have selected the correct firmware, the following window appears. Start the firmware update by clicking **OK**.

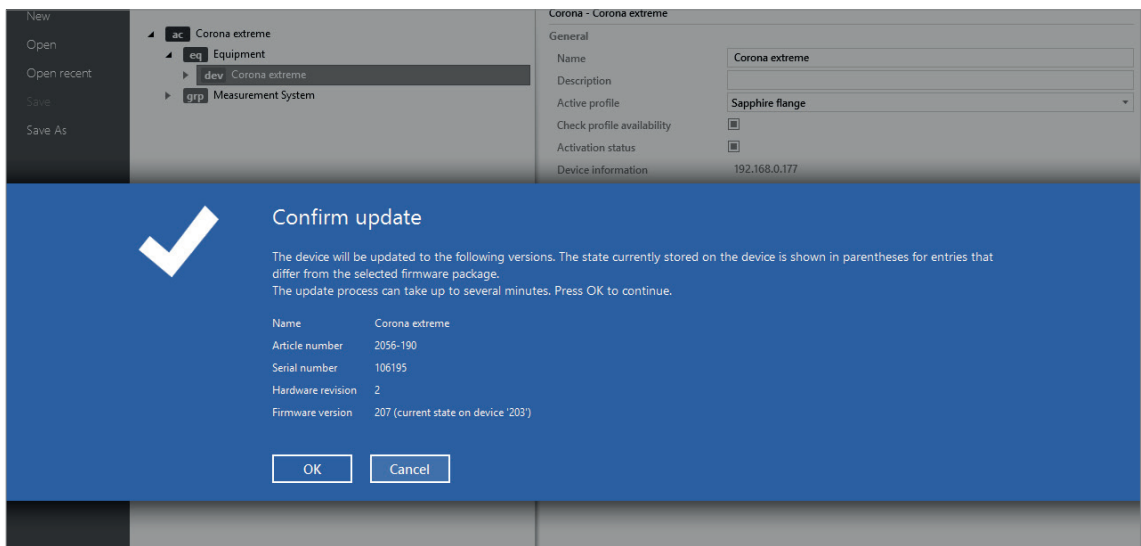


Fig. 11 Firmware update confirmation

The firmware update is running. This can take several minutes.

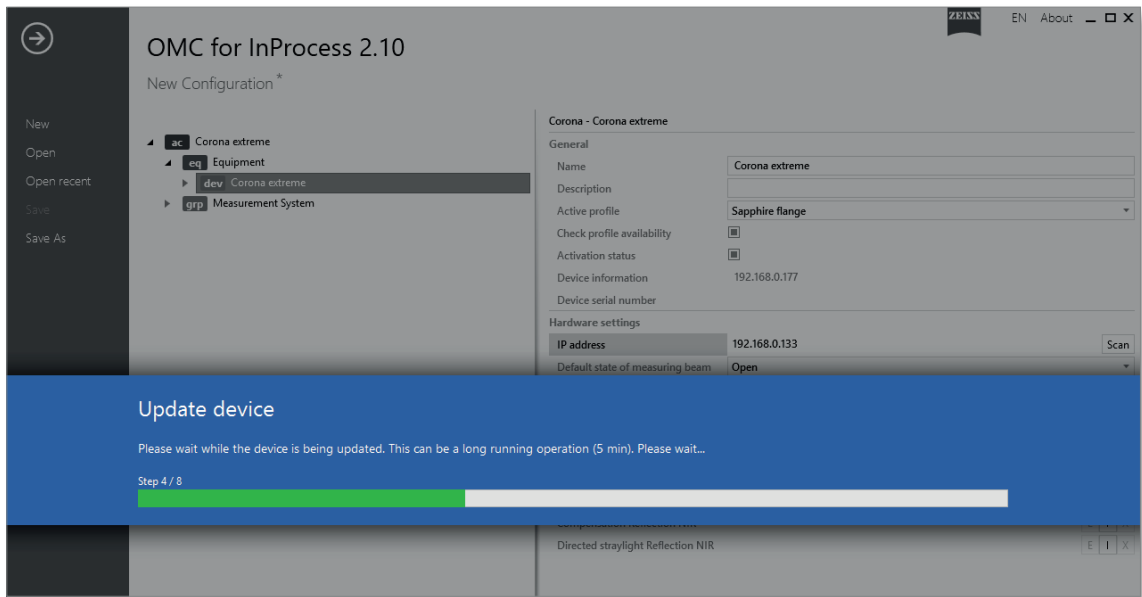


Fig. 12 Updating of firmware

The update was successful.

Confirm by clicking **OK**.

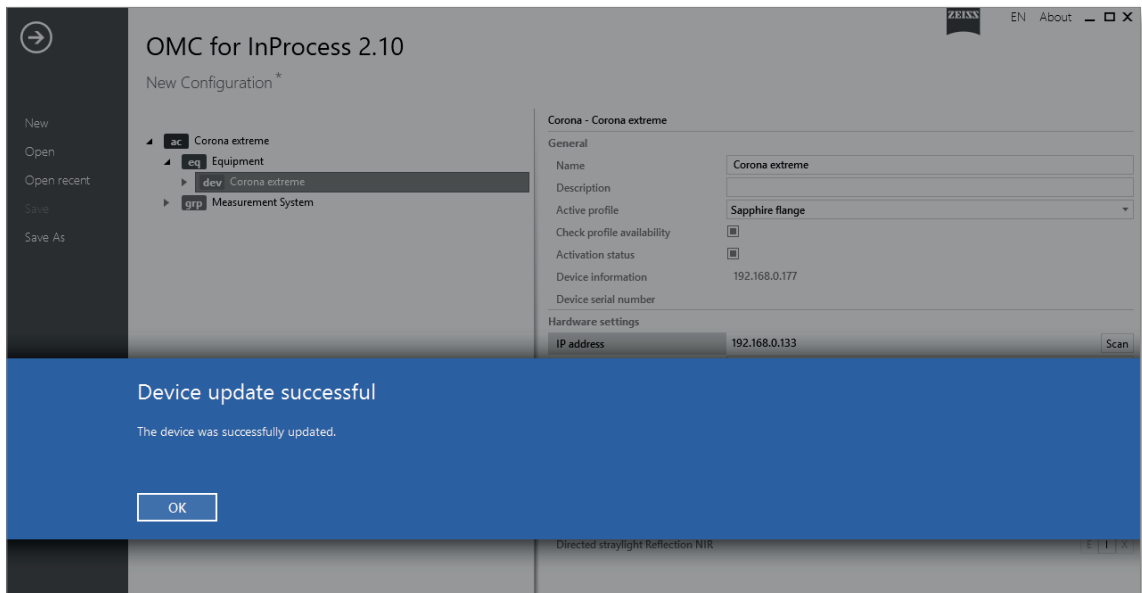


Fig. 13 Confirming successful firmware update

5 Run batch file (only Hardware Revision 2)



Note

IMPORTANT NOTE REGARDING FIRMWARE UPDATE

In order to update the device from revision 2 to revision 3, a corresponding batch file needs to be run.

Download the folder "Revision_Update_Corona_extreme" to your test computer.

Open the folder. It contains several files and subfolders. Do not remove these. Use only the file "Install.bat".

Start the batch file by double-clicking on **Install.bat**.

Read the info text.

```
C:\WINDOWS\system32\cmd.exe

You're about to update the Corona extreme device from Revision 2 to Revision 3!
This is only necessary when applying the service kit ____-____!
Wrongfully applying this update may result in device failure!

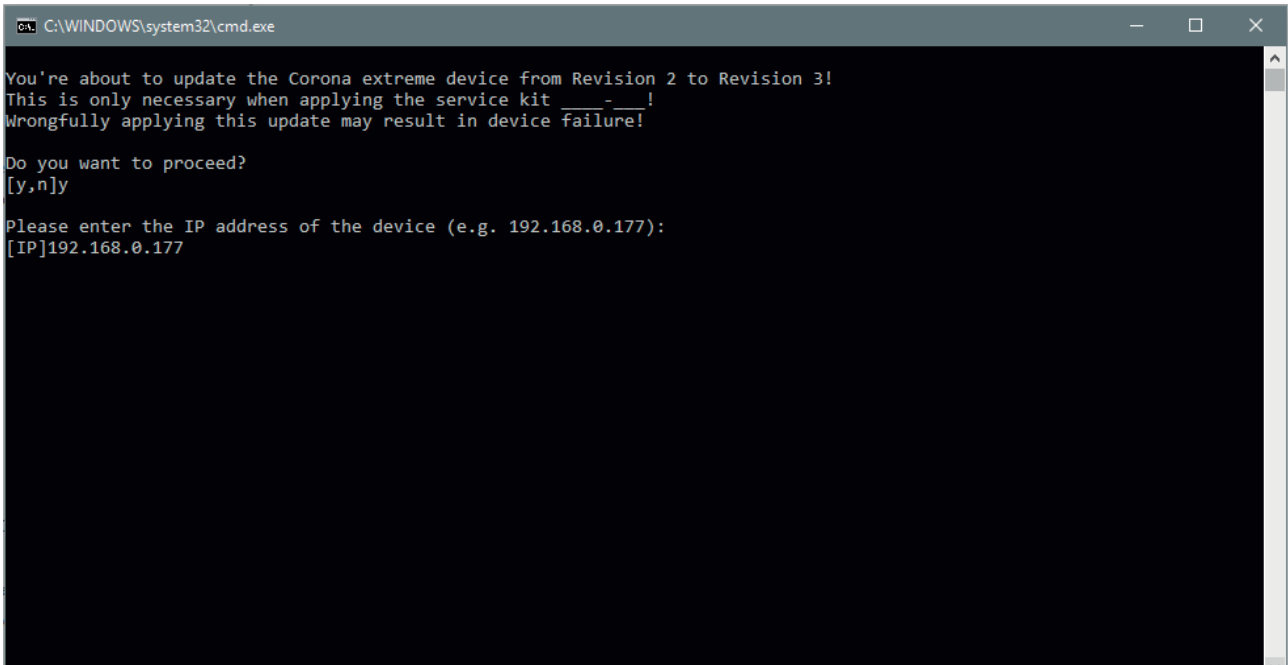
Do you want to proceed?
[y,n]
```

Fig. 14 Confirmation prompt for batch file

- [y] Select [y] (Yes) if Hardware Revision 2 is installed and you intend to replace the lamp.
- [n] Select [n] (No) if you do not intend to replace the lamp.

Enter the IP address of the device.

Confirm by pressing **Enter**.



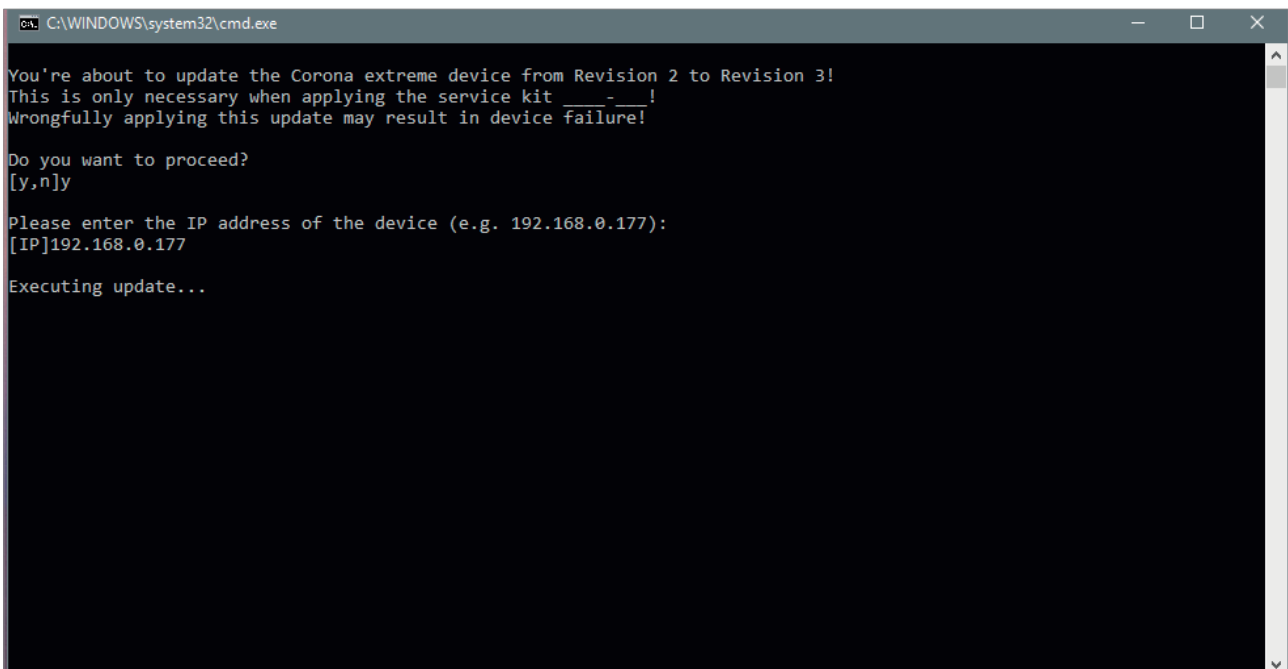
```
C:\WINDOWS\system32\cmd.exe
You're about to update the Corona extreme device from Revision 2 to Revision 3!
This is only necessary when applying the service kit ____-____!
Wrongfully applying this update may result in device failure!

Do you want to proceed?
[y,n]y

Please enter the IP address of the device (e.g. 192.168.0.177):
[IP]192.168.0.177
```

Fig. 15 Entering IP address

The batch file is run. This can take several minutes.



```
C:\WINDOWS\system32\cmd.exe
You're about to update the Corona extreme device from Revision 2 to Revision 3!
This is only necessary when applying the service kit ____-____!
Wrongfully applying this update may result in device failure!

Do you want to proceed?
[y,n]y

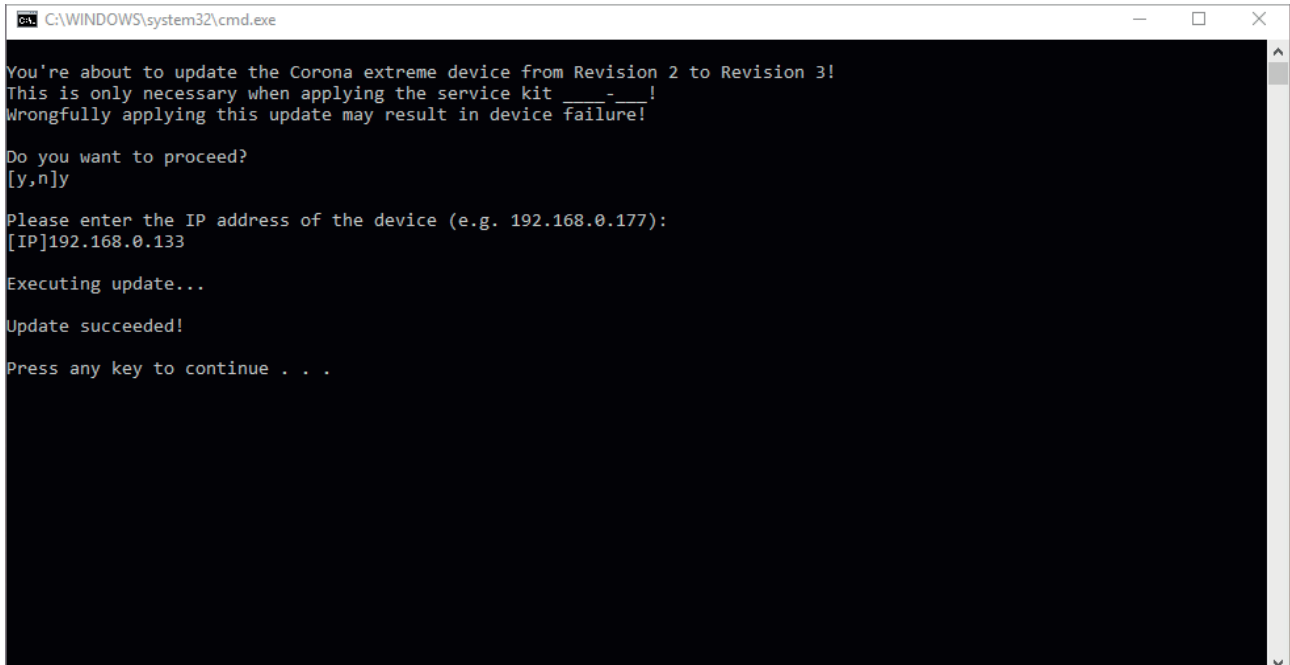
Please enter the IP address of the device (e.g. 192.168.0.177):
[IP]192.168.0.177

Executing update...
```

Fig. 16 Running batch file

The update was successful.

Press any key to complete the process.



```
C:\WINDOWS\system32\cmd.exe
You're about to update the Corona extreme device from Revision 2 to Revision 3!
This is only necessary when applying the service kit ____-____!
Wrongfully applying this update may result in device failure!

Do you want to proceed?
[y,n]y

Please enter the IP address of the device (e.g. 192.168.0.177):
[IP]192.168.0.133

Executing update...

Update succeeded!

Press any key to continue . . .
```

Fig. 17 Entering IP address

Result

The preparatory work for the lamp replacement is now complete.

Return to chapter "4 Replacing the halogen lamp" on page 19 and read the safety instructions. Replace the lamp as follows.

4 Replacing the halogen lamp

4.1 General work

Warning



HAZARD FROM ELECTRICAL ENERGY

Make sure that the power supply is disconnected. The entire measuring system must be disconnected from the power supply.

Make sure that the measuring system cannot be unintentionally reconnected to the power supply by third parties.

Caution



GENERAL HAZARD

The activities below may only be performed by Service employees of Carl Zeiss Spectroscopy GmbH or by appropriately trained personnel.

Caution



HAZARD FROM THERMAL ENERGY

Allow the halogen lamp to cool down for approx. 10 minutes before removing it.

Caution



SENSITIVE OPTICAL COMPONENTS

Be careful not to touch the reflector and the glass bulb of the new halogen lamp without cotton gloves.

Only carry out work on optical components in a very clean working environment. Use gloves which are free of all traces of lint, powder or grease.

Caution



SENSITIVE ELECTRONIC COMPONENTS

Perform all the activities below at an ESD workstation.

Procedure 1 Exit control software

Exit the **InProcess** control software.

2 Disconnect power supply

Disconnect the power supply to the **Corona extreme** measuring system.

3 Dismantle Corona extreme from customer interface

If necessary, dismantle the **Corona extreme** measuring system from the customer interface (tool selection based on specific constellation).

4 Remove system cables

Loosen the sleeve nuts of the connected plugs and remove the cables from the connection sockets on the **Corona extreme** measuring system.

5 Set up ESD workstation

Perform all the activities described below at an ESD workstation.

6 Have the spare parts ready

If you have not already done so, have the following spare parts ready:

Hardware revision 2:

– Maintenance Package 2, order no. 000000-2397-832

Hardware revision 3:

– Maintenance Package 3, order no. 000000-2402-119

7 Have all tools and equipment ready

If you have not already done so, have the following tools and equipment ready:

- TX 10 and TX 25 Torx screwdrivers
- 2 mm slot-head screwdriver
- Gloves

4.2 Opening the housing

1 Remove housing screws

Place the Corona extreme spectrometer system so that the measurement window is facing upwards.

Unscrew the 12 Torx screws **2** from the base plate **1** of the housing. Use a TX 25 Torx screwdriver for this.

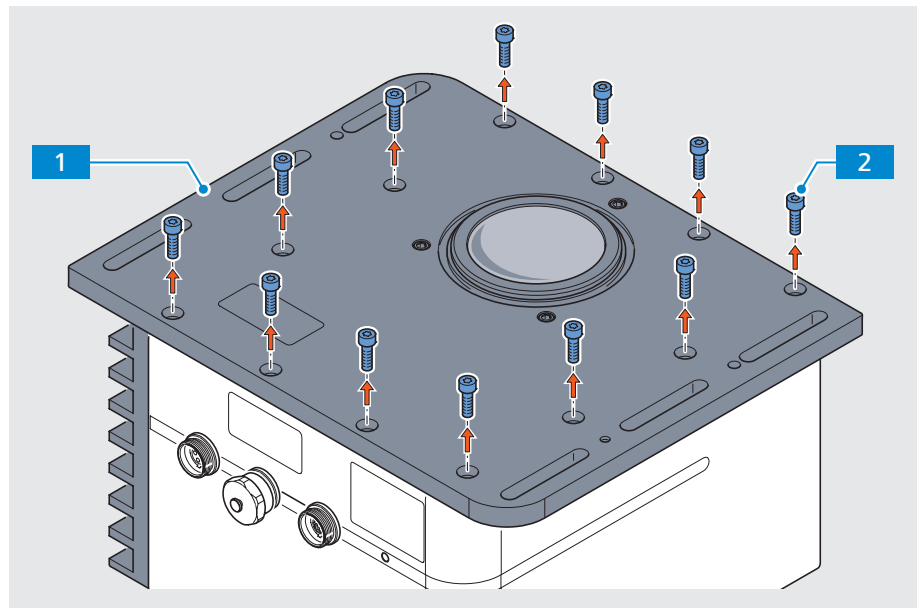


Fig. 18 Removing housing screws

2 Lift the base plate off the housing

Carefully lift the base plate **1** straight off the housing **2**.

This disconnects the plug connections between the boards, which are located in the housing and on the base plate.

Turn the base plate through 180° and place it on the ESD workstation.

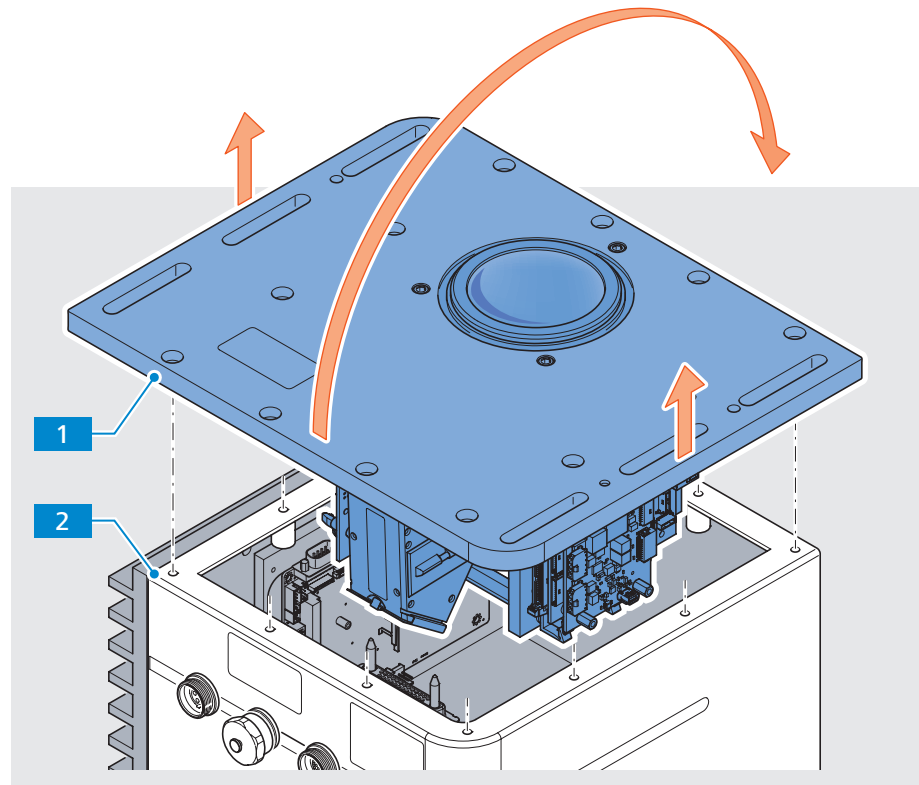


Fig. 19 Lifting the base plate off the housing

3 Remove old housing seal

Remove the housing seal **1** from the groove **2** in the base plate.

The seal must be replaced by a new seal each time the housing is opened (see chapter "4.5 Closing the housing" on page 34).

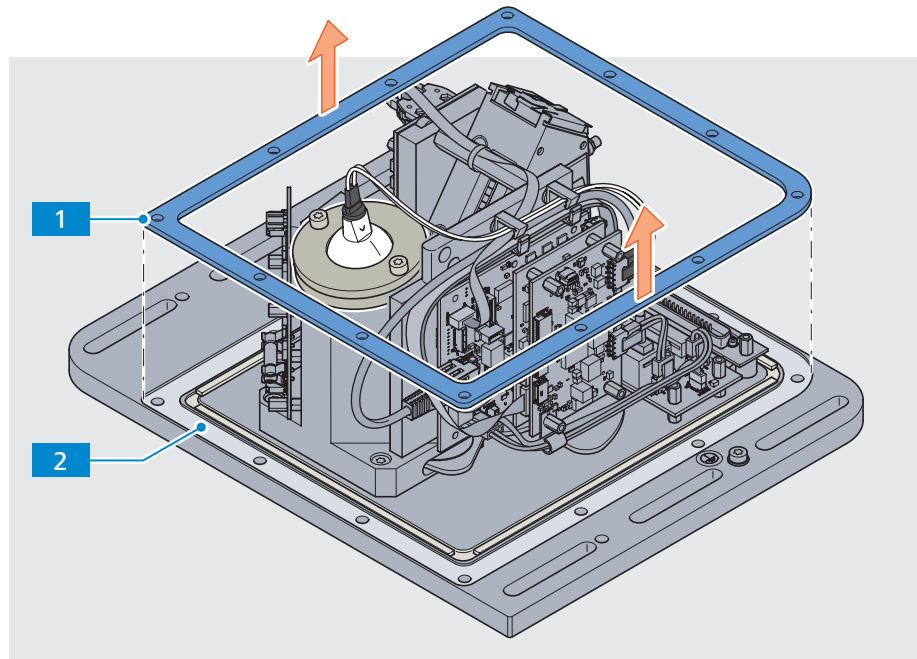


Fig. 20 Removing housing seal

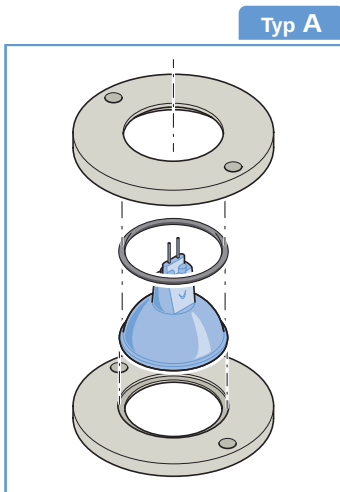
4.3 Replacing halogen lamp – Hardware Revision 2

- Requirements**
- The base plate has been removed and placed on an ESD base (see section “4.2 Opening the housing” on page 21).
 - If you have not already done so, put the following spare parts ready:
 - **Maintenance package 2**, order no. 000000-2397-832

Procedure 1 Disconnect the plug connections

Disconnect the lamp cable **1a** from the halogen lamp **2**.

Disconnect the lamp cable plug **1b** from the connector/jack **4** on the lamp board. If necessary, use a slot-head screwdriver to unscrew the connection. Proceed very carefully.



NOTE:

Some type A lamps are installed without the lower lamp holder ring.

In this case, the lamp is replaced as described here, but without the lower lamp holder ring.

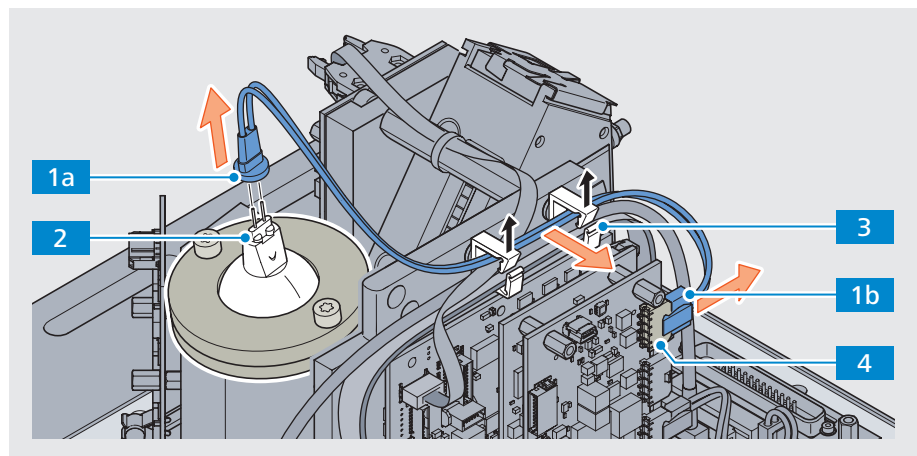


Fig. 21 Removing the old lamp cable

2 Remove the lamp cable

Open the two cable clips **3**. If necessary, use a slot-head screwdriver for this. Proceed very carefully.

Remove the old lamp cable **1** from the cable clips.

3 Remove the lamp holder

Unscrew the two Torx screws **1** from the lamp holder. Use a TX 25 Torx screwdriver for this.

Remove the entire lamp holder – consisting of the lower lamp holder ring **3** and upper lamp holder ring **4** together with the old halogen lamp **2** – carefully upwards.

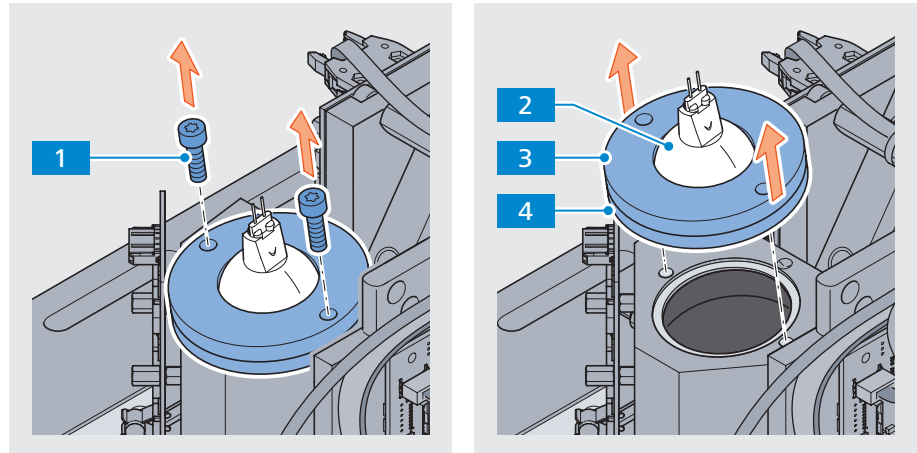


Fig. 22 Removing the lamp holder

4 Changing type A lamp to type B lamp

Note



IMPORTANT NOTE ON LAMP REPLACEMENT

If the firmware has been updated from Rev.2 to Rev.3, it is essential to use a type B halogen lamp.

It is no longer possible to install a type A halogen lamp.

Put all disassembled type A lamps aside. These are no longer needed.

5 Install adapter cable for type B lamp

If necessary, open the right cable clip **1**. If necessary, use a slot-head screwdriver for this.

Insert the adapter cable **2** into the cable clip and close it again.

Insert the wide plug of the adapter cable into connector/jack **3** on the lamp board.

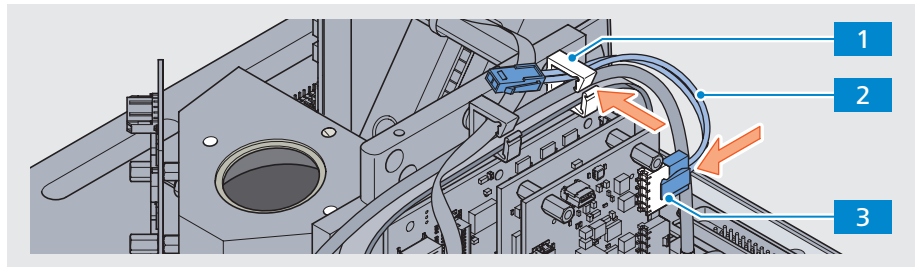


Fig. 23 Installing adapter cable for type B lamp

Caution



SENSITIVE OPTICAL COMPONENTS

Do not touch the reflector or the glass bulb of the new halogen lamp without gloves.

Work on optical components in a very clean working environment only.

6 Insert new reflector and new O-ring

Insert the new reflector **2** into the ring groove of the lamp housing **1**.

Place the new O-ring **3** concentrically into the reflector **2**.

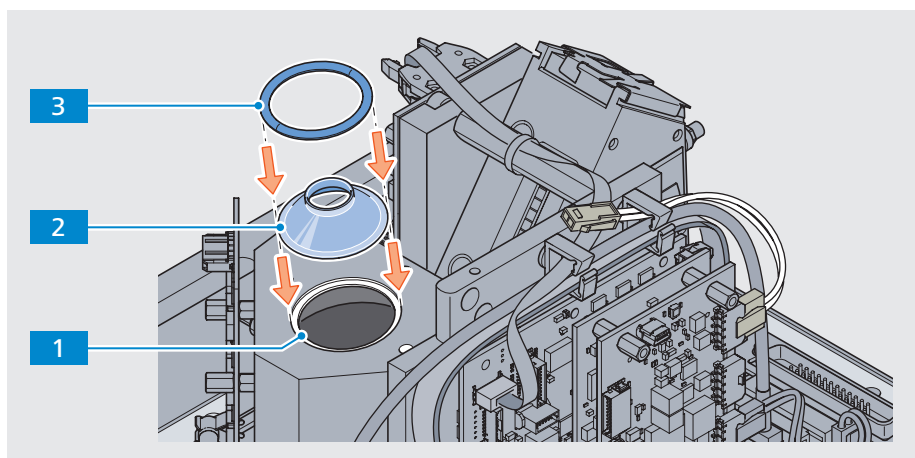


Fig. 24 Inserting new O-ring and new reflector

7 Mount the reflector holder

Align the hole in the reflector holder **4** and the centerbore in the lamp housing **5** (red line in the diagram below).

Place the reflector holder **2** onto the lamp housing centrally above the reflector.

Provisionally screw the two fixing screws **3** only half way into the threaded holes in the lamp housing **1**. Use a TX 25 Torx screwdriver for this.

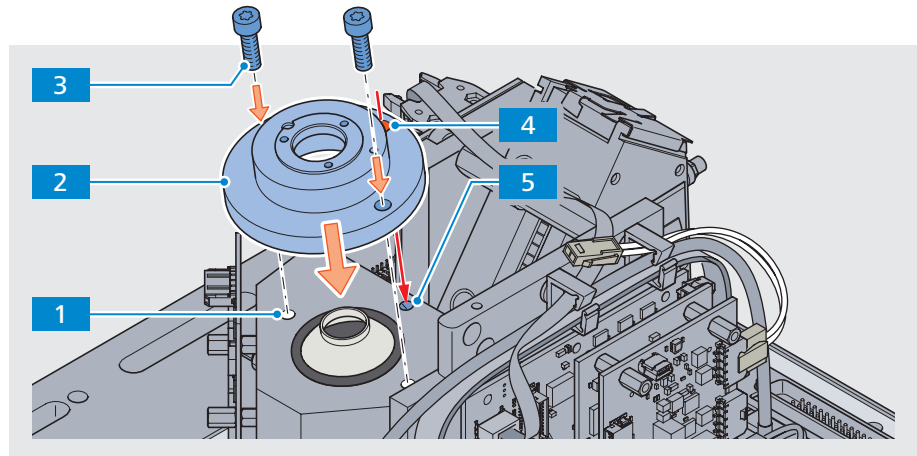


Fig. 25 Mounting the reflector holder

8 Center the reflector

Insert the mounting tool **3** into the reflector holder **1**. This centers the reflector within the reflector holder.

Now tighten the two fixing screws which are already screwed in halfway **2a** - **2b**. Use a TX 25 Torx screwdriver for this.

Remove the mounting tool **3** from the reflector holder **1**.

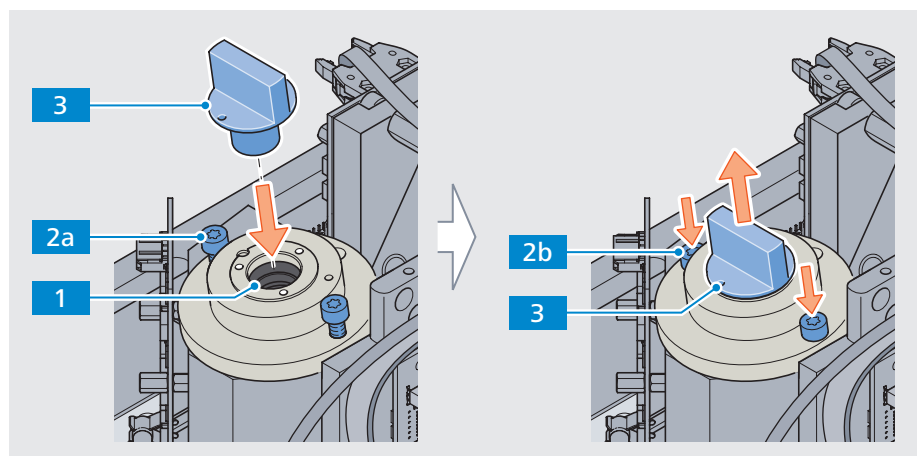


Fig. 26 Centering the reflector

9 Install a new halogen lamp

Bring the hole on the edge of the lamp cap **4** in line with the counterbore in the lamp housing **2** (red line in the diagram below).

Insert the new halogen lamp **3** carefully into the opening of the reflector holder **1**.

Tighten the three Torx screws **5** on the lamp cap. Use a TX 10 Torx screwdriver for this.

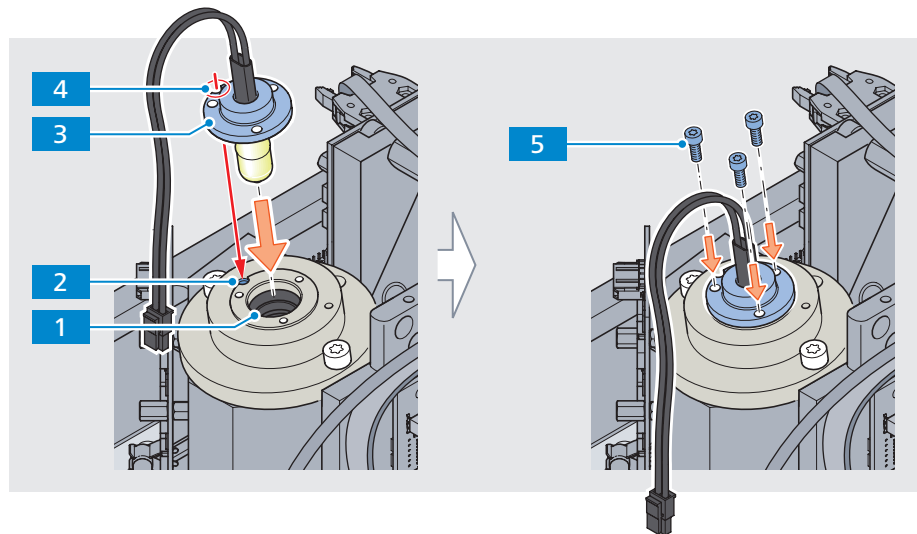


Fig. 27 Installing a new halogen lamp

10 Connect lamp cable and adapter cable

Connect the lamp cable **1** with the adapter cable **2**.

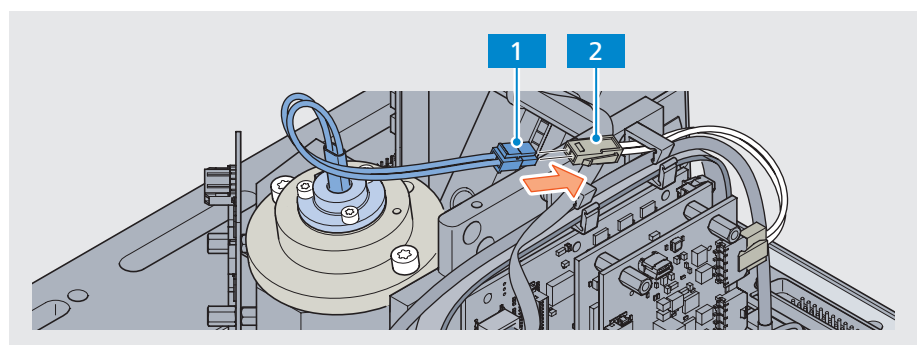


Fig. 28 Connecting lamp cable and adapter cable

11 Insert lamp cable into cable clip

Insert the lamp cable **2** in the left cable clip **3** so that the connecting plugs are secured between both cable clips.

Close the left cable clip again.

12 Attach screw-on cable tie

Screw on a new cable tie **1**. Use a TX 10 Torx screwdriver for this.

Tighten the cable tie sufficiently.

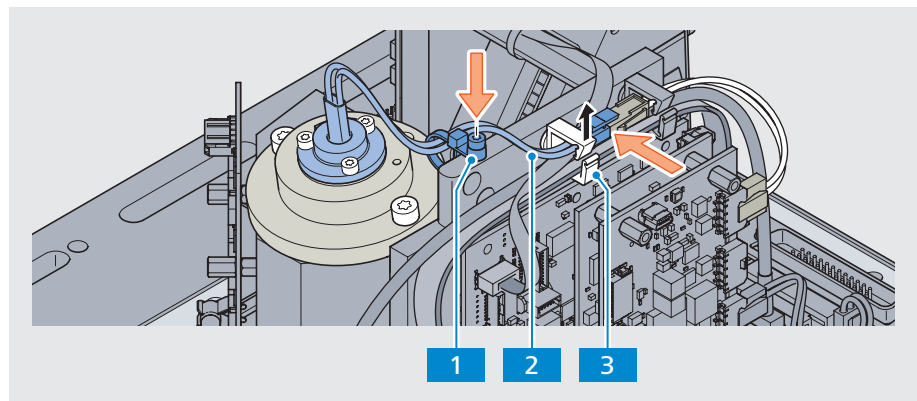


Fig. 29 Attaching the lamp cable

Final steps 13 Close the housing

Once the lamp has been replaced, the device can be closed again.

Refer to chapter "4.5 Closing the housing" on page 34.

14 Calibrate the compensation data

After each lamp replacement, the various profile attachments must be recalibrated.

Refer to chapter "5 Performing sensor calibration" on page 36.

4.4 Replacement of halogen lamp – Hardware Revision 3

- Requirements**
- The base plate has been removed and placed on an ESD base (see section “4.2 Opening the housing” on page 21)
 - If you have not already done so, put the following spare parts ready:
 - **Maintenance Package 3**, order no. 000000-2402-119

Procedure 1 Remove the lamp cable from the cable clip

Open the left cable clip **1**. If necessary, use a slot-head screwdriver for this. Proceed very carefully.

Take the lamp cable **2** out of the cable clip.

2 Remove screw-on cable tie

Unscrew the cable tie **3**. Use a TX 10 Torx screwdriver for this.

Cut the cable tie and remove it.

Note: The screw-on cable tie **3** must be replaced by a new one each time the halogen lamp is replaced.

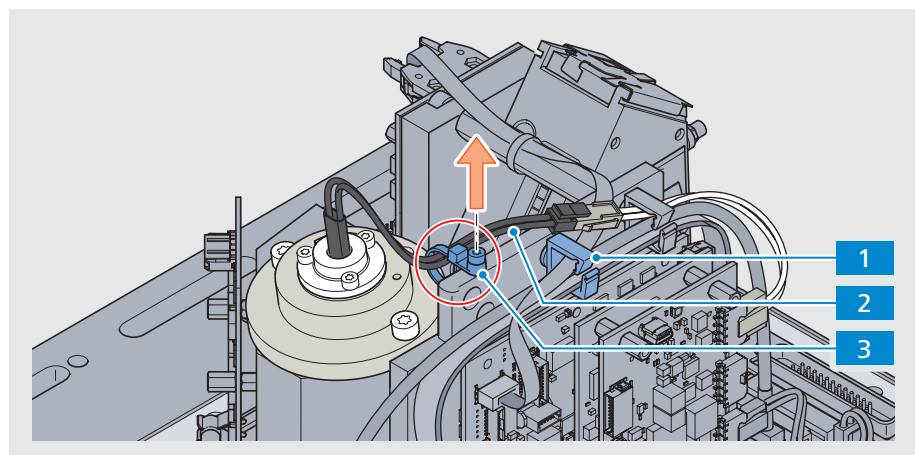
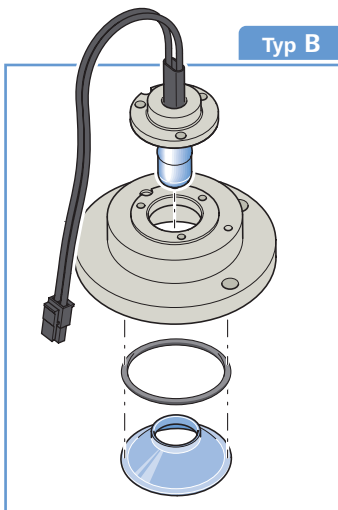


Fig. 30 Exposing the lamp cable

3 Disconnect the lamp cable from the adapter cable

Unplug the lamp cable plug **1** from the adapter cable **2**.

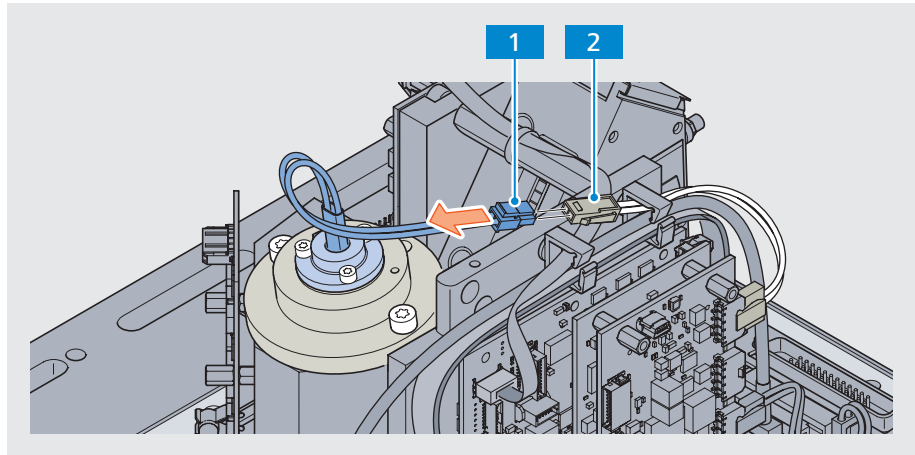


Fig. 31 Disconnecting the lamp cable from the adapter cable

4 Remove the halogen lamp

Unscrew the three Torx screws **1** from the lamp cap. Use a TX 10 Torx screwdriver for this.

Carefully remove the old halogen lamp **2** upwards out of the reflector holder **3**.

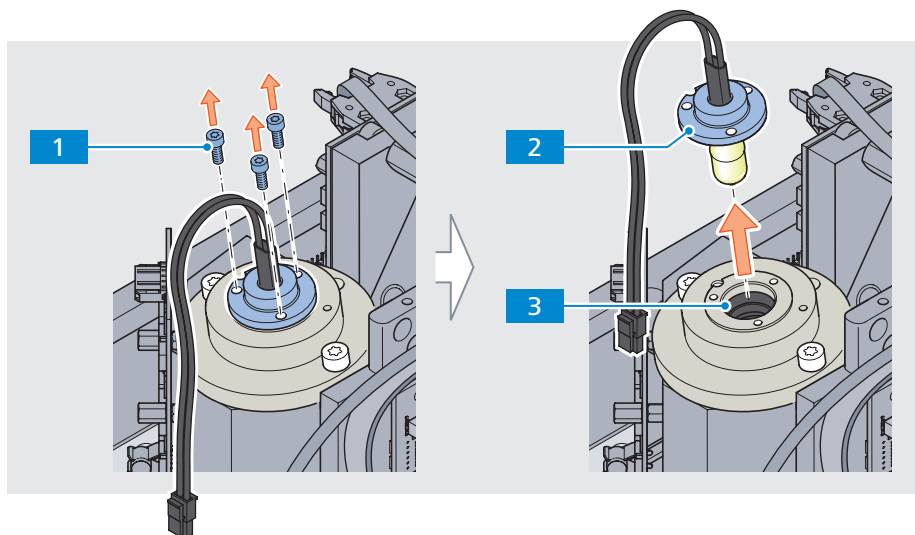


Fig. 32 Removing the halogen lamp

5 Install a new halogen lamp

Bring the hole on the edge of the lamp cap **4** in line with the counterbore in the lamp housing **2** (red line in the diagram below).

Insert the new halogen lamp **3** carefully into the opening of the reflector holder **1**.

Tighten the three Torx screws **5** on the lamp cap. Use a TX 10 Torx screwdriver for this.

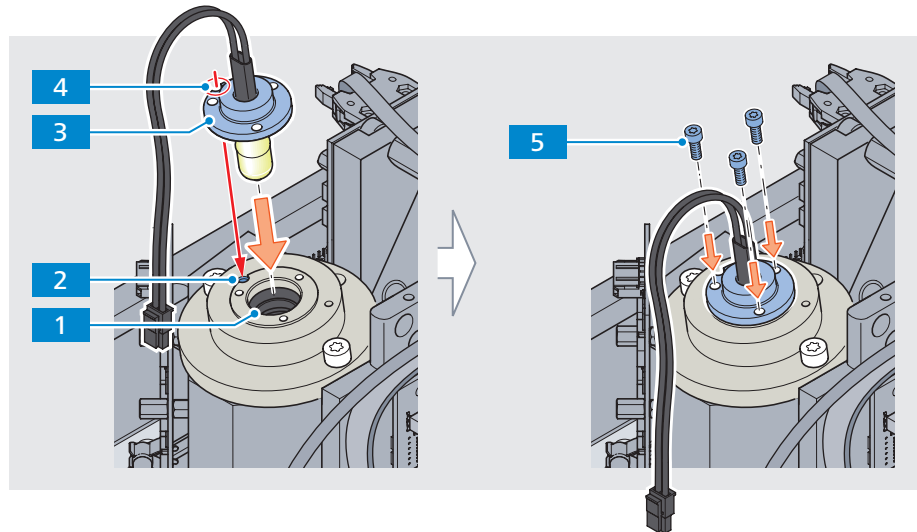


Fig. 33 Installing a new halogen lamp

6 Connect lamp cable and adapter cable

Connect the lamp cable **1** with the adapter cable **2**.

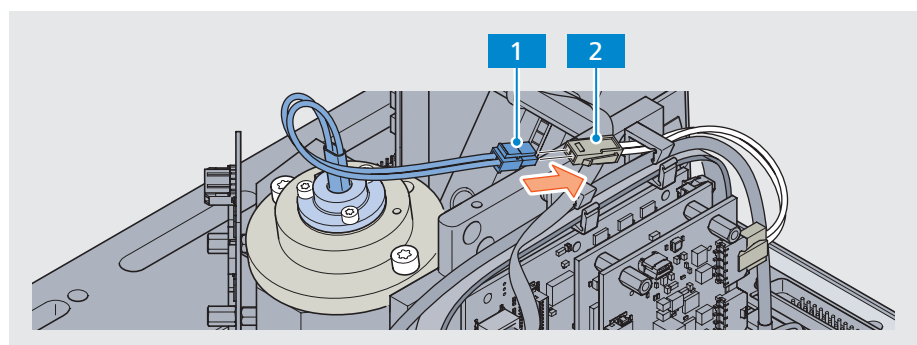


Fig. 34 Connecting lamp cable and adapter cable

7 Insert lamp cable into cable clip

Insert/place the lamp cable **2** in the left cable clip **3** so that the connecting plugs are secured between both cable clips.

Close the left cable clip again.

8 Attach screw-on cable tie

Screw on a new cable tie **1**. Use a TX 10 Torx screwdriver for this.

Tighten the cable tie sufficiently.

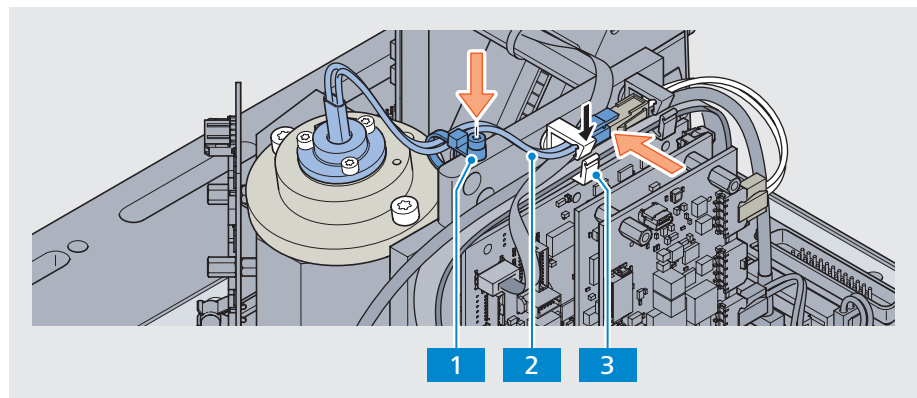


Fig. 35 Attaching the lamp cable

Final steps 9 Close the housing

Once the lamp has been replaced the device can be closed again.

Refer to chapter "4.5 Closing the housing" on page 34.

10 Calibrate the compensation data

After each lamp replacement, the various profile attachments must be recalibrated.

Refer to chapter "5 Performing sensor calibration" on page 36.

4.5 Closing the housing

- Requirements**
- All service activities have been properly complete. All disconnected plug connection have been reconnected and cables are laid properly.
 - Put the following spare parts ready:
 - Housing seal (part of the Maintenance Package)
 - Put the following tools and equipment ready:
 - Centering aid for seal replacement (part of the Service Package), consisting of 8 mounting pins
 - TX 25 Torx screwdriver

Procedure 1 Apply the new housing seal and insert mounting pins

Always apply a new housing seal **2** to the housing **3**.

Make sure the seal is correctly positioned. The side of the seal with the larger corner radius (red circle) must coincide with the corresponding corner of the housing.

Insert the 8 mounting pins **1** into the threads of the housing **3**.

The 8 pins can be distributed freely to any of the threads as they will be removed in a later step.

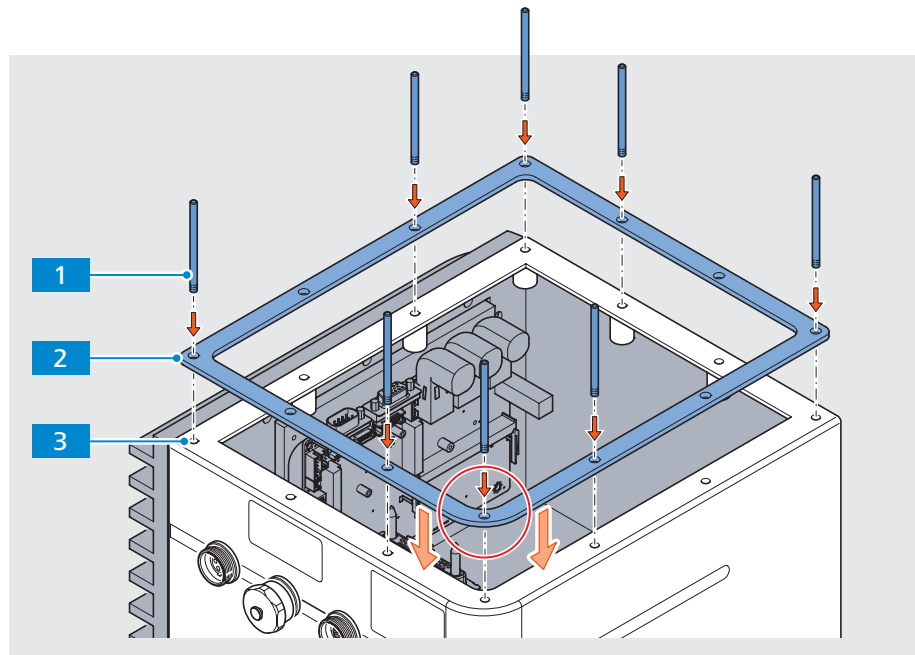


Fig. 36 Applying the new housing seal and insert mounting pins

2 Insert the base plate into the housing and secure

First check the correct mounting position. The electrical connectors of the board and the housing need to be aligned to each other.



Caution

RISK OF COMPONENT DAMAGE

When the base plate is put back onto the housing, there is a risk of damage to the boards, e.g. through individual components shearing off.

Therefore put the base plate very slowly and carefully back onto the housing, visually monitoring the movement at all times.

[A] Carefully put the base plate **1** in a straight line back onto the housing **2**.

The two plug connections between the boards of the housing and the base plate are reconnected.

[B] Remove the 8 mounting pins **3**.

[C] Screw the 12 fixing screws **4** back into the housing.
Use a TX 25 Torx screwdriver for this.

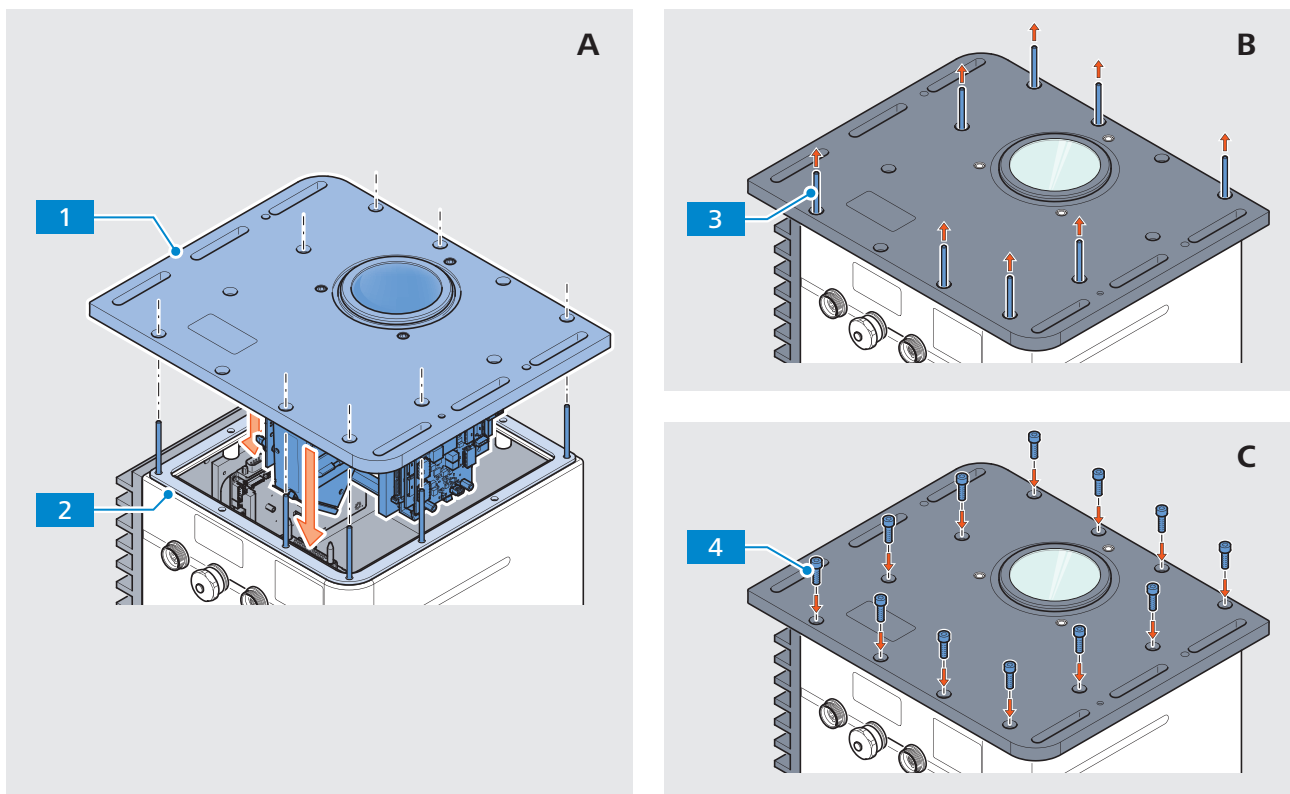


Fig. 37 Inserting the base plate into the housing and screw tight

5 Performing sensor calibration

- Requirements**
- The halogen lamp has been replaced and the device is closed.
 - The “TestCenter” software is installed on your test computer.
If this is not the case, you can download the software from your download portal at <http://www.zeiss.com/info-ce>.
 - The white and gray reference standard certificates are already on the test computer. If this is not the case, they must be copied to the test computer.
 - If not already done so, put the following equipment ready:
 - Laboratory power supply unit (000000-2045-548)
 - Ethernet cable (000000-2036-573)
 - Reference holder “Sapphire Flange” (000000-1462-668)
incl. 3x Fixing screw (000000-0452-139)
 - Reference holder “Sample pan - 5.5 mm thick base”
(in TURNSTEP) (000000-2130-893)
 - Reference holder “Sample pan - thin base”
(in TURNSTEP) (000000-2285-627)
 - Centering aid for reference standards (000000-2051-306)
 - White reference standard with certificate (000000-2393-701)
 - Gray reference standard with certificate (000000-2394-676)
 - Black reference standard (cavity) (000000-1270-164)

Procedure **1 Connect the device to the power supply**

For acceptance testing with “TestCenter”, always connect the device to a power supply unit.

2 Connect the device to the test computer

Connect the device to the measuring computer via Ethernet cable.

Make sure that you have the same IP address range. You may need to change the IP address range on the test computer.

3 Apply the reference holder to the device

Apply the required reference holder to the device.

4 Position the reference standard on the reference holder

Place the required reference standard on the reference holder.
Ensure that the reference standard is correctly oriented.

Note



IMPORTANT NOTE

To ensure a correct position during calibration, the sapphire flange must be fixed with the three enclosed screws (000000-0452-139) when placing it.

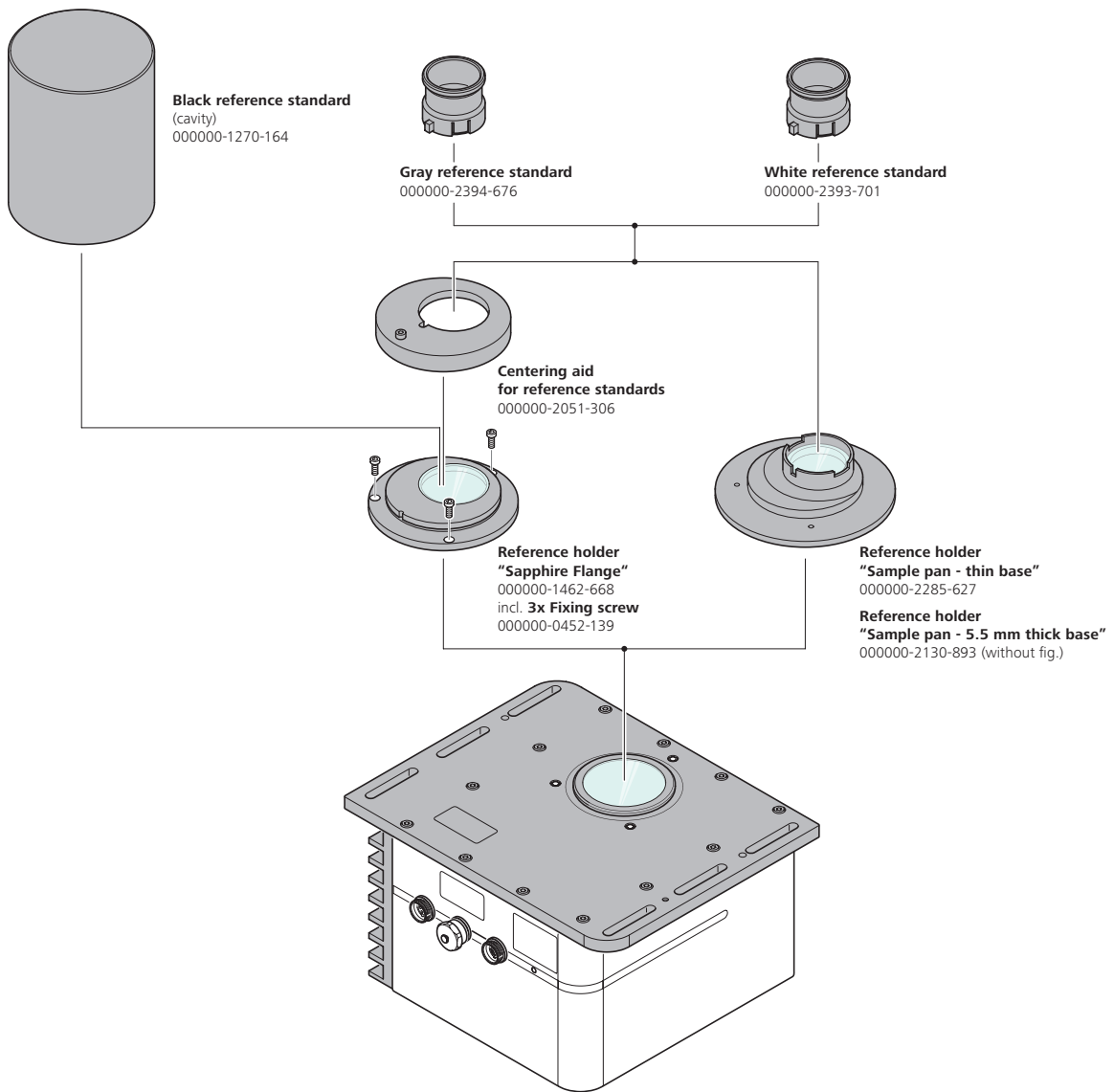


Fig. 38 System overview – Flanges and standards

5 Start TestCenter

Start the "TestCenter".

A scan is performed for potential/available/connected devices.

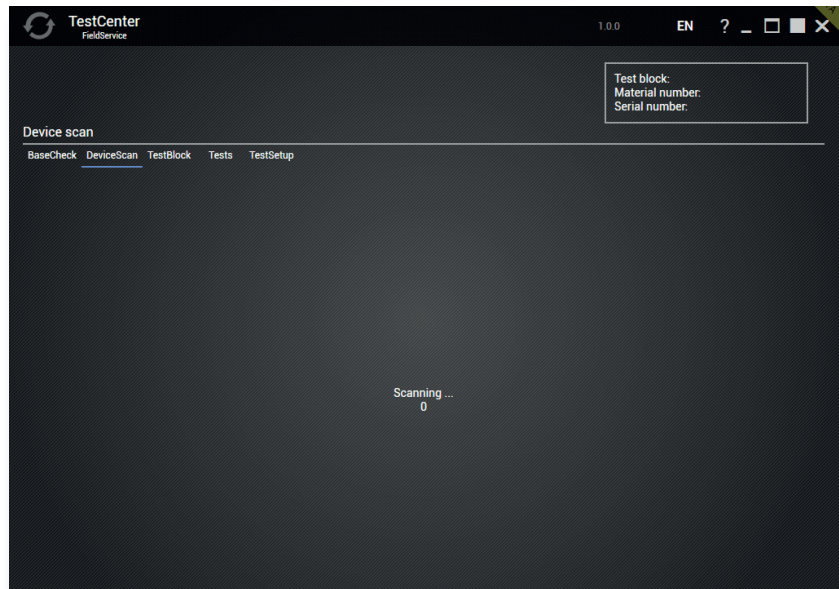


Fig. 39 Performing device scan

Once the scanning process is completed, any devices which have been found will be displayed.

Confirm your device selection by clicking **OK**.

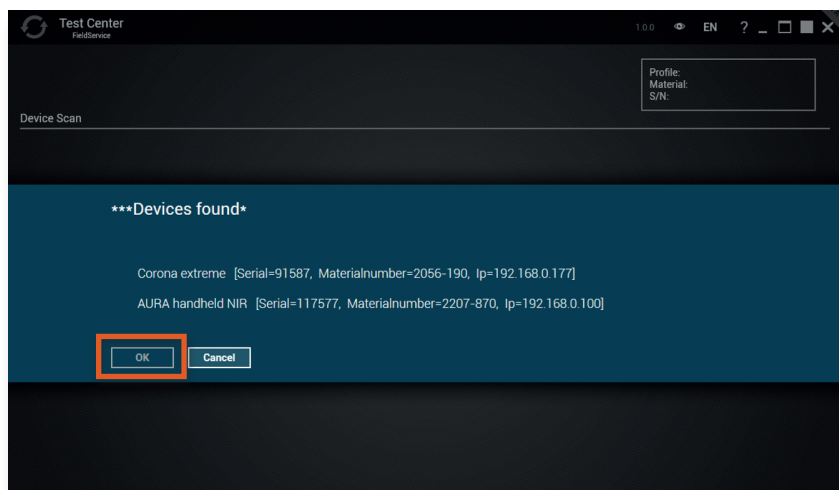



Fig. 40 Confirming device selection

The following screen displays additional information about the selected device.

 = Skip to next program section

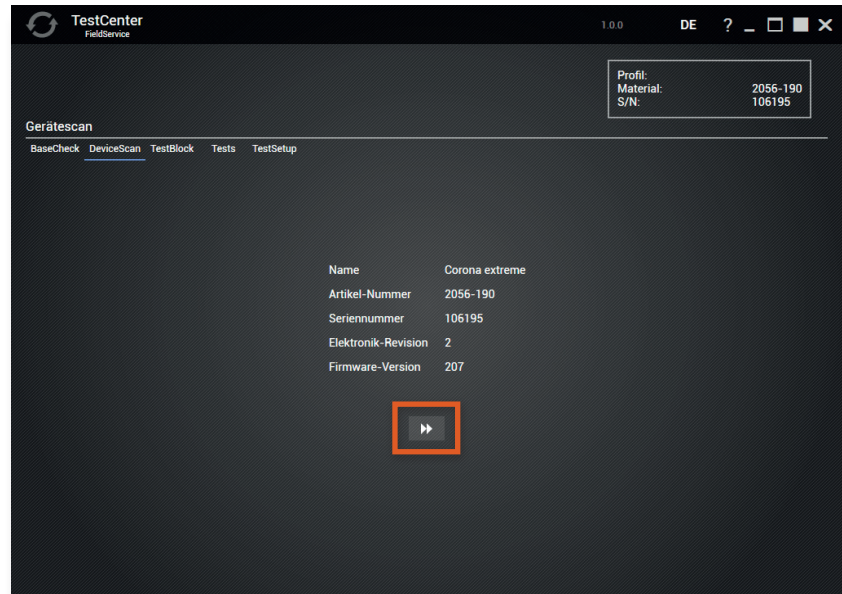


Fig. 41 Device information displayed

Click  to proceed to the next step.

 = Restart workflow

Connection status:
 yellow: "connected to device"
 gray: "not connected"

6 Select test block/device profile

A scan is performed for potential/available/connected test blocks/device profiles.

Select a test block.

- Profile: **Sapphire Flange**
- ⇒ Reference holder: "1462-668"
- Profile: **Sample pan - 5.5 mm thick base (in TURNSTEP)**
- ⇒ Reference holder: "2130-893"
- Profile: **Sample pan - thin base (in TURNSTEP)**
- ⇒ Reference holder: "2285-627"

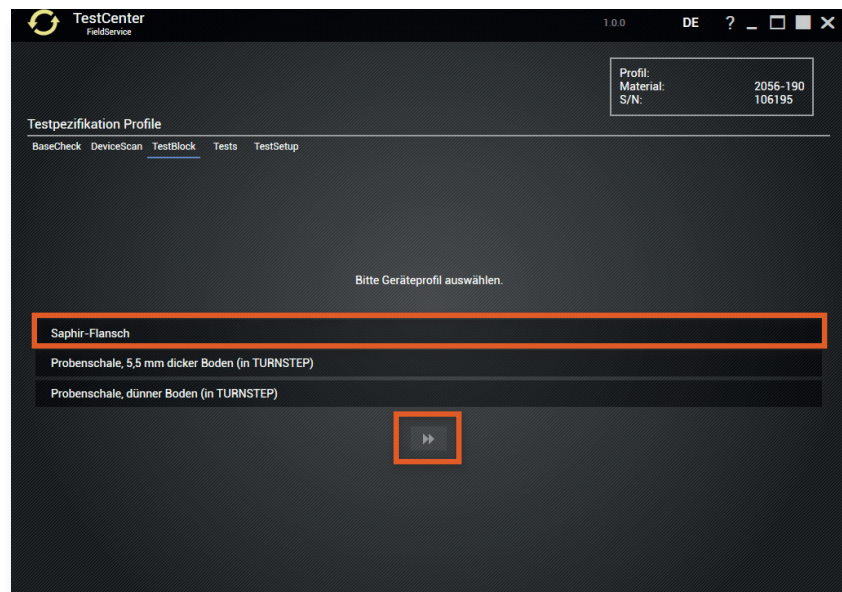



Fig. 42 Selecting device profile

Click  to proceed to the next step.

7 Select certificates

Enter your name in the "User" input field.

Use the  buttons to select your reference standard certificates.

"Maximum certificate"
= White reference standard
= SRS-99

"Gray reference standard"
= Gray reference standard
= SRS-60

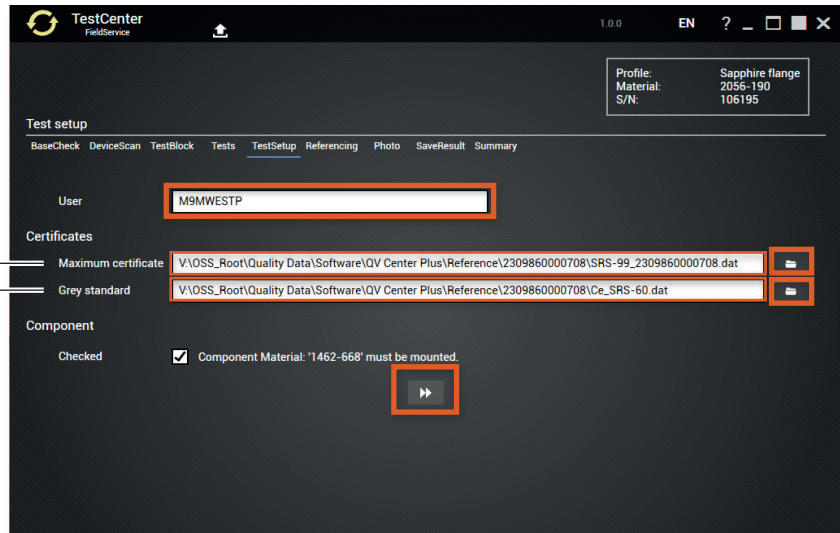


Fig. 43 Selecting certificates

Note: Make sure that the correct profile attachment is placed on the sensor.

Click  to proceed to the next step.

8 Referencing – Calibration of white reference standard

Place the white reference standard on the centering aid. Ensure correct alignment (interlocking of groove and pin).

Click **OK** to start the calibration.

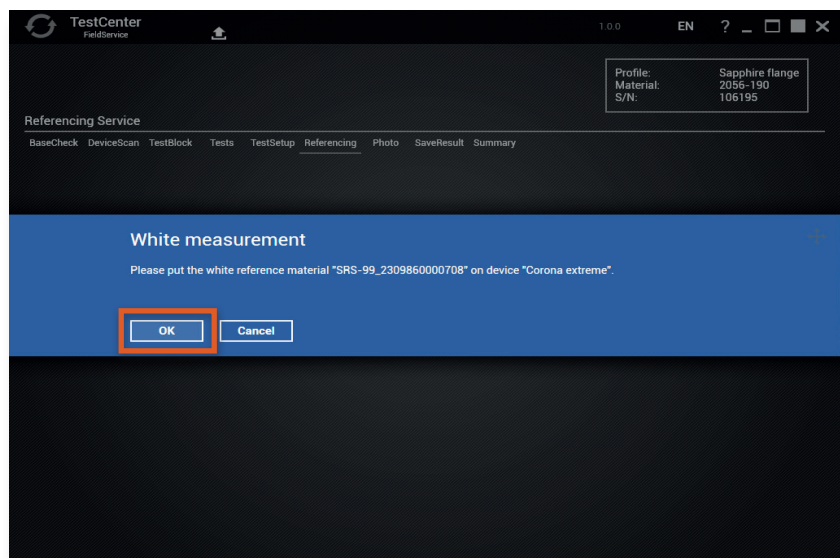


Fig. 44 Calibrating white reference standard

Remove the white reference standard when the measurement is complete.

9 Referencing – Calibration of cavity (black reference standard)

Place the black cavity on the sensor.

Click **OK** to start the calibration.

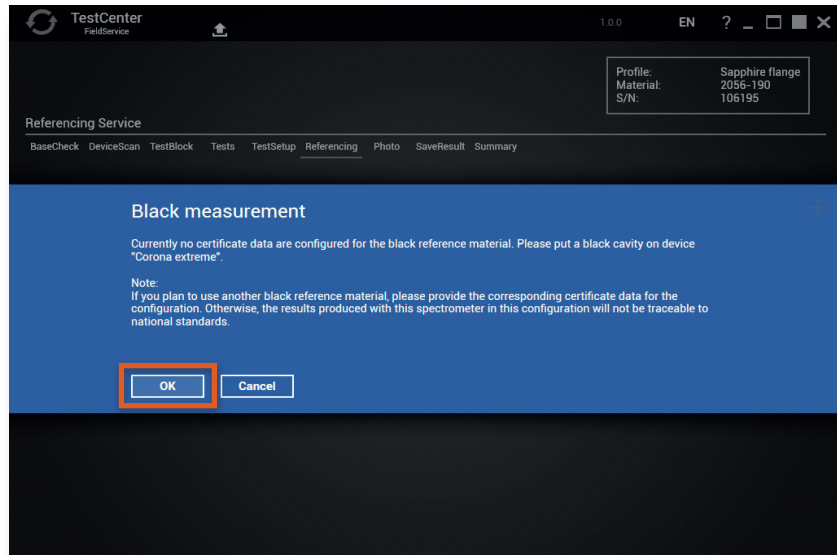


Fig. 45 Calibrating cavity (black reference standard)

10 Photometric verification – Cavity measurement (black reference standard)

Place the black reference standard on the centering aid.

Click **OK** to start the measurement.

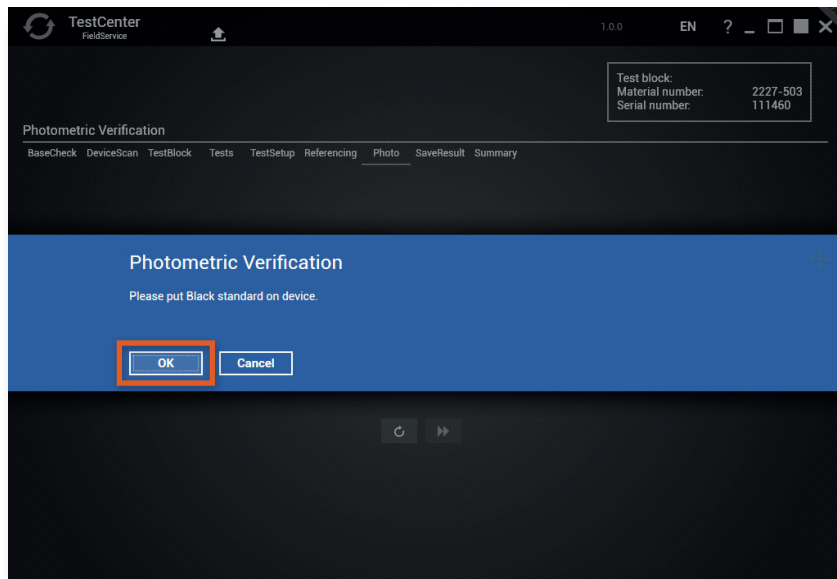



Fig. 46 Photometric verification

Click  to repeat the measurement.

Click  to proceed to the next step.

11 Photometric verification – Gray reference standard measurement

Place the gray reference standard on the centering aid.
Ensure correct alignment (interlocking of groove and pin).

Click **OK** to start the measurement.

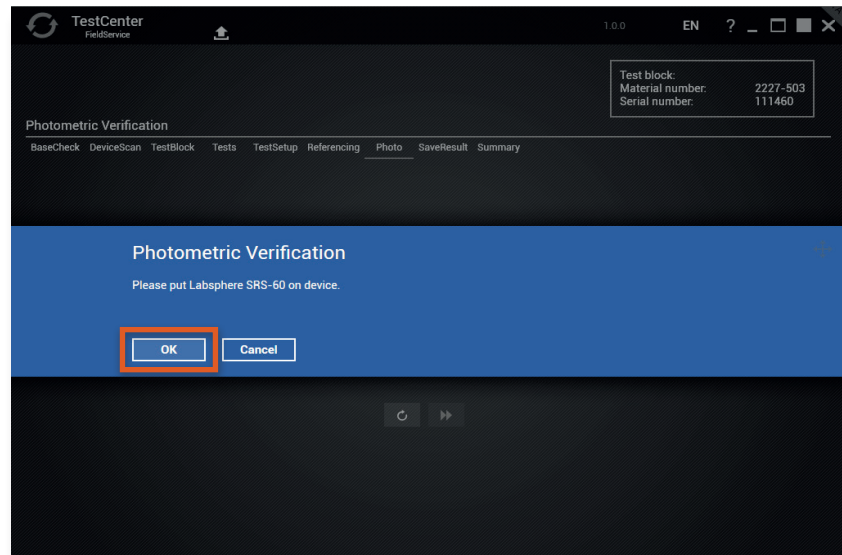


Fig. 47 Calibrating gray reference standard

Remove the gray reference standard when the measurement is complete.

12 Photometric verification – White reference standard measurement

Place the white reference standard on the centering aid. Ensure correct alignment (interlocking of groove and pin).

Click **OK** to start the measurement.

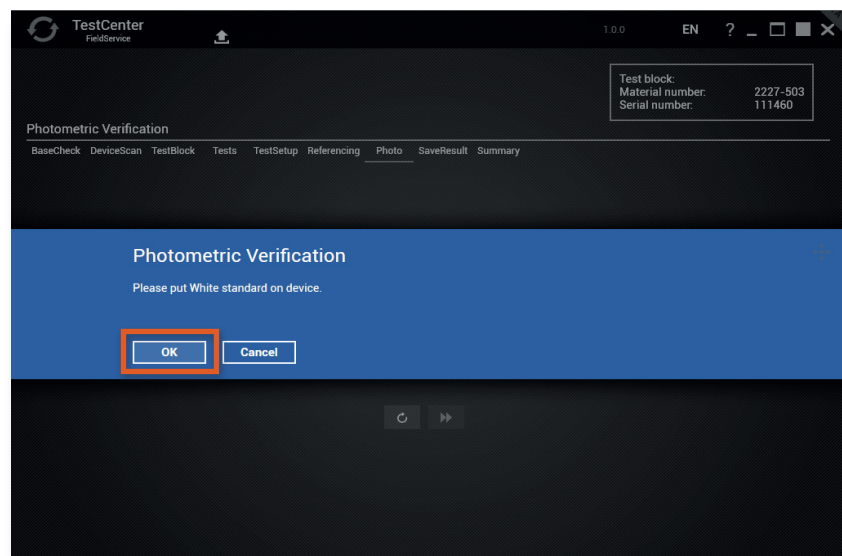




Fig. 48 Calibrating white reference standard

13 Evaluation of photometric verification

In the following screen you will receive an evaluation of the measurements.

 = Restart the workflow

 = Measurement successful

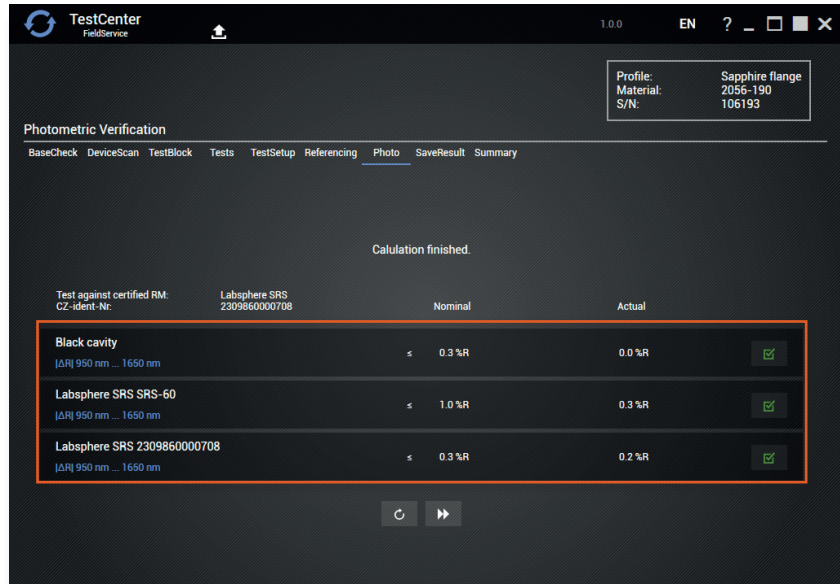


Fig. 49 Evaluating photometric verification

If measurements are unsuccessful, this is indicated by the following pictogram:



 = Measurement unsuccessful

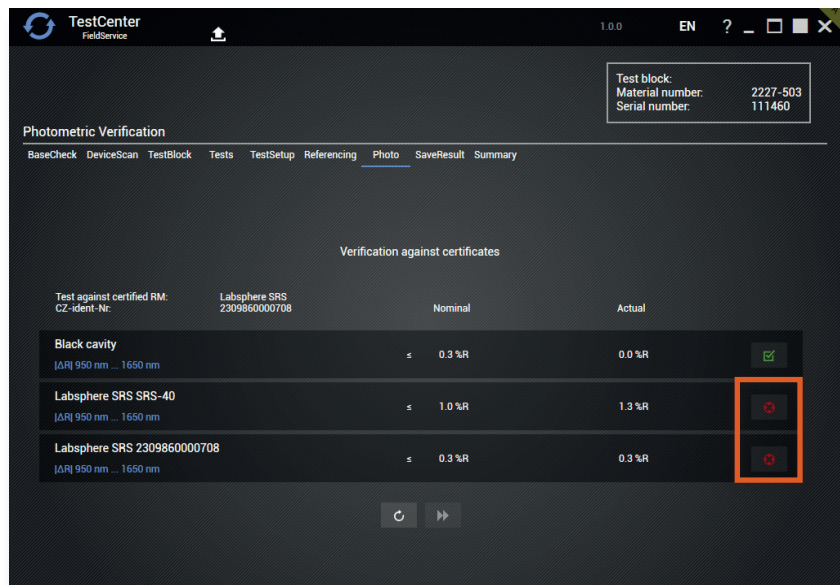



Fig. 50 Photometric verification unsuccessful

Click  to repeat the measurement.

Click  to proceed to the next step.

14 Changing the device profile

The counter must be reset each time the halogen lamp is replaced.

When a lamp hour reset is performed, all profiles stored before the lamp was replaced are deactivated. Therefore it is necessary to calibrate all profiles on the sensor as described in step 6.

Click **Yes** to start Reset.

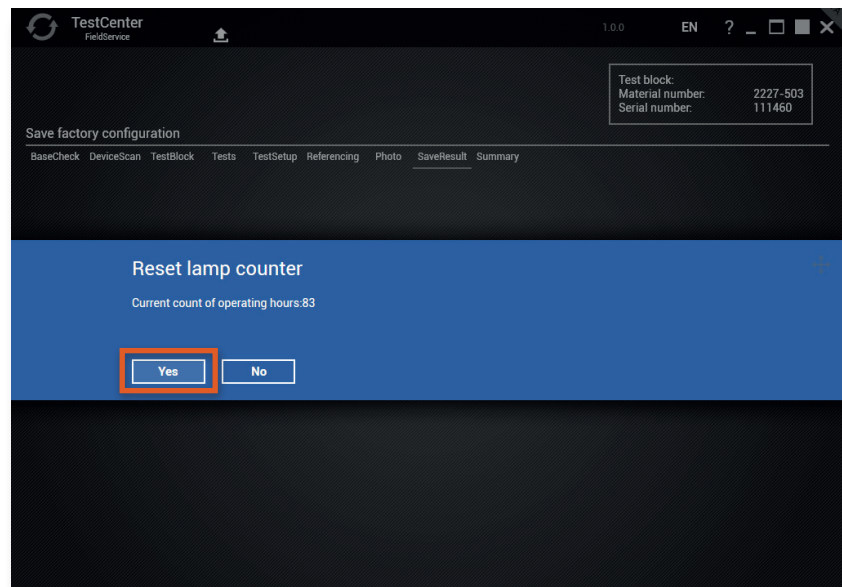


Fig. 51 Resetting counter

Several steps now need to be taken to store the current reference as the new default setting on the device.

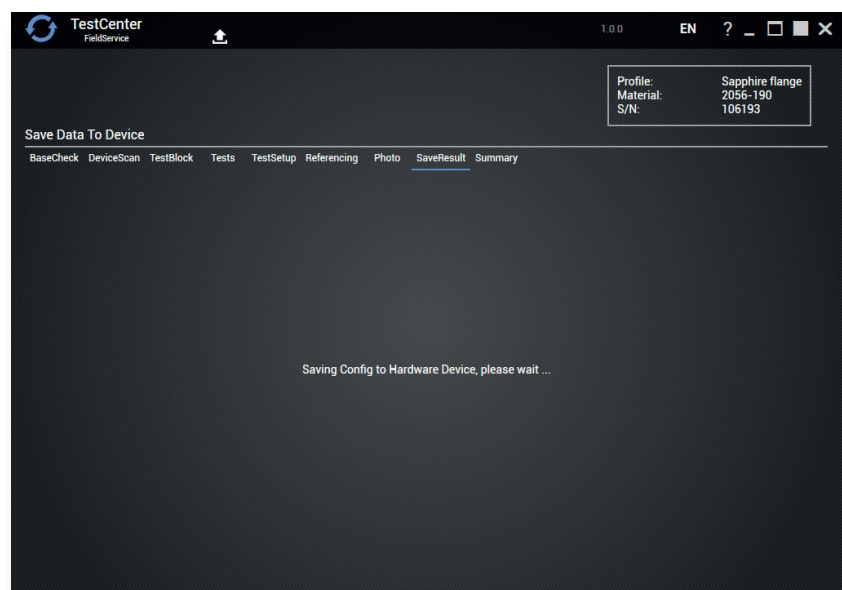


Fig. 52 Saving new configurations

The new configuration is read by the device (as a check) and a backup is created.

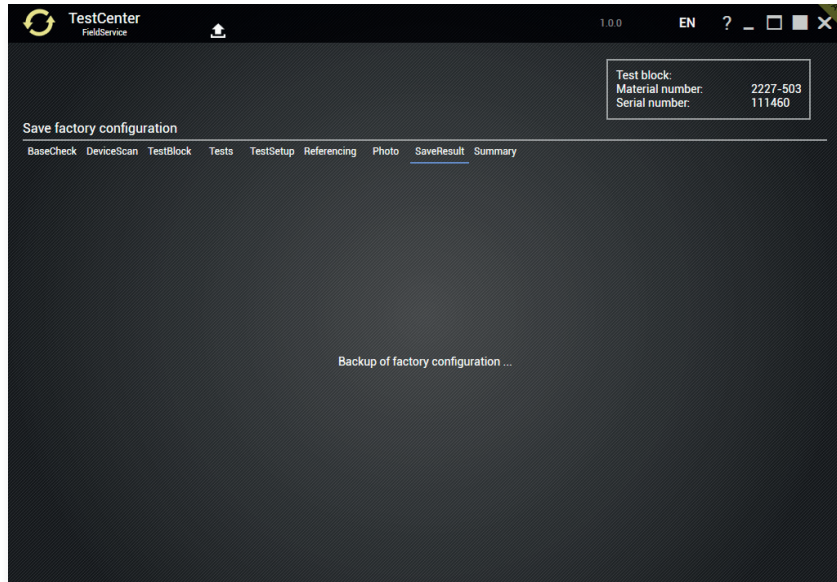


Fig. 53 Backup of factory configuration

15 Open and transmit protocol

Click **Open Protocol** to open the acceptance protocol.

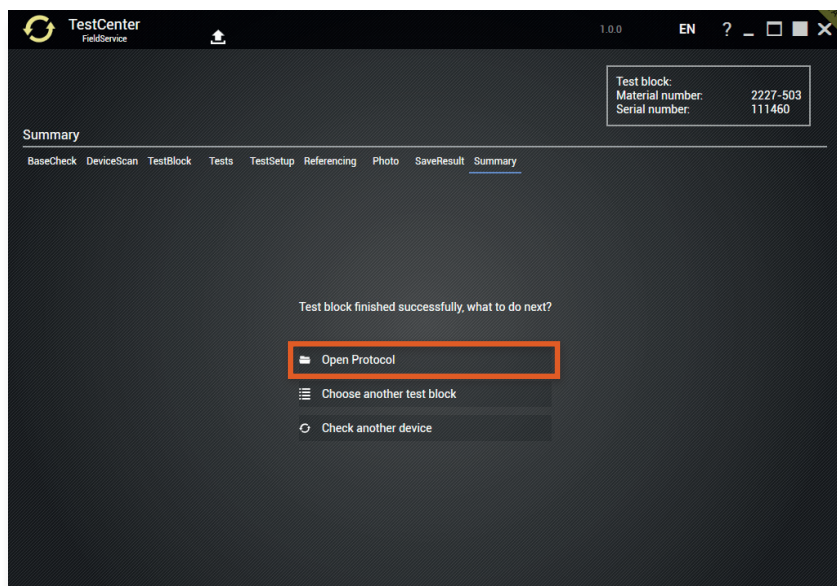


Fig. 54 Opening the acceptance protocol

This protocol can be printed out or sent in digital form to the customer.

Send the protocol to the Service department of Carl Zeiss Spectroscopy GmbH.

⇒ service.spectroscopy@zeiss.com

16 Back to Profile selection

Return to the profile selection to perform further profile configurations.

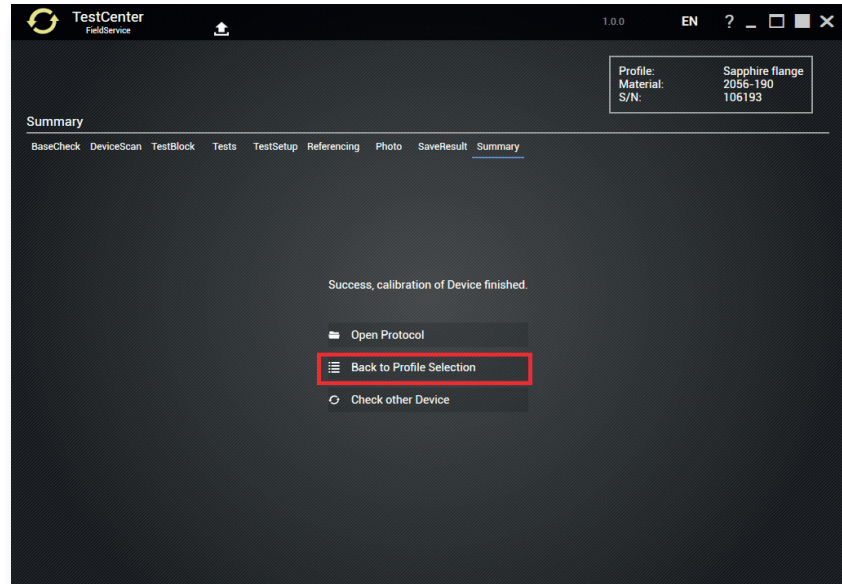


Fig. 55 Back to profile selection

17 Select a further test block/device profile

A scan is performed for potential/available test blocks/device profiles.

Select the next test block/device profile.

- Profile: **Sapphire Flange**
- ⇒ Reference holder: "1462-668"

- Profile: **Sample pan - 5.5 mm thick base (in TURNSTEP)**
- ⇒ Reference holder: "2130-893"

- Profile: **Sample pan - thin base (in TURNSTEP)**
- ⇒ Reference holder: "2285-627"

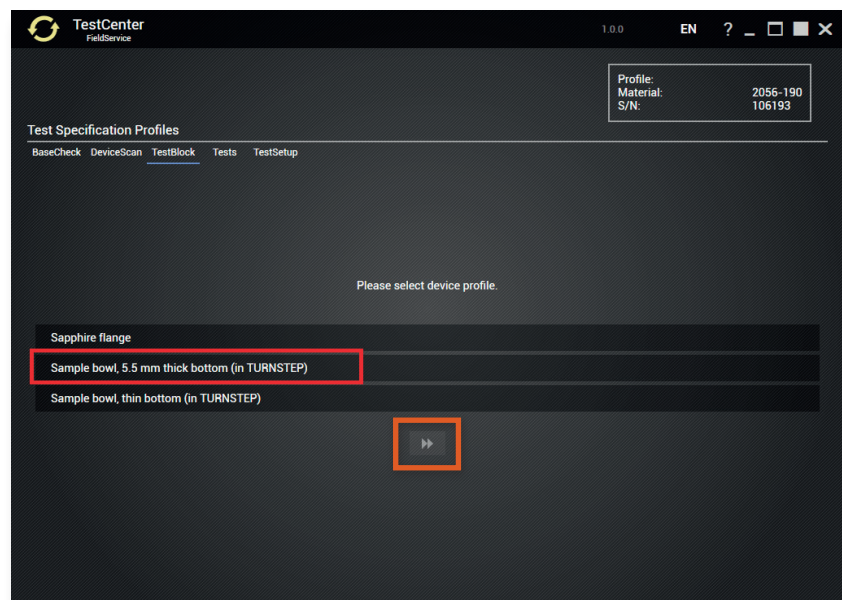


Fig. 56 Selecting a further device profile

Click  to proceed to the next step.




Note

Repeat steps 6 to 17 until all available test blocks/device profiles have undergone profile configuration.

18 Export calibration workflow data

The calibration workflow data / test data of the current device can be exported at any time for error analysis or to save the test data for backup and analysis purposes.

Click on  to start the export.



= Start export

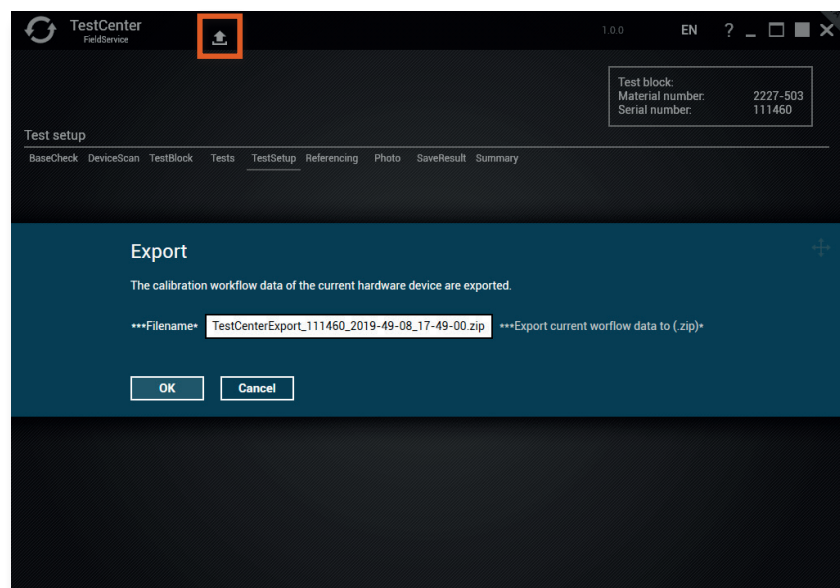


Fig. 57 Exporting calibration workflow data

19 Transmission of *.zip files

Send the TestCenterExport_*.zip files to the Service department of Carl Zeiss Spectroscopy GmbH. ⇒ service.spectroscopy@zeiss.com

Final steps 20 Exiting the "TestCenter" software

When all steps are complete, close the TestCenter program.

6 Create *.ini file containing device information

Procedure 1 Open the OSIS software

Start **OSISManagementConsole.exe** which can be found in:

up to InProcess version 2.9:

⇒ C:\Program Files (x86)\ZEISS\InProcess

from InProcess version 2.10:

⇒ C:\Program Files (x86)\ZEISS\InProcess\OSIS\ManagementConsole\

2 Select device

Select the **Corona extreme** measuring system.

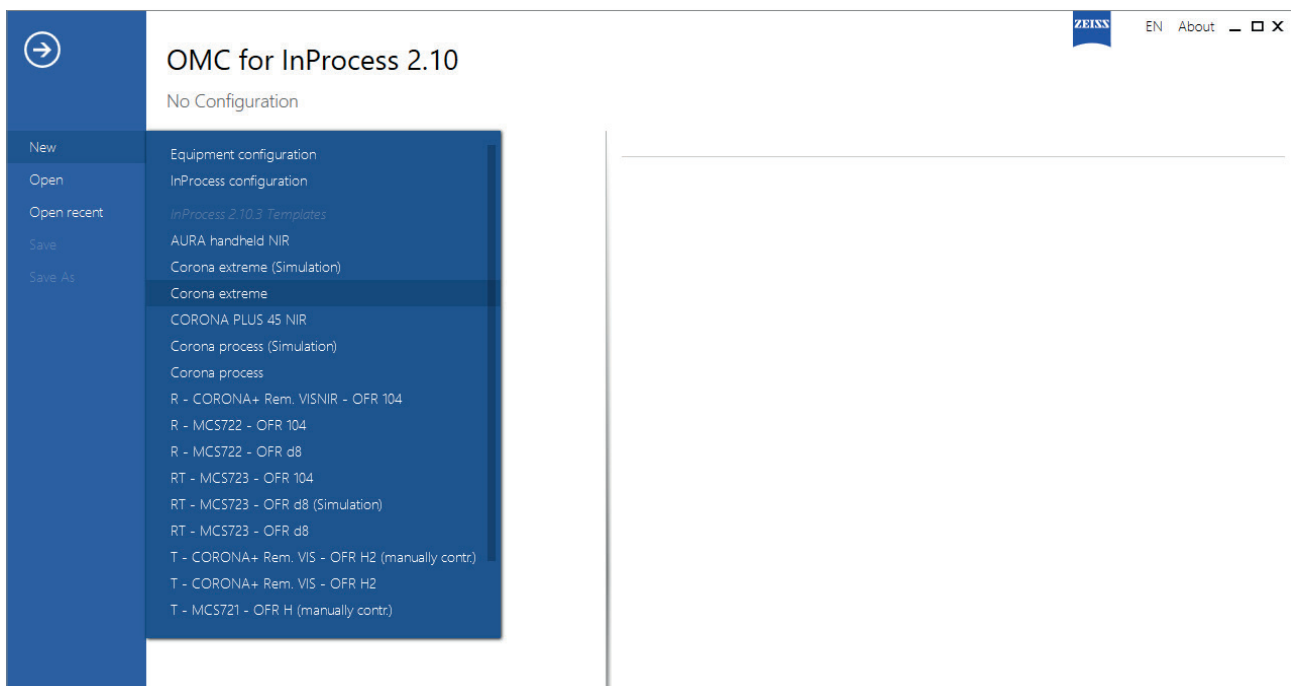


Fig. 58 Selecting device

3 Enter the IP address of the measuring system or perform a scan

Enter the IP address of your device under **Hardware settings** > **IP address** or click the **Scan** button to perform an address scan.

Make sure that you have the same IP address range. You may need to change the IP address range on the test computer.

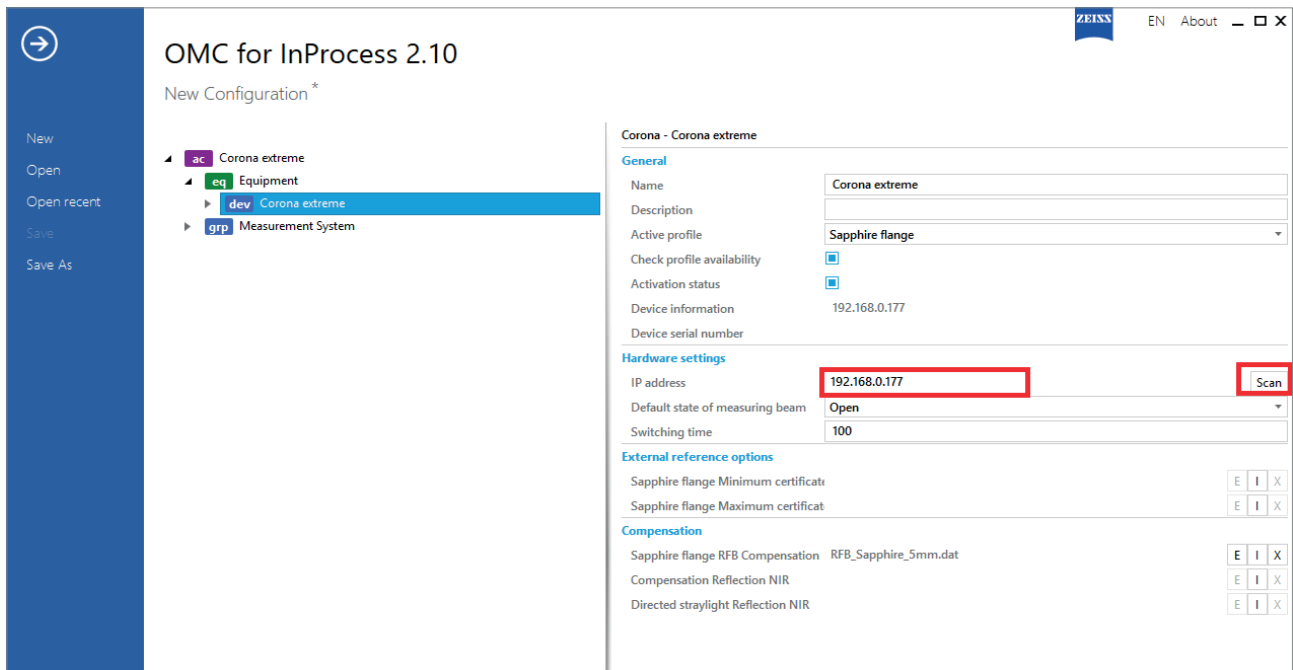


Fig. 59 Entering or scanning the IP address

4 Open the "Get device information" context menu

Right click on **dev** Corona extreme and then select **Get device information...**

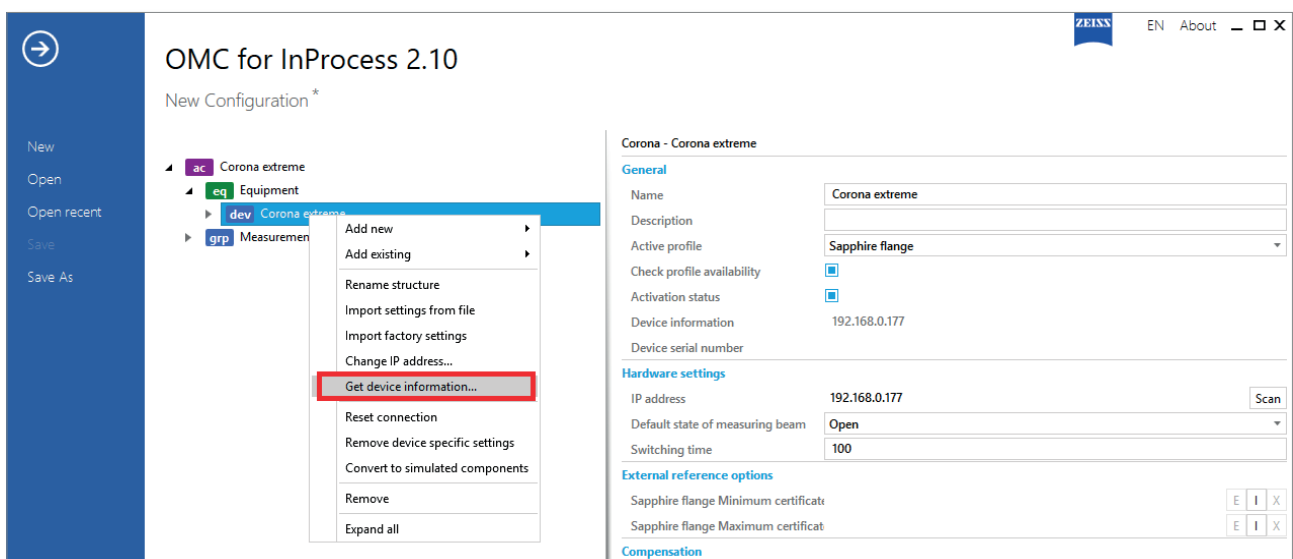


Fig. 60 Opening the "Get device information" context menu

5 Select device (measuring system)

If necessary, select **Corona extreme** under "Please select one entry ...".

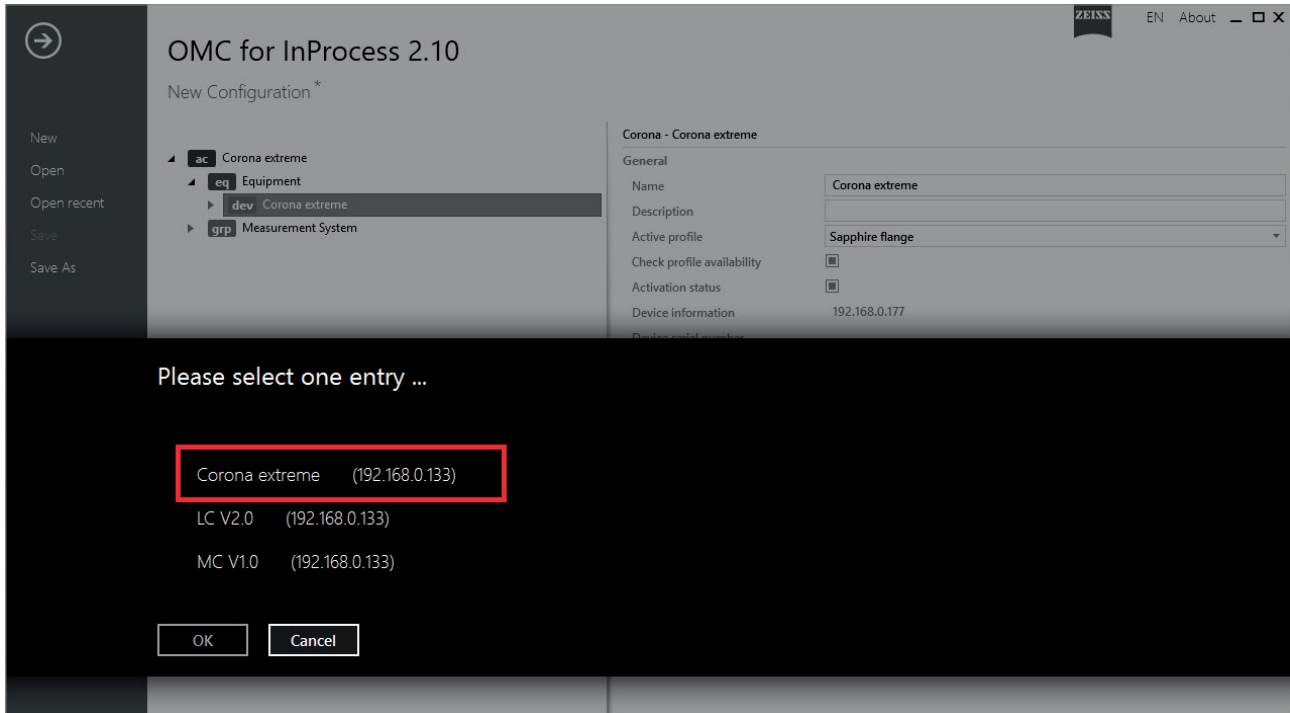


Fig. 61 Selecting device (measuring system)

6 Create *.ini file

Click on **Export details** under "Device info".

An *.ini file is created. Save this file.

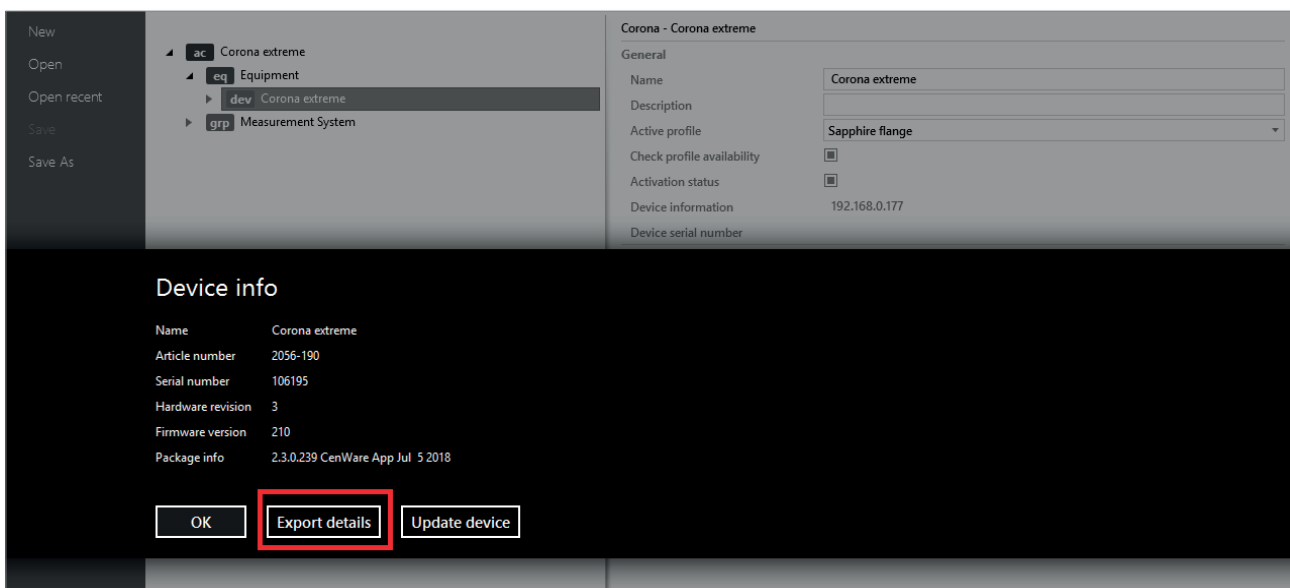


Fig. 62 Creating *.ini file

7 Transmission of *.ini files

Send the *.ini file and the first *.ini file created in preparation for the lamp replacement (see Chapter "2 Getting device information", Step "9 Create *.ini file" on page 10) to the Service Department of Carl Zeiss Spectroscopy GmbH.

⇒ service.spectroscopy@zeiss.com

Final steps 8 Re-install Corona extreme

Disconnect the **Corona extreme** measuring system from the test PC and the laboratory power supply.

Re-install the **Corona extreme** measuring system in its original position in accordance with the specifications contained in the "Corona extreme" operating manual.

7 Accessories and spare parts

Accessories	Order number
Ethernet cable for Corona (3 m)	000000-2036-573
Laboratory power supply unit	000000-2045-548

Maintenance packages	Order number
Maintenance Package 2	000000-2397-832
Maintenance Package 3	000000-2402-119

Service Package	Order number
Service Package	000000-2425-664

Spare parts for Service Package	Order number
White reference standard (certified)	000000-2393-701
Gray reference standard (certified)	000000-2394-676
Black reference standard (cavity)	000000-1270-164
Centering aid for standards	000000-2051-306
Reference holder Sapphire flange	000000-1462-668
Reference holder TURNSTEP thin	000000-2285-627
Reference holder TURNSTEP thick, 5.5 mm	000000-2130-893
Reference holder GEA flange	000000-2183-234
Centering aid for seal replacement	000000-2395-787