

CEREC MC XL Premium Package / MC XL / MC X / MC and inLab MC XL Cleaning and Maintenance

THE DENTAL SOLUTIONS COMPANY™



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Introduction

Dear Customer,

Thank you for your purchase of a milling and grinding unit from Dentsply Sirona. The purpose of this document is to assist you with conducting routine cleaning and maintenance on your unit. This will result in optimizing the unit's performance and extending its lifetime.

Additionally, to keep up to date on the latest CEREC news and information, we welcome you to visit https://my.cerec.com.

Your CEREC Team

Maintenance Schedule



Before every wet machining process

• Ensure that the water and Dentatec solution completely covers the filter(s) in the water tank



Weekly

• Change water in water tank and add 75ml Dentatec



Monthly

- Clean water filter monthly or as needed depending on usage (change filter every 3-4 cleanings)
- Check and clean water jets to ensure that water is striking the tools during wet machining
- Clean manual block clamp inside of the block axle
- Clean motor clamping cones for instruments without chuck



Yearly

• Annual maintenance carried out by a Service Technician



Dry milling zirconia only:

Every 10 dry milled zirconia restorations

• Vacuum chamber and run wet cleaning program



Every 120 dry milled zirconia restorations

• Change filter bag (change HEPA filter every 3-4 filter bags)

Water System

Change the water at least once a week or when prompted by the system after 240 minutes wet machining time.

- Add 75ml Dentatec to the tank
- Fill the tank with water until the filter(s) is/are completely immersed (up to the bottom edge of the cover thread, approx. 3 liters)

Clean the filter(s) when changing the water or when the "water pressure too low" message appears. Remove the filter(s) from tank and hold under warm water while washing out material.

Change the filter(s) immediately if damaged; otherwise every 3 months or after 3-4 filter cleanings.

Clean the cooling water jets if they do not strike the machining instruments by carefully removing any foreign particles from the water nozzles with a cleaning wire or probe. This will help to extend the life of the instruments.

Changing the Filter Bag (CEREC Suction Device)

If there is a significant fall in suction power when dry milling zirconia, the filter bag (REF 65 78 095) could be full and will need replacing. Typically a filter bag should offer capacity for ca. 120 restoration units. This number can vary depending on the amount of zirconia material milled and extracted. To change the filter bag:

1. Loosen and remove the two knurled nuts on the maintenance cover.

- 2. Remove the cover.
- 3. Remove the full bag from the nozzle and replace with a new one.
- 4. Place the cover back on and screw tighten the two knurled nuts.

Note: ensure that the cap is sealed properly and the filter bag is not jammed.



1 Removing the cover



2 Replacing the filter bag

Changing the HEPA Filter (CEREC Suction Device)

If the suction power is still weak after replacing the filter bag, then also replace the HEPA filter (REF 63 85 277). The HEPA filter is located behind the filter bag. It is recommended to change the HEPA filter every 3-4 filter bags. This number can vary depending on the amount of zirconia material milled and extracted. To change the HEPA filter:

- 1. Loosen and remove the two knurled nuts on the maintenance cover.
- 2. Remove the cover.
- 3. Remove the filter bag from the nozzle.
- 4. Then remove the two Phillips screws on the perforated sheet on the inside of the suction device.
- 5. Take out the perforated sheet and remove the HEPA filter.



Removing the cover

- 6. Place a new HEPA filter in the designated area.
- 7. Insert the perforated sheet and tighten the two Phillips screws.
- 8. Put the filter bag back on again.
- 9. Place the cover back on and tighten the two knurled nuts.



2 Removing the filter bag



4 Removing the perforated sheet



3 Unscrewing the Phillips screws



5 Replacing the HEPA Filter

Using the Cleaning Hose and Wet Cleaning Process

The milling chambers of units used for dry milling zirconia should be regularly cleaned to avoid a build-up of excess zirconia dust. A cleaning hose with nozzle can be used for this. This hose is ordered separately as a spare part (REF 65 89 795). When dry milling zirconia, it is recommended to use the wet cleaning process or wet grind a restoration at least once a week or after every ten dry-milled restorations.

To use the cleaning hose and wet cleaning process:

- 1. Remove the milling unit hose from the top of the suction device.
- 2. Connect the cleaning hose to the top opening of the suction device.
- 3. Activate the suction device's manual function by changing the switch setting on top of the device from "Auto" to "On".
- 4. Vacuum excess dust from the chamber as needed.
- 5. Remove excess dust from the block shaft and the underside of the baffle plate located on the block axis. (See both arrows in picture 4)
- 6. After the chamber has been vacuumed the wet cleaning process in the software should be used 2-3 times as needed to remove excess dust.
 - In the software's system menu, navigate to "*Configuration*", then click on the "*Devices*" button.
 - Select the applicable unit.
 - Click on the option "Service" then "Start a cleaning process".

Notes: A restoration can be wet grinded to achieve a similar cleaning effect.

A nylon brush can also be used to remove zirconia dust from around the base of the block shaft in between wet cleaning processes.





1 Cleaning hose





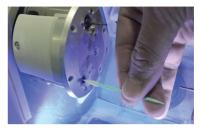
3 Vacuuming the chamber

4 Block shaft base and baffle plate

Motor Clamping Cones for Instruments

Clean the clamping cones of the tools once a month as follows:

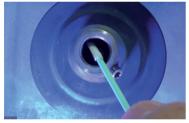
- 1. Using the software, initiate a tool change.
- 2. Unscrew and remove the tool.
- 3. Clean the inside of the clamping cone with a pointed cotton swab included with the Cleaning Set and undiluted ethanol (commercially available cleaning alcohol). When doing this, rotate the cotton swab counterclockwise in order to push the dirt out.
- 4. Do not grease the thread. Insert the tool and screw it tight with the torque wrench.



1 Cleaning the clamping cones

Manual Block Clamp

Clean the inside of the block axle once a month with a round (green) cotton swab included with the Cleaning Set and undiluted ethanol (commercially available cleaning alcohol).



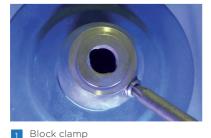
1 MC XL block clamp



2 MC/MC X block clamp

Ball Pressure Screw in Manual Block Clamp

The high clamping forces cause wear of the ball pressure screw. Replace the ball pressure screw (REF 62 58 987) after every 500 clamping procedures.







Set Screw (MC and MC X only)

Replace the set screw (REF 62 35 126) after every 1000 clamping procedures or if the pin has broken off. Note: do not confuse the set screw with the ball pressure screw! (See picture 1)





1 Replacing the set screw

- 1. Remove block from holder if inserted.
- 2. In the software's system menu, navigate to "*Configuration*", then click on the "*Devices*" button.
- 3. Select the applicable unit.
- 4. Click on the button "Change set screw".
 - The block axis will move into 12 o'clock position.
 - The software will inform to replace the set screw and close the door.
- 5. Remove the worn set screw using the block clamp tool.
- 6. Insert a new set screw and secure in place with the block clamp tool.
- 7. Click on the "Ok" button in the software.

Chamber Door

The door should only be cleaned with a microfiber cloth. Paper towels should not be used as they can reduce the transparency of the door over time.

Instruments

Change the grinding burs and milling instruments when prompted by the software.

- Diamond burs (wet grinding): typically after ca. 25 restorations at the latest. However the type of material, size of blocks used and machining option can impact lifetimes.
- Shaper 25 (dry milling): after 50 restorations
- Shaper 25 RZ (wet milling): after 30 restorations
- Finisher 10 (dry and wet milling: after 50 restorations

Calibration

The unit is calibrated at the factory. No additional calibration is required during initial startup.

Subsequent calibrations should be carried out once a year as part of annual maintenance or if production results are faulty.

Annual Maintenance

It is recommended to have maintenance performed on your unit annually by a trained technician. Please contact your local dealer for details.

Approved Accessories

In order to ensure reliable and high-quality results as well as product safety and durability, our portfolio of CEREC MC / MC X / MC XL / MC XL Premium Package and inLab MC XL milling and grinding units may be only operated with original Dentsply Sirona accessories or third-party accessories expressly approved by Dentsply Sirona. In particular, only the power cable supplied with the unit or the corresponding original spare part may be used with the unit. The user assumes the risk of using non-approved accessories.

Approved accessories also include grinding burs, milling instruments, blocks and coolants. The current range of approved blocks and corresponding burs/ cutters can be found in the latest software as well as in the "Bur Tables" available in the Downloads area at:

https://my.cerec.com

These lists will be updated from time to time.

Important Order Numbers

Left Side	REF	REF	Right Side	
Step Bur 12 S (Qty. 6)	62 40 167	62 40 159	62 40 159	Cylinder Pointed Bur 12 S (Qty. 6)
Step Bur 12 (Qty. 6)	62 60 025			
Cylinder Bur 12EF (Qty. 6)*	65 35 186	65 35 178	Cylinder Pointed Bur 12 EF (Qty. 6)*	
*Extra Fine Burs require a 4-motor unit				
Step Bur 20 (Qty. 6)	62 59 597	62 59 589	Cylinder Pointed Bur 20 (Qty. 6)	
Shaper 25 (Qty. 3) - dry milling**	62 99 395	62 99 387	Finisher 10 (Qty.3) - dry & wet milling**	
Shaper 25 RZ (Qty. 3) - wet milling**	64 33 440		62 99 387	

** Milling is only approved for units from the following serial numbers: inLab MC XL 129001, CEREC MC XL 129001, CEREC MC XL Premium Package 302001, CEREC MC X 231001, CEREC MC 231001 or upgrade of the left motor on 2-motor machines or of the left motor in the motor set 1 on 4-motor machines.

Dry milling of zirconia requires dry milling configuration and CEREC Suction Unit.

Description	REF		
Dentatec 1000ml	58 09 640		
Filter MC/MC X (Qty. 1) - "Top-loading"	63 87 067		
Filter MC/MC X (Qty. 6) - "Top-loading"	64 29 950		
Filter (Qty. 1) – "Side-loading"	61 29 519		
Filter (Qty. 6) - "Side-loading"	61 29 402		

Description	REF	
Filter Bag, CEREC (Qty. 2)	65 78 095	
HEPA Filter (Qty. 1)	63 85 277	
Second Hose for Cleaning	65 89 795	
Torque Wrench, Spare	64 79 849	
Torque Wrench HT, Spare (only for Shaper 25RZ)	64 79 856	T
Ball Pressure Screw Set (Qty. 5) (for manual block clamp)	62 58 987	
Set Screw (Qty. 1) (for MC and MC X units only)	62 35 126	
Cleaning Set (for manual block clamp)	63 05 614	
Milling chamber sieve, Spare	62 99 403	

Maintenance Documentation

No.	Task Description	Task Date	Person Responsible

Maintenance Documentation

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Notes

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Procedural Solutions

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