



Notice Inviting e-Tender

West Bengal Medical Services Corporation Limited

Swasthya Sathi

GN-29, Salt Lake, Sector-V

Kolkata-700091

Phone No (033) 40340307/319

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Procurement of 4 (four) different dental equipment for the North Bengal Dental College & Hospital

(Submission of Bid through *online*)

Bid Reference No.: WBMSCL/NIT-479/2026

Dated-09.06.2026

The following amendment has been made in the tender document,

Amendment – 1

Schedule-II

Dental Milling Machine CAD- CAM

Online UPS for CAD CAM System Milling Unit

1. Dimensions (in mm) - should be within a range of 450-760 x 450-1040,580-1950
2. Approximate weight - should be within a range of 50 kg to 130kg
3. Vacuum pump - should have high displacement pump to suck the dust should be standardized.
4. Axes - should have minimum 5, with simultaneous motion.
5. Axis setting angle - A - 360 degree
6. Axis setting angle - B - should be within a range of +30 degree to +35 degree and - 30 degree to - 40 degree.
7. Automatic tool change - should be fully automatic with minimum 5 tool changer, having air pressure of >0.5 npa. Should have broken tool detection as well as tool length measurement.
8. Number of Tools per process and tool library - should be in the range of 6 -17 tools at least.
9. Tool diameter- should have an approximate of 2+1+0.6 (ø4)
10. Dry and wet milling - both should be available

11. Average milling time - should be minimum, can be in the range of Zirconia-815 minutes, Wax - 3-7 minutes, PMMA-<12 minutes.
12. Nesting - should have a feature of nesting
13. Positioning accuracy - should be approximately 0.2mm
14. Milling accuracy - should be in the accurate, may be in the range of 3-6 microns.
15. Spindle speed - should be good with high frequency, having minimum motor capacity of 7 Ncm motor, may be in the range of 3000 rpm to >70,000 rpm
16. Spindle power - (motor power) should be the range of 350W to 800W.
17. Maximum feed rate - should be approximately 3000mm/min.
18. Materials that can be processed - Zirconium oxide, PMMA, Wax, Composite, Hybrid ceramics, Lithium di-silicate, Co-Cr sintered, Ti performs, PEEK, Glass fibre resin, Transparent acrylic PMMA, Splint PMMA and other hard / soft dental materials
19. Product type and quantity - should be able to handle all dental work, like – Crown approximately 500, Bridge approximately 14-78 units, Inlays, Onlays, Veneers, Telescopic crowns, Bite raising appliances, axial temporary rests, Full and partial dentures, Digital models, Implant related works, Implant bridges with gingival sections, etc.
20. Blank holder - should be fully automatic and exchangeable.
21. Material open system - should be able to take standard blocks/discs by more than one manufacturer.
22. Block size - should be able to accommodate assorted sizes and shapes, round diameters with step ranging from 98110mm, height -10- 40mm, lengths of and above 500mm.
23. Block holder - should be available.
24. Electro -spindle - Should be of approximately 2.1kV, with rpm ranging up to 50,000.
25. Attached bar/tool - Should have a shank diameter of about 4mm and length of about 45 mm
26. Milling range - should be in the **range** of 167/206/104 along **X/Y/Z/A/B**
27. Engine speed - should be the range of 7-10 Ncm
28. Spindle cooling - should have compressed air of 0.25- 0.35 npa
29. Sound level - should be minimum
30. Collect chuck - should be available
31. Should have auto-calibration
32. E-fuse-should be available in range of 3-15 amp
33. Body make - should be of good quality, may be of Aluminum
34. Required air compressor pressure - should be of minimum 7 bar or 6 lt/min
35. Compressor - should be oil free compressor with dryer should be fitted with -
 - a. Built in thermo cutoff to save the motor the motor during excess heat
 - b. Auto head air release valve
 - c. Automatic cut off
 - d. Safety release valve
 - e. Drain valve
 - f. Pressuregauge
36. Input Voltage - should be AC-200-240 Volts with 50-60Hz
37. Warranty - 2 Years
38. Monitor - should be touch screen

Furnace:

1. Dimension (in mm) - should be within a range of 350x500x7000 to 500x700x900
2. Weight - should be within a range of 25 kg to 70 kg.
3. Voltage - should be within a range of 200-240v, 220/240

4. Frequency - should be within a range of 50-60 Hz
5. Normal capacity - should have wattage of about approximately 3500W, should be able to accommodate 40/60 to 120 single unit as well as single full arch bridge's
6. Sintering temperature - should be in the range of 16000C to 20000C minimum and should have the capacity to raise to maximum temperature to process zirconia blocks.
7. Program types - should be able to do all these following required process: Speed control, Conventional sintering, Pre-drying and speed sintering, auto-start, service program, individual customized programs, option of calibrating device temperatures, etc.
8. Should be able to sinter - Zirconia and pre sintered non precious metal.
9. Should be able to sinter at least 120 crowns together and have a provision of additional trays.
10. Should be able to pre-dry and speed sinter in one step.
11. Chamber - Should have minimum 2 chambers
12. Should have a high temperature micro processor and should have a controlled fully automatic high performance system.
13. Display - should have LED display
14. Display - should have LED display
15. Fuse - Should be of 15 amps.
16. Should have fast sintering, of approximately 20 minutes and less than equal to 75 minutes for single crowns and bridges, maximum sintering time of bridges extending up to 120 minutes.
17. Should have an option of removable furnace head, for exchange of thermocouple

Scanner and accessories:

1. Intra-oral and Extra-oral scanner
2. Should have a high performance table top, user friendly interface, should be able to export data into most common formats.
3. Scanner should have open interface so that it can scan STL files to be loaded in other CAD programs.
4. Open system- Should be able to read and store all formats.
5. DICOM viewer - should have compatible software to integrated CBCT and CT data
6. Scan accuracy - should be within a range of 2 microns to 5 microns
7. Scanning speed - should be able to scan a full arch within 16-60 seconds.
8. Data processing - should be automatic
9. Scan process - should be Automatic and Digital using minimum 2 synchronized axis upto 5 axis with light projection
10. Customization of acquisition - should be able to customize the acquisition strategies and parameters.
11. Should be able to scan - articulators and have auto articulation, impressions, triple trays, single side and double side trays, full arch scan, implant impressions and abutments, etc.
12. Should be able to scan texture.
13. Should have universal scan and free scanning sequences.
14. Should be able capture hand drawn margins should be accurately.
15. Should have colour output
16. Precision - should have Auto focus, should be able to do automatic positioning of models, should have blue light technologies, should be able to do HD scanning etc.
17. Should have multi-die scanning .
18. Number of units - should be able to acquire complete arch / aw / stumps/ minimum 10 Units.

19. Should have DNA speed matching and articulator scan
20. Should have fixator scan
21. Should have open scanning
22. Model holder - should have an integrated magnetic model holder
23. Die holder - should have multi die holders for minimum 10 crowns in single fast

Scanner.-

24. Camera - should be high resolution, HD, C-clam, minimum - 2.2 MP
25. Dimension - should be compact, within a range of 3000x350x300 to 4500x800x500.
26. Intermaxillary relation - should be able to - register all types of bite registrations, transfer accessories for transferring articulated models, virtual articulation normal to full arch with functionalities of adjustment of condylar guidance, Bennet angle, retrusion, protrusion etc to design a fully anatomical framework, according to dynamic occlusion, record dynamic occlusion.
27. PC and software-
 - a. Should incorporate most upto date technologies support multicore CPU and should have advantage of 64 bit operative system.
 - b. Designing software should have feature of precision recognition of margins, automatic bridge connector design, tooth libraries, individual tooth part and compilations.
 - c. Should have in-built shade guide
 - d. Should have large indication spectrum with fully automatic features for anatomically reduced crowns and bridges, inlays, reducing was ups, press over, telescopic, virtual articulator, possibility to upgrade implant abutment software, bar and precision attachment, abutment/screws retained long span bridge, etc.

Accessories to be supplied:

- i) Requires separate air conditioned floor area
- ii) Consumable milling materials ceramic / acrylic / wax ingots / zirconia etc required CAD Disc - 98/10 - 20pc, 98/12-20pc, 98/14-19pc, 98/16-10pc, 98/118-10pc, 98/20-10pc. Wax Disc - 98/10-20pc, 98/12-20pc, 98/14-19pc,98/16-10pc,98/1810pc, 98/20- 10pc.Colouring Disc all shades (A to D) -10pc each Dipping colouring liquid - all shade (A to D) - 5 bottles each
- iii) Computer with accessories
- iv) Milling burs/blades/tools all size 10 pc each Zirconia polishing and Finishing kit - 2 pc each



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Schedule-IV

Autoclave

- 1 Class B fully automatic front loading with triple vacuum cycle
- 2 Temperature selection 121°C - 134°C. vacuum 0.9 bar
- 3 Door lock system for safety
- 4 programs for sterilization of all types of instruments - Solid/Hollow
- 5 Bow and Dick test qualified
- 6 User friendly control panel
- 7 storage tanks for distilled & waste water
- 8 Reduced full cycle time
- 9 Chamber size 250 X 450 mm
- 10 Alarming system for both clean water lacking & waste water surplus