

	TEST REPORT	Report No.	CWM-MT-17-N23
		Date of Issue	November 23, 2017
	Manufacturing Tolerance Evaluation (Micro Measuring Method)		

Manufacturing Tolerance Evaluation
using Measuring Microscope

- 1. Specimen (Product):** INNO SLA-SH[®] Submerged Fixture (5pieces).
- 2. Classification:** Dental Implant Fixture C 20030.01(3).
- 3. Model Number:** ST4510S-16H3A870(# 1), ST4510S-16H3A871(# 2)
ST4510S-16H3A872(# 3), ST4510S-16H3A873,(# 4)
ST4510S-16H3A874(# 5)

4. Manufacturer: Cowellmedi Co., Ltd.

Address: 48, Hakgam-daero 221 beon-gil, Sasang-gu, Busan, 46986,
Korea

Tel: +82 51 314 2028

Fax: +82 51 314 2026

5. Place of the Evaluation: REID (Research & Education in Implant Dentistry)

Address: #1404, ACE Twin Tower 1 Cha, 285, Digital-ro, Guro-gu,
Seoul, 08381, Korea

Tel: +82 51 314 2028

Fax: +82 51 314 2026

6. Date of the Evaluation: November 20, 2017.

7. Purpose: To evaluate whether manufacturing tolerance of the Product is no more than $\pm 0.001\text{mm}$.

8. Criteria: Each dimensional difference of 3 inner hexagonal sides should be no more than $\pm 0.001\text{mm}$ from 2.500mm

9. Photos of the Specimens



Fig 1. # 1

Fig 2. # 2

Fig 3. # 3

Fig 4. # 4

Fig 5. # 5

10. Evaluation Equipment

1) Measuring Microscope - Nikon, Japan / Model Number:

MM-40 / Calibration completed day: November 20, 2017

2) Jig - Cowellmedi, Korea / Model Number: N/A

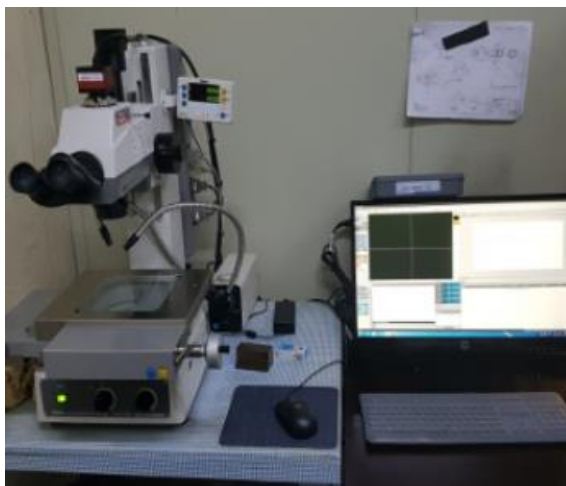


Fig 6. Measuring Microscope

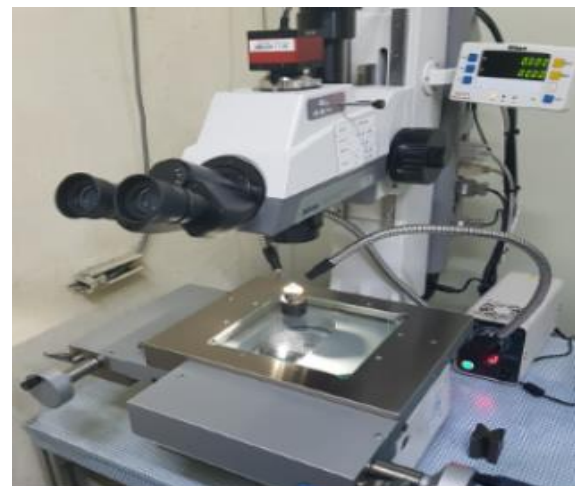


Fig 7. Measuring Microscope
+ Jig + Specimen

11. Method

- 1) The specimen was fixed in the Jig
- 2) Each dimensional difference of 3 inner hexagonal sides (Hex-1, Hex-2, Hex-3) of 5 specimens was measured using Measuring Microscope

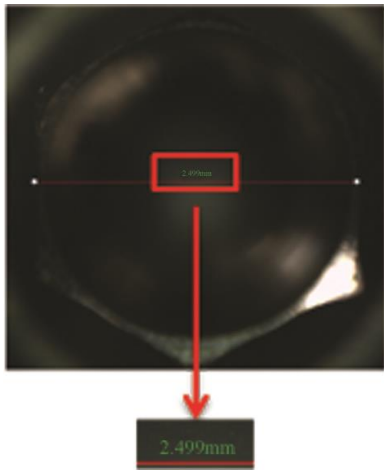


Fig 8. # 1, Hex-1

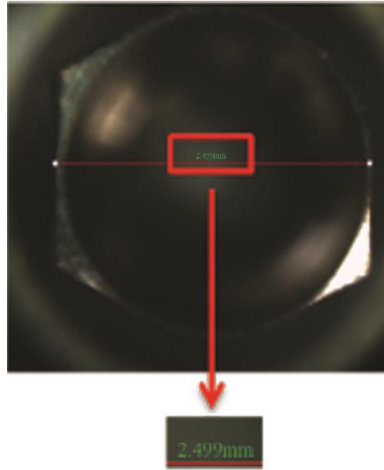


Fig 9. # 1, Hex-2

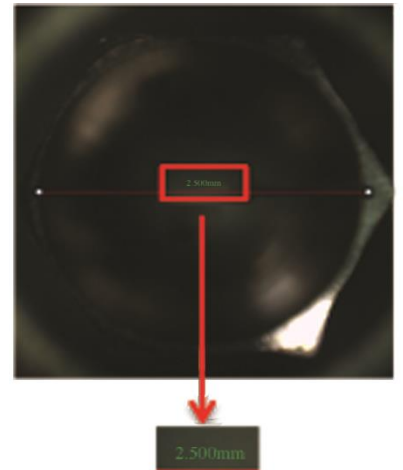


Fig 10. # 1, Hex 3

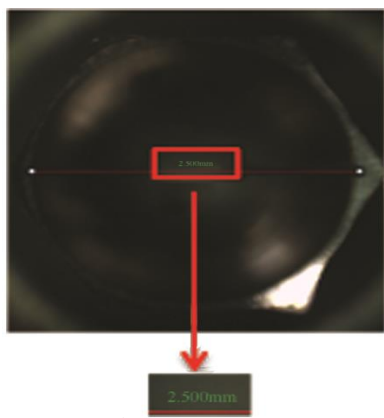


Fig 11. # 2, Hex-1

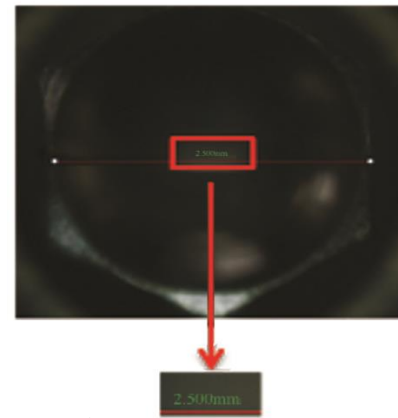


Fig 12. # 2, Hex-2

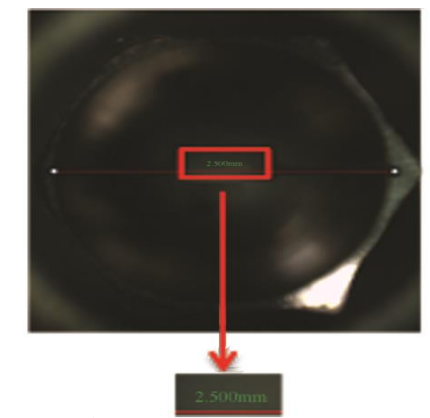


Fig 13. # 2, Hex-3

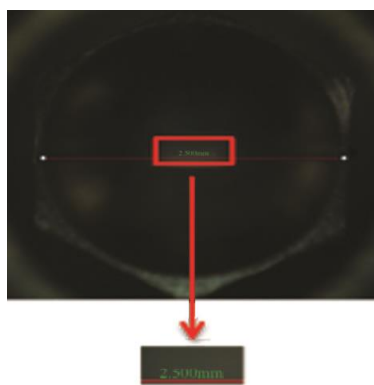


Fig 14. # 3, Hex-1

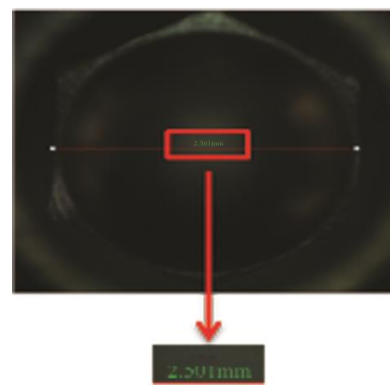


Fig 15. # 3, Hex-2

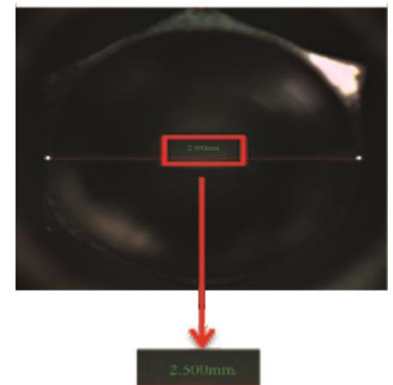


Fig 16. # 3, Hex-3

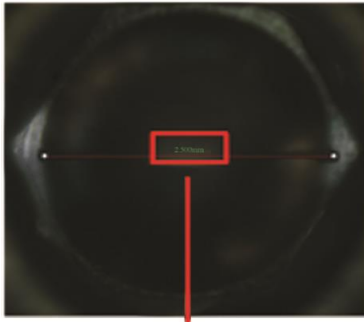


Fig 17. # 4, Hex-1

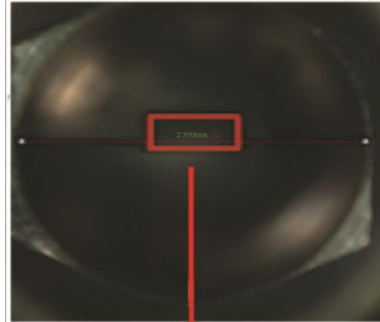


Fig 18. # 4, Hex-2

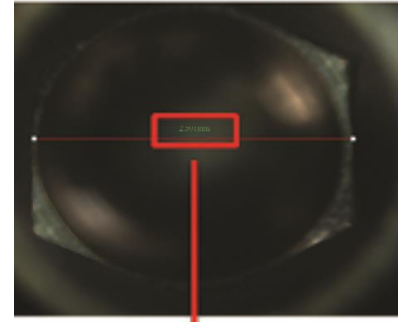


Fig 19. # 4, Hex-3

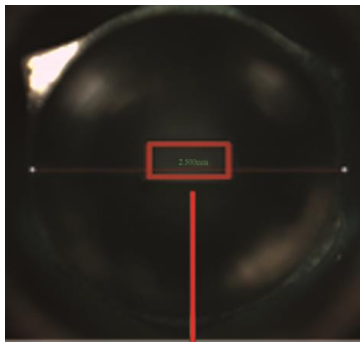


Fig 20. # 5, Hex-1

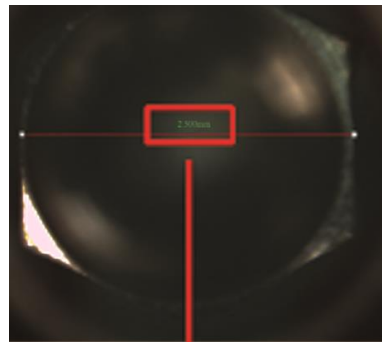


Fig 21. # 5, Hex-2

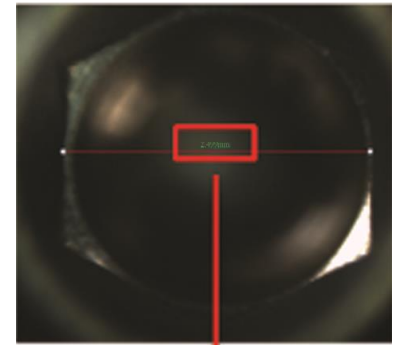


Fig 22. # 5, Hex-3

12. Result

Test Item		Evaluation Criteria	Result (Pass/Fail)
1	Manufacturing Tolerance	Each dimensional difference of 3 inner hexagonal sides should be no more than $\pm 0.001\text{mm}$ from 2.500mm	Pass No more than $\pm 0.001\text{mm}$ Details are as below

1. Test (Unit: mm)					
Classification	# 1	# 2	# 3	# 4	# 5
1.1 Hex-1	2.499	2.500	2.500	2.500	2.500
1.2 Hex-2	2.500	2.500	2.501	2.500	2.500
1.3 Hex-3	2.500	2.500	2.500	2.501	2.499
1.4 Average	2.500	2.500	2.500	2.500	2.500

1.5 Total Average	2.500
1.6 Evaluation Criteria	Each dimensional difference of 3 inner hexagonal sides should be no more than $\pm 0.001\text{mm}$ from 2.500mm
2. Result (Pass/Fail)	Pass
2.1 Manufacturing Tolerance	No more than $\pm 0.001\text{mm}$