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# Anti-Bacterial Coating Efficacy Inspection Report

## Customer & Project Information

<b>Name:</b>	<b>Merhi Dental &amp; Orthodontic Center</b>
Attn:	Dr. Adnan Merhi (Director)
Location:	ABU DHABI, UAE

## Analysis of Anti-bacterial Efficacy

### Inspection Edition 1.0

#### Please reference

Delivery	UAE
	Dated Dec-22
PO No. (optional)	
Customer ID	MDOC.AD
Reference No.	DM20101220.1
Monitor System	Hygiene® SystemSurell
System Protocols	Ultrasnap ATP swab

#### ATP RLU Reading Description:

<10	<b>Safe</b>
10-30	<b>Caution</b>
>30	<b>Dangerous</b>

## Project Brief

The Merhi Dental & Orthodontic Center is a well-known dental clinic in Abu Dhabi. We are invited to monitoring the bacterial activity in the clinic with ATP system and apply our TE anti-bacterial nano coating for one operation room of the clinic for demo purpose.

We inspect its sterilization protocol and result before applying the TE®nano coating but after their normal sterilization process. The result of most area in the clinic is excellent which shows a very careful and strictly sterilization process complied with. However since there will be many patients coming in and out continuously, the harmful microbial bring in can't be avoided, there is still several area show high microbial activity which is classified to the "Caution" or "Dangerous" level by ATP system.

After the initial monitor, we coat the entire operation room, not only for the high risk area, because a good sterilization protocol shouldn't be designed only for kill the bacterial on the high risk surface, but also for kill the air-borne bacteria drops in the air. This can insure the entire room will be in a safe situation for long time, even visitor or HVAC systems bring in outer bacterial.

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# Before Coating Analysis

Sampling Time: 2010-Dec-14  
 Sampling Location: 8  
 Remark: The sampling was done after routine sterilizing and cleaning process.

Location	RLU Value	Safe	Caution	Dangerous	Conclusion
Water & soap tap	37	<10	10-30	>30	Dangerous
Operation lamp handle	21	<10	10-30	>30	Caution
Operation tools platform & control panel	4	<10	10-30	>30	Safe
Doctor's phone	15	<10	10-30	>30	Caution
Operation chair handle	38	<10	10-30	>30	Dangerous
Spitting pool	76	<10	10-30	>30	Dangerous
Switches of the Operation room	20	<10	10-30	>30	Caution
Control panel	3	<10	10-30	>30	Safe

Picture Record below listed:



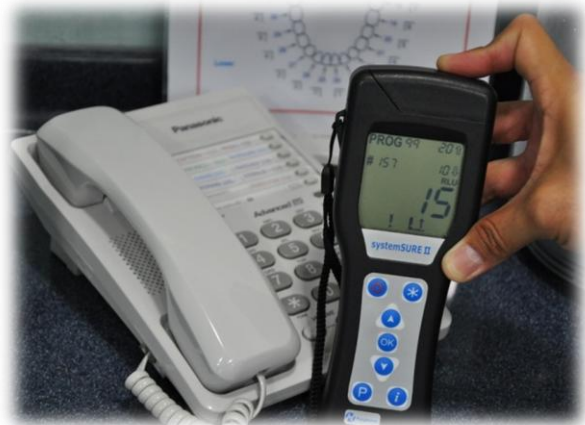
Water & soap tap @ 37-dangerous



Operation lamp handle @ 21-caution



Operation tools platform & control panel @ 4-safe



Doctor's phone @ 15- caution



Operation chair handle @ 38-dangerous



Spitting pool @ 76-dangerous



Switches of the Operation room @ 20-caution



Control panel @ 3-safe

**Remark:**

The coating will be applied on **all** the clinic not restricted to the high risk area, please refer to the project brief.

The after coating analysis will be **only** done on the **high risk** area.

Our ABEL test reports do not relieve you from the obligation to testing for your own intents and purposes.

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# After Coating Analysis

Sampling Time: 2010-Dec-15

Sampling Location: 6

Remark: The sampling was done after 24 hours of coating, and no other sterilizing process.  
Only the high risk area in previous test will be sampling in this test.

Location	RLU Value	Safe	Caution	Dangerous	Conclusion
Water & soap tap	8	<10	10-30	>30	Safe
Operation lamp handle	5	<10	10-30	>30	Safe
Doctor's phone	4	<10	10-30	>30	Safe
Operation chair handle	7	<10	10-30	>30	Safe
Spitting pool	2	<10	10-30	>30	Safe
Switches of the Operation room	7	<10	10-30	>30	Safe

Picture Record below listed:



Water & soap tap @ 8-safe



Operation lamp handle @ 5-safe



Doctor's phone @ 4-safe



Operation chair handle @ 7-safe



Spitting pool @ 2-safe



Switches of the Operation room @ 7-safe

### Conclusion

The TE<sup>®</sup> nano coating shows excellent anti-bacterial function after coating. It can reduce the bacterial risk in hospital, clinic obviously. We suggest the customer do monthly ATP (or equivalent) test to make sure the coating works properly after coating.

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