



Bactericidal and sporicidal efficiency of hot steam cleaner

Project:

Test microbe:

Methicillin-resistant *Staphylococcus aureus* (MRSA strain ATCC 43300)
Bacillus subtilis spores (from strain ATCC 6633)

Hot steam cleaner:

KS Group Professional Line PC ID

Test surfaces:

Dry-brushed stainless steel (SSDB)
Hospital safety floor (plastic)
Ceramics

Methods:

Viability tests were performed according to the EN 13697 standard for surface disinfection. Suspension with a microbial count of $1 \cdot 10^5$ cfu/ml was prepared from a pure culture. This suspension was pipetted (100 μ l) and spread on pieces of different surface materials (20cm*20cm). Surfaces were treated once, twice or four times with steam nozzle prior to testing. After cleaning soiled pieces of surface materials were placed into a test tube with buffer solution and glass pearls. The tube was shaken for one minute and the solution was pipetted on a soya agar plates with proper dilutions. The plates were incubated at 36 °C overnight.

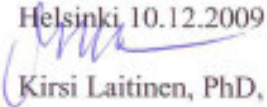
Results:

MRSA-colonies on plates (cfu/ml).

Time sec pressure 2	bacteria on surface	bacteria in spill water
wipe 1 x	0	0
wipe 2 x	0	0
wipe 4 x	0	0

Conclusion: MRSA bacteria are killed by hot steamer cleaner

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