NEW MAIN REQUEST

1. A method of processing a stainless steel surface to improve hygienic properties of the stainless steel surface, which method comprises ejecting a processing medium out of a nozzle of a process gun onto the surface by means of compressed air,
wherein said method is a single step-method, and said processing medium consists of a suspension comprising a liquid and a mixture of at least two different types of products consisting of chemically inert abrasive particles,
said particles at least comprise particles having an irregular shape,
said particles being dispersable in said liquid,
said irregular shaped particles consist of fused alumina particles,
said fused alumina particles are substantially iron-free, and
said particles have an average particle size of between 0.9 µm and 110 µm,
the processing serving to render the topography of the surface less sensitive to bacterial and soil adhesion.

2. A method according to claim 1, CHARACTERIZED IN THAT said fused alumina particles have an Al_2O_3-content of 95 % - 99,80 % by weight.

3. A method according to claim 1 or 2, CHARACTERIZED IN THAT said particles also comprise particles having a spherical shape, said particles being dispersable in said liquid.

4. A method according to claim 1 to 3, CHARACTERIZED IN THAT said suspension is a balanced suspension.

5. A method according to claim 3 or 4, CHARACTERIZED IN THAT the mixture weight ratio of said spherical shaped particles with respect to said irregular shaped particles is 60 % - 96 % / 4 % - 40 %.

6. A method according to any one of claims 3 to 5, CHARACTERIZED IN THAT said spherical shaped particles consists of glass beads.

7. A method according to claim 6, CHARACTERIZED IN THAT said glass beads have a SiO2-content of 50 % - 80 % by weight.

8. A method according to any one of claims 6 to 7, CHARACTERIZED IN THAT said glass beads have a relative hardness of 4 Mohs - 6 Mohs and said white fused alumina particles have a relative hardness of 8 Mohs - 10 Mohs.

9. A method according to any one of claims 1 to 8, CHARACTERIZED IN THAT said suspension has a concentration in use of 10 % to 70 % particles in liquid.

10. A method according to any one of claims 1 to 9, CHARACTERIZED IN THAT said mixture of particles has a balanced bulk density of from 1 kg/dm^3- 2 kg/dm^3.

11. A method according to any one of claims 1 to 10, CHARACTERIZED IN THAT said suspension comprises a soluble chemical additive.

12. A method according to claim 11, CHARACTERIZED IN THAT said soluble chemical additive has a concentration of approximately 1 vol-% - 15 vol.-% on the total liquid of said suspension.

13. A method according to any one of claims 1 to 12, CHARACTERIZED IN THAT said suspension is ejected out of said nozzle at a low nozzle output pressure from 0,5 to 5 bar.

14. A method according to any one of claims 1 to 13, CHARACTERIZED IN THAT said suspension is ejected out of said nozzle at a balanced and controlled volume output of 20 l/minute up to 130 l/minute.

15. A method according to any one of claims 1 to 14, CHARACTERISED IN THAT the nozzle (20) comprises a distal end section (21) having a nozzle-exit (22) and a distal end (23), said nozzle-exit (22) being located at said distal end (23), wherein said distal end section (11) comprises an outer profile (24) arranged to induce an external suction air flow around said nozzle-exit (22), said outer profile (24) being tapered towards said distal end (23) and comprises a plurality of longitudinally extending notches (25) arranged around the circumference of said distal end section (21).