Claims

1. A method for a chemical and/or electrolytic surface treatment of a substrate (20) in a process station (10), comprising:

- mounting a substrate (20) to be treated to a rotor unit (11),

- moving the rotor unit (11) with the substrate (20) into a pre-wetting chamber (12) of the process station (10),

- applying a pre-wetting fluid to the substrate (20) inside the pre-wetting chamber (12),

- moving the rotor unit (11) with the substrate (20) at least partially out of the pre-wetting chamber (12),

- spinning the rotor unit (11) with the substrate (20) in a spinning plane around a center of the substrate to centrifugally reduce the pre-wetting fluid at a surface of the substrate (20),

- rotating the rotor unit (11) with the substrate (20) from a position facing the pre-wetting chamber (12) vertically to the spinning plane so that the substrate (20) faces away from the pre-wetting chamber (12),

- moving the rotor unit (11) with the substrate (20) into an electroplating chamber (13) of the process station (10),

- applying an electrolyte liquid and an electric current to the substrate (20) for an electroplating process on the substrate (20) inside the electroplating chamber (13), and

- moving the rotor unit (11) with the substrate (20) at least partially out of the electroplating chamber (13).

2. Method according to claim 1, wherein the pre-wetting chamber (12) and the electroplating chamber (13) are arranged in the same process station (10).

3. Method according to one of the preceding claims, further comprising the step of modifying a gas system in the pre-wetting chamber (12), wherein the modification of the gas system is a reduction of pressure relative to atmospheric pressure before the pre-wetting step, an increase of pressure to atmospheric pressure after the pre-wetting step and/or an exchange of gas relative to ambient air before and/or after the pre-wetting step.

4. Method according to one of the preceding claims, wherein the electroplating is done in ambient air and/or atmospheric pressure.

5. Method according to one of the preceding claims, further comprising the following steps after moving the rotor unit (11) with the substrate (20) out of the electroplating chamber (13):
- rotating the rotor unit (11) with the substrate (20) so that the substrate (20) faces towards the pre-wetting chamber (12),
- moving the rotor unit (11) with the substrate (20) into the pre-wetting chamber (12), and
- applying a rinsing liquid to the substrate (20) in the pre-wetting chamber (12) to remove the electrolyte liquid from the substrate (20).

6. Method according to one of the preceding claims, further comprising the step:
- applying a drying flow to the substrate (20) in the pre-wetting chamber (12) to dry the substrate (20).

7. A process station (10) for a chemical and/or electrolytic surface treatment of a substrate (20), comprising
- a rotor unit (11),
- a pre-wetting chamber (12), and
- an electroplating chamber (13),
wherein the rotor unit (11) is configured to hold a substrate (20) to be treated and to move the substrate (20) at least partially in and out of the pre-wetting chamber (12) and in and out of the electroplating chamber (13),
wherein the pre-wetting chamber (12) is configured to pre-wet the substrate (20) by

means of a pre-wetting fluid,

wherein the electroplating chamber (13) is configured to apply an electrolyte liquid and an electric current to the substrate (20) for an electroplating process on the substrate (20), and

wherein the rotor unit (11) is further configured to spin the substrate (20) in a spinning plane around a center of the substrate and to rotate with the substrate (20) vertically to the spinning plane so that the substrate (20) faces towards the pre-wetting chamber (12) or towards the electroplating chamber (13).

8. Process station (10) according to the preceding claim, wherein the pre-wetting chamber (12) and the electroplating chamber (13) are arranged opposite to each other with the rotor unit (11) in between.

9. Process station (10) according to one of the preceding claims, wherein the rotor unit (11) comprises a fixing means to fix the substrate (20) to the rotor unit (11), wherein the fixing means is configured to enable a surface treatment of one or more substrate (20) surfaces.

10. Process station (10) according to one of the preceding claims, wherein the rotor unit (11) comprises a sealing means to close the pre-wetting chamber (12) and/or the electroplating chamber (13) liquid tight and/or gas tight.

11. Process station (10) according to one of the preceding claims, wherein the rotor unit (11) comprises a gas supply system to supply gas to the pre-wetting chamber (12).

12. Process station (10) according to one of the preceding claims, wherein the rotor unit (11) comprises a pressure reduction system to reduce a pressure in the pre-wetting chamber (12).

13. Process station (10) according to one of the preceding claims, wherein the rotor unit (11) is configured to spin the substrate (20) with 1500 rounds per minute and more, preferably 2000 rounds per minute.

14. Process station (10) according to one of the preceding claims, wherein the rotor unit (11) comprises an electric energy supply system to provide an electric current to the substrate (20) for the electroplating process in the electroplating chamber (13), preferably wherein the electric current amounts to 50 Ampere and larger, more preferably 100 Ampere and larger.

15. Process station (10) according to one of the preceding claims, wherein the rotor unit (11) comprises a rinsing liquid supply system to supply a rinsing liquid to the substrate (20).