

riag Oberflächentechnik AG · Postfach 169 · CH-9545 Wängi TG

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riag Seal 981

Topcoat

riag Seal 981 is a thin, water-based topcoat.

Properties

- Thin layers
- Applicable in barrel or rack

Make up

	Barrel	Rack
riag Seal 981 Additive (density = 1.0 g/mL)	200 – 400 mL/L	50 – 200 mL/L
DI water	600 – 800 mL/L	800 - 950 mL/L
Dipping time	10 - 20 sec	10 - 20 sec

The rack application is used with a drip time of 20 – 30 seconds or by blowing off procedure before drying. At the barrel application a spin-dry process is used before hardening the layer.

Procedure for a make up

If necessary, put water in the process tank, add riag Seal 981 Additive and mix well. Now the bath is ready for operation.

Effluent control and safety considerations

Protective gear such as face shields and gloves should be worn during bath make up and operation. Chemicals shall not be stored below 10 °C. Spent solution has to be treated and discharged according to local wastewater laws.

Operating conditions

Temperature: 18 - 30 °C (room temperature)

Time: 10 - 20 sec.

pH-Value: $\geq 8 - \leq 10$, Frequent control is usually not necessary, if no acidic solutions are

dragged in. For adjustment use only ammonia.

Drying: $40 - 100 \,^{\circ}\text{C}$

Process sequence

1. Zinc or zinc-nickel plating

- 2. Water rinse (double)
- 3. Activation for zinc only in nitric acid (0.3 1.0 %)
- 4. Water rinse
- 5. riag Pass
- 6. DI water rinse (double)
- 7. Dry or blow liquid off
- 8. riag Seal 981
- 9. Drying at 40 100 °C

Analysis

riag Seal 981 can be analyzed easily gravimetrically. A scaled sample is dried at 105 °C to a constant weight (approximately 30 minutes) and scaled again. The result should be the same as after a new make up.

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