

# Electrodeposition Coatings

## Ultrafiltration plant

### 1. Generally

- Designation: 4" + 8" – ultrafiltration plant
- Production of Ultrafiltrat by fragmentation of the electrical dipping varnish in down and high-molecular components of
- Ultrafiltrat finds use as kidney function for the cleaning of the electrical dipping varnish and serves for the adherence to important lacquer parameters (conductivity) to
- Rinsing function

### 2. Impact

The ultrafiltration plant separates high-molecular materials over halfpermeable membrans from low-molecular materials, i.e. the low-molecular lacquer components, like water, amine, water-soluble solvents and salts, form the so-called Ultrafiltrat (Permeat).

### 3. Components of the Ultrafiltrat

- > 95% demineralized water
- 0,2 to 2.0 Gew,% low-molecular solvent
- 0,2 to 1.0 Gew,% neutralization agent
- Low-molecular resin components
- Foreign matter and pollutions

### 4.- Employment Ultrafiltration

- To rinsing the EP-coated parts off in the attached rinsing zones used
- Over cascade guidance again the lacquer basin supplied
- UF throw for conductivity reduction

### 5. Throw quantities

Daily UF throw quantity usually amount between 1-10 % of the EP-tank volume, dependent on:

- Bringing in of pollutions into the electrical dipping varnish
- Bacteria situation in the EP-tank

### 6. Ultrafiltrat - achievement/- capacity depends on

- Adherence to the operating parameters (pressure ratios, rushing over)
- Lacquer system/- temperature
- Regular Ultrafiltrat flushing
- Solid portion of EP-tank
- Bacteria contamination
- Running time of Ultrafiltrat modules

### 7. rinsing UF-Module

- A periodic cleaning is recommended tot he extension oft he standard time of UF-moduls. for cleaning please use FREIOTHERM-KTL-UF-Cleaner 400299 or FREIOTHERM-ATL-UF-Cleaner 400300
- With accurate handling of the UF-plant the lifetime of a module is 2 years.