LEADING IN PRODUCTION EFFICIENCY

EcoCell
BETTER SOLUTIONS FOR ELECTROCOATING

» *Example of a submersible horizontal anode*

The electro dialysis cell is a decisive step in the electro coating process. It provides the necessary electrical field for paint deposition and helps to remove any free acid released during the process. As a leading supplier, Dürr has developed four different alternatives for application in cataphoretic and anaphoretic processes.

The following types are available

EcoCell F – flat
EcoCell R – round
EcoCell S – semi-circular
EcoCell I – immersion

The combination of different cell types provides optimum set-up of the required equipment. While **Eco**Cell F offers a cost effective approach, the **Eco**Cell R allows maximum flexibility for individual control and easy handling due to its size. The **Eco**Cell S semi-circular offers the best combination of both aspects. **Eco**Cell I is a fully submersible version capable of intensifying the electrical field in critical areas. All cells can be masked to concentrate on specific areas.

All types of cells can be easily inspected and maintained due to exchangeable anode and membrane. The extractable anode can be maintained without opening the cell or emptying the tank. The electrodes can be masked during the commissioning phase or even after start of production.

Your benefits with **Eco**Cell

» Simple and user-friendly maintenance
» Low life-cycle costs
» Less space requirements
» Systems integration, even with non-Dürr components
» Local specialized technicians available worldwide
» Best value

ELECTRODIALYSIS CELLS IN THE ELECTROCOATING PROCESS

	EcoCell F Flat shape	**Eco**Cell S Semi-circular shape	**Eco**Cell R Round shape	**Eco**Cell I Round shape
Benefits	Durability – Robustness	Effectiveness – Maintainability	Flexibility – Maintainability	Flexibility – Maintainability
Field of application	Car bodies	Car bodies/parts	Car bodies/parts	Special application
Product volume	Large	Medium/large	Small/medium	Large/small/ medium
Total length, mm	1,200-3,760	1,200-3,760	1,200-3,760	1,750-3,000
Active length, mm	960-3480	960-3480	960-3480	1250-2500
Active surface, m²/m linear	0.65	0.4	0.18 (anode) 0.28 (membrane)	0.18 (anode) 0.28 (membrane)
Standard anode thickness, mm	3	3	2.77	2.77
Recommended flow rate	800-1000 l/h	500-700 l/h	200-300 l/h	200-300 l/h
Recommended power	50 Amps/m²	50 Amps/m²	50 Amps/m²	50 Amps/m²
Peak power	70 Amps/m²	70 Amps/m²	70 Amps/m²	70 Amps/m²
Variants	Open	Open	Open and closed available	Open
	All four types » Have an extractable anode and a replaceable membrane » Anode material available in 1.4404, 1.4571 or Titanium/IO_2 coated » Special membrane » Leak tested before delivery			

Durable material: Polypropylene (PP)

- Resistance against high impact and stress cracking
- Resistance against mechanical abrasion
- Chemical resistant
- Excellent electrical and thermal insulator
- No water absorption
- Recyclable

Design adapted to

- High static pressures
- Maximum safety against leakage
- Optimum anolyte circulation
- Minimum spare parts
- Special customized solutions

Easy maintenance

- Maintenance and replacement without emptying the tank due to extractable anodes
- Replaceable membranes
- Design optimized to reduce spare parts
- Cell body made of Polypropylene (PP) with very smooth surfaces → easy to clean
- Classified as low health hazard

Your contact

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