



# Model M500D

*Cell divider allows treatment of anodically sensitive solutions.*



*A revolutionary three-dimensional porous, carbon cathode provides 500 times more plating area than conventional two-dimensional cells and recovers metals in elemental form.*

## **RenoCell Model M500D**

The RenoCell M500D is a new divided electrochemical cell based on revolutionary, patented technology. This technology allows the M500D to provide performance that consistently pushes metal ion concentrations down to the sub-ppm range. The cell is equally effective for effluent treatment and metal recovery and is designed to either replace or enhance existing systems.

The M500D offers unmatched features and benefits:

- Proven world-class technology and design.
- Effective metal ion treatment down to the sub-ppm range surpasses conventional electrodeposition methods by two to three orders of magnitude.
- Three to five times more cost-effective than electrodeposition systems currently in use.
- Greatly improved electrical efficiencies and life-cycle cost reduction.
- Regulatory compliance with virtual elimination of hazardous sludge by recovering elemental metals that are ready for reuse or sale.
- Easy metal removal, quick and easy cathode replacement, and low operating and maintenance costs.
- Highly reliable operation in harsh industrial environments.
- Compact size, capable of being wall mounted.
- Robust, modular design using industry-standard components.

# **RenoCell Model M500D**

## **Technical Specifications**

**Standard Material** Polypropalyne

### **Dimensions**

Length	645 mm (25.4 in)
Width	
Top lid	252 mm (10 in)
Housing body	200 mm (8 in)
Weight	12.7 kg (28 lb)

### **Hydraulic Connector**

Inlet/outlet	25 mm ISO female (3/4 in FNPT)
Outlet adapter	1 in MNPT x 25 mm ISO Female (3/4 in FNPT)
Anolyte (inlet/outlet)	20 mm ISO female (1/2 in FNPT)

### **Electrical Connectors**

Cathode	Two 8 mm posts (titanium, tantalum, or stainless steel)
Anode	Two 8 mm titanium posts

**Anode** DSA

### **Cathode**

Material	Carbon
2-D area	0.1 m <sup>2</sup>
Metal loading	3 kg to 5 kg (6 lb to 11 lb)

**Divider** Nafion

### **Typical System Component Requirements**

Power supply	
AC input	230 Vac, 50/60 Hz, single phase 110 Vac, 60 Hz, single phase
DC output	50 A, 0 - 12 Vdc
Control	Adjustable constant current and/or constant voltage
Catholyte pump	30 l/min to 90 l/min @ 0.5 to 0.7 bar (8 g/min to 24 g/min @ 8 to 10 psig)
Anolyte pump	4 l/min @ 0.3 bar (1 g/min @ 5 psig)



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