

## TURBOCOAG® TREATMENT FOR INDUSTRIAL WASTEWATER TREATMENT

Ideally suited for remediation of:

- Arsenic and Lead
- Heavy metals
- Suspended solids
- Pesticides and herbicides
- Microorganisms, including e-coli

High efficiency, compact, scalable, and mobile!



ENVIRONMENTAL PROTECTION ♦ RELEASE STANDARD COMPLIANT  
♦ WATER FOR REUSE ♦ MINERAL RECOVERY ♦ WASTE REDUCTION

### FEATURES

- Commercial models from 25 to 200 GPM per reactor
- Small footprint minimizes floor space requirements
- Heavy duty steel construction
- Controllable throughput
- Top-access clam shell design
- Continuous water treatment
- Self-cleaning system
- Passivation-free anodes, aluminum, or iron
- Sludge-free reactor
- Low maintenance – two-hour anode replacement
- Efficient removal of multiple contaminants
- Kills bacteria, molds, spores and viruses
- Higher level of suspended solids handled
- Strong flocculant is easily filtered / quickly settled
- Modular, scalable solutions for mobile or fixed install
- Choice of metals for sacrificial anodes enables cost-effective treatment and optimization of contaminant removal

### AVIVID WATER TECHNOLOGY

Avivid Water Technology provides advanced water purification via its patented TurboCoag® technology to treat industrial water contaminated with emulsified oils, heavy metals, suspended solids, and microorganisms.

AVIVID provides TurboCoag® reactors and parts for wastewater treatment, customized water treatment design services, installation, integration, remote monitoring, and self-service training or maintenance contracts.

***Putting a new spin on water treatment.***



TurboCoag® Treatment Results			
CONTAMINANTS	RAW WATER	TREATED	% REMOVED
Al	34825	580.67	98.33%
As	31.94	DL	100%
Cd	71.2	0.11	99.85%
Co	113	0.56	99.51%
Cr	28.0	3.95	85.91%
Cu	2688	7.83	99.71%
Fe	136586	517	99.62%
Mg	127605	35398	72.26%
Mn	96187	297.66	99.69%
Ni	179	8.54	95.24%
P	37.6	DL	100%
Pb	299	DL	100%
Si	23416	759.1	96.76%
U	35.6	0.48	98.66%
Zn	138771	37.43	99.97%
PFOS	75.6	DL	100%
6:2 FTS	51	DL	100%
PFDA	41.5	DL	100%
2,4-D	15434	679	96%
Bromoxynil Octadec	130.8	4.2	97%
Mecoprop-P	351.9	27.6	92%
E-coli (mpn/100 mL)	1203300	1373	100%
Total Coliform (mpn/100 mL)	9208000	141400	98%
DL = below detectable limits Measurements in µg/L (PPT)			

## TURBOCOAG® ELECTROCOAGULATION

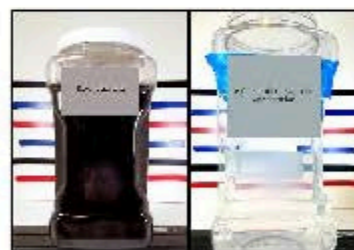
**TurboCoag®** is an innovative Tesla pump with patented rotating electrodes. These electrodes are energized with an electrical potential that causes current to flow through the fluid to be treated, dissolving the anodes into reactive anions into the water which binds to contaminants, forming a strong floc. The influent cycles repeatedly within the chamber increasing average dwell time in the reactor. The effluent is processed via conventional water settling or filtration technologies as required by the specific application. **TurboCoag®** offers better process control, a smaller footprint, liquid flow control, and is scalable.

AVIVID's electrochemistry presents a cost-effective and advantaged alternative to chemical water treatment via its patented electrocoagulation (EC) reactors. The rotating anode cartridge design **solves the fundamental problems of EC applications by preventing anode fouling and internal sludge buildup**. Design life of the replaceable cartridge is 15 to 60 days depending upon influent water quality, flow rates, and water discharge requirements.

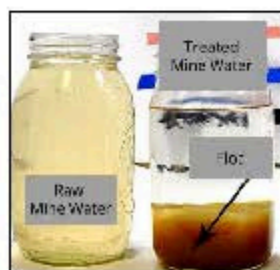
TurboCoag® reduces waste and decreases OPEX for clients by replacing chemicals in the treatment of contaminated wastewater.

## TURBOCOAG® SPECIFICATIONS

Design Flow Maximum (GPM)	200
System Power Requirement: Maximum	100 kW
System Power Requirement: Typical	40 kW
Anode Current Maximum (Amps)	5000
Voltage Maximum (Volts)	20
AC Power Requirement	480 VAC 3Ø
Anode Quantity	16
Dose Rate Range Aluminum (PPM)	37-150
Internal System Volume (gal)	200
Piping Connections (NPT)	4 x 2"
Nominal pH Requirement Range	6 - 8
Reactor Weight w/Aluminum Anodes (lb)	8400
Reactor Weight w/Iron Anodes (lb)	10,665
Overall Length	109"
Overall Width	43"



Landfill Leachate water



Mine water



Produced Oil water

