



blue eden
clean technology solutions

ClearBLUE

ClearBLUE™ Water purification system

DESCRIPTION

ClearBLUE™ uses advanced electro-flotation techniques to remove a wide range of industrial contamination from process and wastewaters

APPLICATIONS

ClearBLUE solves treatment challenges of heavily contaminated wastewater eliminating water handling and disposal costs across multiple industry sectors including:

- ✓ Chemical manufacturing
- ✓ Oil and gas production
- ✓ Food and Beverage
- ✓ Metal finishing
- ✓ Municipal water treatment
- ✓ Agriculture and fertilizer manufacturing
- ✓ Chemical tanker wash

ClearBLUE™

THE CHALLENGE

Due to variable contamination loading many industries and processes have no effective wastewater treatment solutions other than expensive offsite disposal by either incineration or deep well disposal. As well as the associated costs this practice is not sustainable and adds to the overall environmental liability

THE SOLUTION

ClearBLUE™ uses electricity and sacrificial electrodes to create flocculation's that effectively remove a wide range of contamination from wastewater

BENEFITS

Removes a wide range of difficult to treat contaminants including:

- ✓ Emulsions
- ✓ Heavy metals
- ✓ Scaling and fouling compounds
- ✓ Hydrocarbons

Reduces Costs

- ✓ Elimination of water treatment chemicals and associated processes
- ✓ Reduces water consumption as wastewater is recycled
- ✓ Eliminates wastewater disposal related costs

Deployment

- ✓ Modular design and re-deployable
- ✓ Standalone deployment
- ✓ Compatible with current treatment systems at different stages
- ✓ Combined with PureBLUE™ advanced oxidation platform to offer a comprehensive water treatment solution

RELIABLE REPEAT PERFORMANCE

ClearBLUE™

Contaminant Description	Suspensions, Emulsions, Colloids % Removal	Solutions % Removal
Biological oxygen demand (BOD)	> 99	30 – 50
Chemical oxygen demand (COD)	>99	30 – 50
Total organic carbon (TOC)	>99	30 – 50
Total suspended solids (TSS)	>99	-
Dissolved organic carbon (DOC)	-	30 – 50
Oil in water (OIW)	>99	30 – 50
Turbidity	>99	-
Bacteria/algae/larvae	10 - 20	-
BTEX (benzene, toluene, ethyl benzene, xylenes)	-	30 – 50
Calcium	>99	20 – 90
Cleaning agents and detergents	>99	50 – 70
Color	>99	30 – 95
Dyes	30 - 90	30 – 50
Ammonia	-	-
Antibiotics	-	30 – 50
Bisphenols	-	30 – 50
Dioxin	-	30 – 50
E. coli	-	-
Fecal matter	80 - 95	30 – 50
Hormones	-	-
Parasites	-	-
Pesticides	-	-
Pharmaceuticals	-	-
Phosphate	80-95	30-50
Polychlorinated biphenyl (PCBs)	-	-
Polycyclic aromatic hydrocarbons (PAHs)	-	-
Protozoans	-	-
Viruses	-	-
Latex	>99	70 – 80
Polymers	>99	50 – 70
Naturally occurring radioactive materials (NORM)	TBD	TBD
Heavy Metals (As, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Se)	>99	80-99
Thallium	>99	80-99
Silicon	90	90



ClearBLUE™ treatment of process water



ClearBLUE™ miniflot 5 m3/day (up to 50,000 m3/day per unit)



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