
Elgressy Engineering Services Ltd

CTG Holding Group

www.elgressy.com

Introduction

- Elgressy Engineering Services Ltd Company is a part of CTG group. The group is engaged in developing and marketing solutions for water and sewage treatments, in different countries.
- Founded over 30 years ago, Elgressy developed and patented an innovative technological platforms which are implemented for different applications.
- The company's products are proven with many different customers and include solution for cooling towers, heat exchangers, hot and cold water system, heavy metal removal, arsenic removal, Legionella eradication systems and etc.
- Elgressy has over 2,000 successful systems installed worldwide. The Company's products have proven in a wide variety of markets, including: industries, hotels, office buildings, shopping centres and hospitals.

Among Our Clients



Plasson



Club Med
WHERE HAPPINESS MEANS THE WORLD



GRUPO MAHOU SAN MIGUEL



Sheraton
HOTELS & RESORTS



Hilton



APPLIED MATERIALS



KORDSA GLOBAL



Strauss



intel



posco



EMBASSY OF THE UNITED STATES
TEL AVIV • ISRAEL



מכון ויצמן למדע
WEIZMANN INSTITUTE OF SCIENCE



מרכז רפואי
אסף הרופא
Assaf Harofeh Medical Center



Assuta
Hospital
PERSONALIZED PRIVATE MEDICINE



מרכז רפואי רבין
Rabin Medical Center



The Tel Aviv Sourasky Medical Center

EEO System

Electro Oxidation Technology

Oil Emulsion & bilge water Treatment

EEO System- Product Details

- Electro Oxidation Treatment (EEO) efficiently removes a wide range of contaminates with a single system.
- Electro Oxidation Capabilities:
 - Removes heavy metals as oxides that pass TCLP.
 - Removes suspended and colloidal solids.
 - Breaks oil emulsions in water.
 - Removes fats, oil and grease.
 - Removes complex organics.
 - Destroys and removes bacteria, viruses and cysts.
- Electro Oxidation Benefits:
 - Meet discharge requirements
 - Reduce sludge volume
 - No chemicals is to be added
 - Process multiple contaminants
 - Process waste streams maximum of 5% solids
 - Harvest proteins, oil and metals

Electroco Oxidation Vs. Chemical Oxidation

Description	Electro Oxidation	Chemical Oxidation	Chemical Sedimentation
TSS removal	95 to 99%	80 to 90%	50 to 70%
BOD removal	50 to 98%	50 to 80%	25 to 40%
Bacteria removal	95 to 99.999%	80 to 90%	25 to 75%

EEO applications examples & its proven results

- **Textile Dye**

Textile dye water can be cost effectively treated using EEO to separate the dye from the water.

By removing the color, suspended solids and silica, the water is of sufficient quality for reuse.

Textile and Dye Industry / Color Removal

Source	Raw	Treated	% Removal
Ref. 006-691	125.1 NTU	12.1 NTU	90.0%
Ref. 006-692	129.4 NTU	2.2 NTU	98.3%
Ref. 006-854	68.3 NTU	0.68 NTU	99.0%
Ref. 006-854	2,340.0 NTU	4.5 NTU	99.8%

EEO applications examples & its proven results

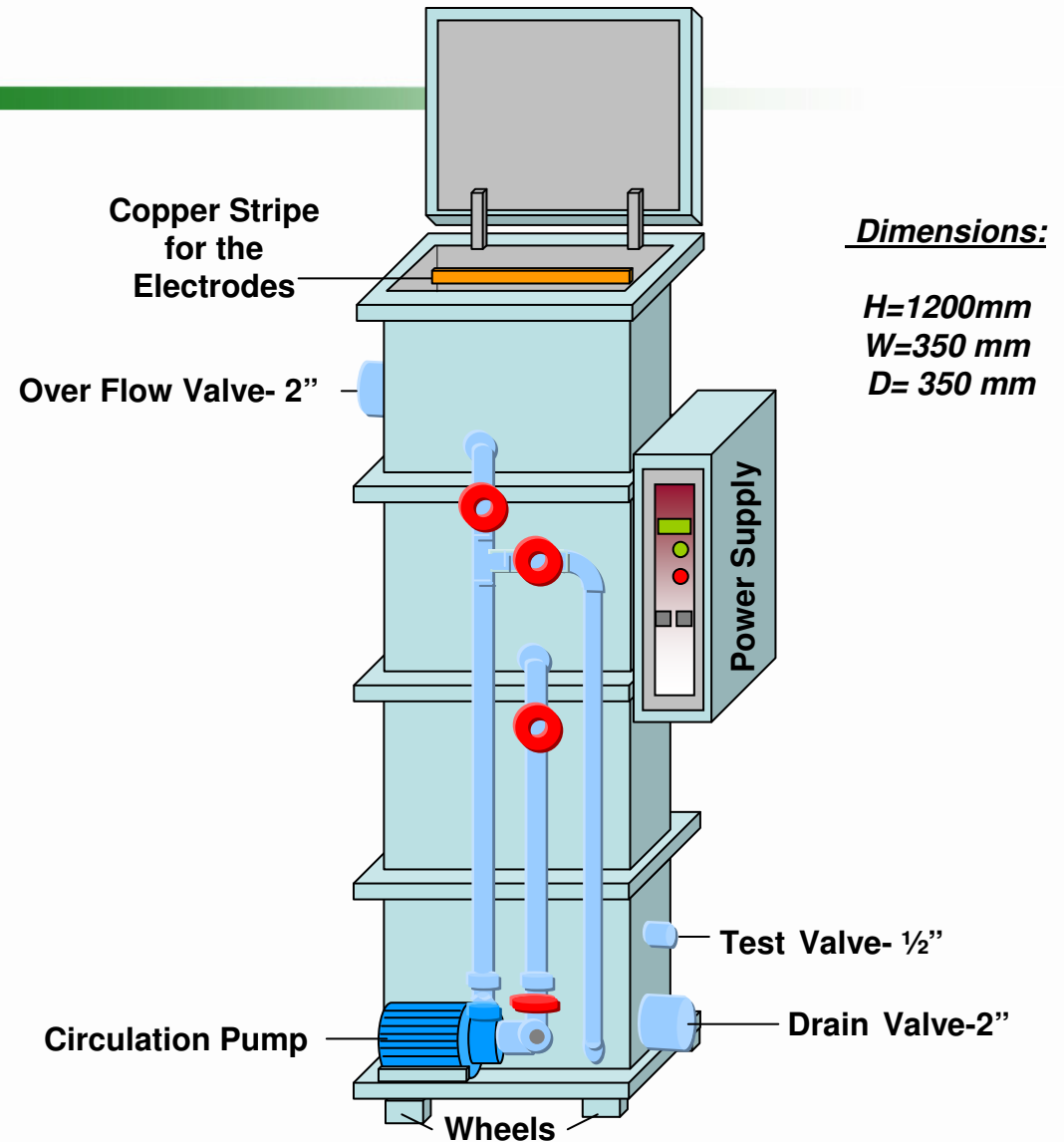
- Raw Sewage**

Electro oxidation has proven effective in treating sewage water, sewage sludge concentrations and sewage sludge metal sufficiently to enable land application.

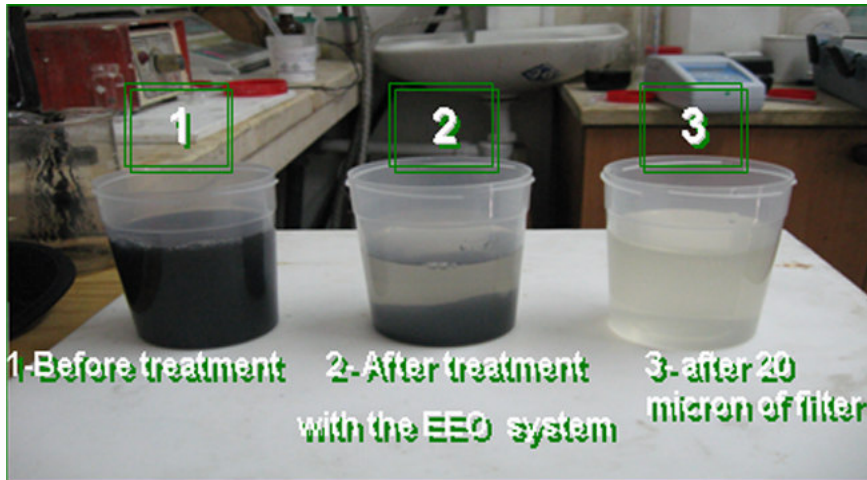
Municipal Sewage from POTW Discharge Water

Municipal	Raw	Treated	% Removal
COD	490	26	94.7%
Total Solids	602	401	43.4%
Suspended Solids	73	7	90.4%
Settleable Solids	21	5	76.2%
Total Hardness	127	11	91.3%
Alkalinity	267	11	95.8%
pH	6.88	7.02	-
IOD	0.98	<0.1	89.8%
BOD	220	9	95.9%
Coliform	318,000/ml	0	99% +
Phosphates	38	0	99% +

EEO 100 Lt batch system- diagram & picture



EEO 100- Test Results



EEO Test Results



The oil emulsion we received



The oil emulsion with pH control



Final results after filtrating

Thank You