



FLAGSHIP

Environment & Water Solutions

solutions built on sustainable
green principles to protect and conserve

Water & Wastewater Treatment & Supply

FLAGSHIP DHAKA CENTRAL ETP (BD) LTD.

FLAGSHIP Environment & Water Solutions

ETP
New & Upgraded

CETP
Zone Development

WTP
Water Softening

STP
Modular

Output Integrity is Key Priority To ZERO DISCHARGE Operations & Cost

FLAGSHIP PROVIDES RMG

Industry with Green-BAT Engineered Designs & Upgrades for latest and best:

- Factory & Product Positioning
- STWI-DETOX Target Output Values
- Buyer Codes, Conservation & Recovery

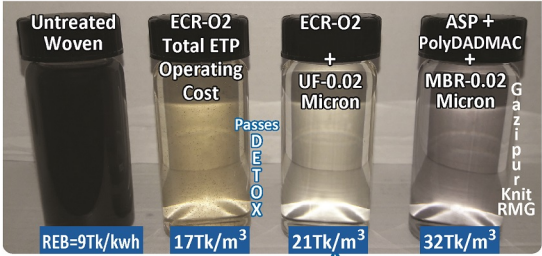
PLANNING THE FUTURE

Flagship and Singapore based **Hydromaster International Pte. Ltd.** completes the water recycle spectrum with proven applications for **industrial waste water into NEWater**. Together we manage, engineer, and deliver the project from start to finish with proven strengths in design, operation, service and alternative project delivery systems.

PROVIDING LONG-TERM VALUE

Flagship is a 24/7 full-service partner in virtually all advanced treatment processes. Technology and scientific tools drive water conservation and **ultimate factory sustainability with water recovery at 70-80%**

We deliver complex solutions and high quality facilities in a cost-effective, land saving, timely manner; with communication matched to your participation requirements.



SCIENCE & ECONOMICS

Biological treatment may not comply with emerging water standards & meet paramater values required for economic recycling.

ETP UPGRADE'S

Converted biological Plant with increased flow using ECR-02 process.

ETP upgraded For Recycling Facility 2017



Future UF & RO platform

ECR Room



Flagship Designs are based on industry water profiling and hydraulic stability. Our BAT Technology profiles consistently meet DETOX target values making ETP / CETP a key player to maintain Buyer Compliance when treating textile/other synthetic effluents.

NEW ETP's

STWI "ACHIEVER" Status



Woven-ECR-02 ETP & Recycling Facility

Compact green footprints

NEW Central ETP's



DHAKA EPZ CENTRAL ETP

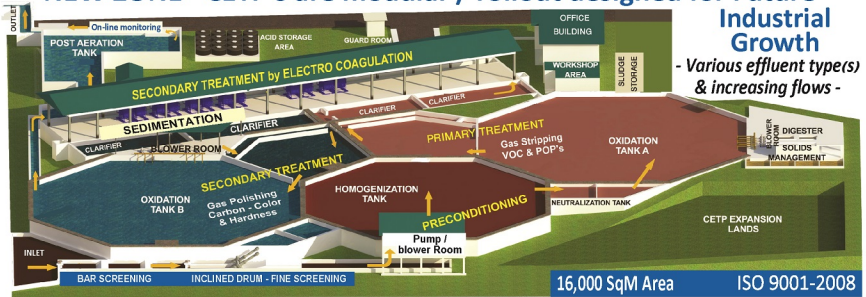
COD 2012 21,000m³/day & increasing

Engineering - Procurement - Commissioning

NEW ZONE - CETP's are modular / rollout designed for Future

Industrial Growth

- Various effluent types) & increasing flows -



COMPREHENSIVE SERVICES

Our delivery spectrum, including but not limited to :

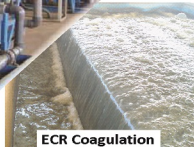
- Master Planning
- Process Selection & Development
- Detailed Design & Engineering
- Construction Management
- Program Management and (O&M)
- Startup, Commissioning & Training

Electro Contaminant Removal Units (ECR)



Electrochemical treatment of RMG effluent is a powerful method of pollution control offering high removal efficiencies especially for acid, dispersed and metal complex dyes. **Other ECR Advantages:**

- ECR provides small effective ETP/CETP footprints.
- ECR minimizes foulants entering membranes thus decreases chemical cleaning & frequency, replacements, and total water operating costs.
- ECR adapts to volumes and pollution loads without using unwanted chemicals or sensitive micro organisms.



ECR Coagulation



Sedimentation



Oxidation/ Gas Stripping

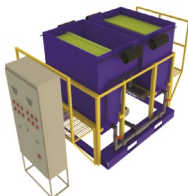
FLAGSHIP ETP-CETP solutions include approved, proven, and reliable scientific treatment methods of electro chemical-floatation, sedimentation, and oxidation reduction principles that are economical and easily maintained.

ECR Wastewater Treatment UNITS

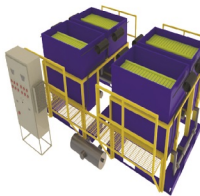
Series 5 & 10 Flowrate
15 to 30 M³/Hr.



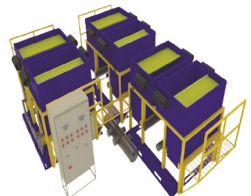
Series 20 Flowrate
30 to 60 M³/Hr.



Series 40 Flowrate
60 to 120 M³/Hr.



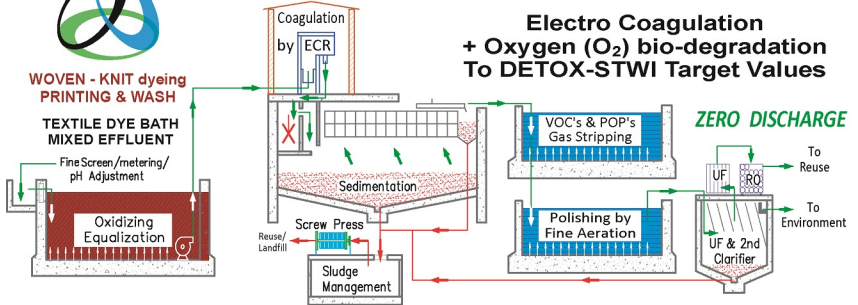
Series 60 Flowrate
60 to 180 M³/Hr.



Colour, dye, organic based auxiliaries, metals, O&G, and other turbid compounds must be removed by ETP to meet recycling influent target values. **ECR technology** has rapidly grown worldwide for wastewater treatment due to its ability to remove inorganic / organic molecular weight pollutants & charged ionic species.



ECR O2 ETP & RECOVERY Process Flow



SECONDARY & TERTIARY RECYCLING EQUIPMENT

In a world where fresh water resources, and the environment, are under enormous strain from growing populations, industrialisation and intensive agriculture; the reclamation and re-use of water is not just preferential but a necessity. Advanced technologies allow us to mimic natural processes to efficiently create high-quality potable water from almost any water source. **The use of reclaimed water for industry is increasingly seen as the only sustainable approach to water resource management.**

Hydromaster International specialises in recycling applications & boasts a number of world-class reference projects.

Advanced membrane filtration technology offers a cost-effective and highly reliable means of removing suspended solids and pathogens in order to produce safe potable water. Hydromaster has extensive experience treating a variety of water types using latest membrane technologies.

Self Contained Filtration Unit - Direct UF Feed to RO



Ultra Filtration



Low Pressure Reverse Osmosis



Sewage & MBR Systems



hydromaster

www.hydromastergroup.com

Hydromaster Membrane Technologies:

- Micro Filtration
- Ultra Filtration
- Nano Filtration
- Low Pressure Reverse Osmosis
- Sea Water Reverse Osmosis
- Membrane Bio - Reactor

FLAGSHIP DHAKA CENTRAL ETP (BD) LTD.

Hs. 11 (6th Fl.), Rd. 6, Sec. 4, Uttara
 Dhaka-1230, BD, Tel: +88 02 8931173
 E-mail : infocetp@flagshipdhaka.com

www.flagshipdhaka.com

Singapore
 Engineering & Manufacturing