



**KOLINA<sup>®</sup>**

Modern thinking in wastewater treatment

**Phosphorus Removal**

# How effective is your current effluent treatment?

1

## Are you discharging outside of consent?

Kolina's electrocoagulation technology reduces a wide range of contaminants from wastewater, including Phosphorus, Nutrients, COD, TSS and metal ions.

2

## Do you want to reduce your operating costs?

Kolina's fully automated effluent treatment plant requires minimal operation intervention with average consumption of 0.4 kWh /m<sup>3</sup>.

3

## Do you want to eliminate the use of expensive chemicals?

Kolina's patented 'Electrocoagulation' technology is a chemical free solution designed to deliver a robust and efficient treatment alternative for wastewater treatment.

4

## Is your site limited for space?

Housed in a modified 10', 20' or 40' ISO container, Kolina's small footprint reduces the physical impact on standard treatment plant / solutions.

5

## Would you like to join our growing band of happy customers?

Do you need a solution to phosphorus in AMP7? Get in touch for more information.

# #gobluebegreen



# How Kolina can help?

## The Solution to Water Pollution Smarter Electrocoagulation



# How do we achieve this?

Our unique containerised systems offer patented Electrocoagulation technology. They provide a viable, chemical-free alternative to treat a wide range of contaminants including nutrients (Phosphorus and Nitrogen), COD, SS and metal ions.

From forward-thinking standalone companies to global blue-chip groups, Kolina's team can deliver a comprehensive service including full project management, installation, training and maintenance.



Ready to go and modular, our solution allows for rapid delivery, installation and commissioning. A small footprint, enables greater utilisation of valuable operational space.



Full automation and remote monitoring improves operational efficiency. Requires less energy and resources to manage the plant (versus other technologies).



Cost effective and sustainable phosphorus removal system to allow utilities to meet AMP 7 targets.



A chemical free solution that is environmentally considerate versus alternative treatment methods. Zero noise and odour pollution.



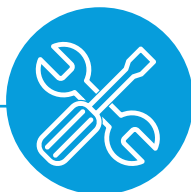
# Phosphorus removal



Kolina's EC technology offers a greener alternative to chemical dosing for removal of phosphorus; it generates coagulant ferric ion species through an electrochemical reaction in the EC cells between passed current and sacrificial electrodes. The generated coagulant ions have a utilisation efficiency of close to 100%, while dosed chemicals such as ferric sulphate and ferric chloride have utilisation efficiencies of between 28% and 34%.

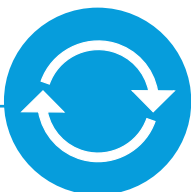
Kolina's fully automated EC system can provide an effective and environmentally greener solution to enable discharge within the phosphorus-limit as per the directives of AMP 7. Get in touch to explore how we can help you meet your phosphorus reduction targets.

# Who does what?



## Install & Commission

Nominated project manager  
Formal sign-off and handover of plant  
Certificate of conformity  
Training of your operational team  
Daily progress report



## Full Deployment & Support

Dedicated Sector Relationship Manager  
Planned & preventative maintenance  
24 hr call out  
Performance monitoring  
Remote system access  
Monthly planning & review meeting

	Our Responsibility	Your Responsibility	Our Responsibility	Your Responsibility
Infrastructure/Civil Works		✓		
Power		✓		✓
Fresh Water		✓		✓
Installation	✓			
Commissioning	✓			
Training	✓		✓	
WiFi Connection	✓			✓
Change Plates	✓			✓
Sampling	✓			✓
Sludge Disposal		✓		✓
Material changes*				✓

\*Material changes in volume, process and ingredients to be advised by the client at the earliest opportunity.

# How quickly can we install?

Our EC unit is manufactured to order with lead times normally being 6-10 weeks. This can be reduced subject to pre-planning and early commitment from the client.



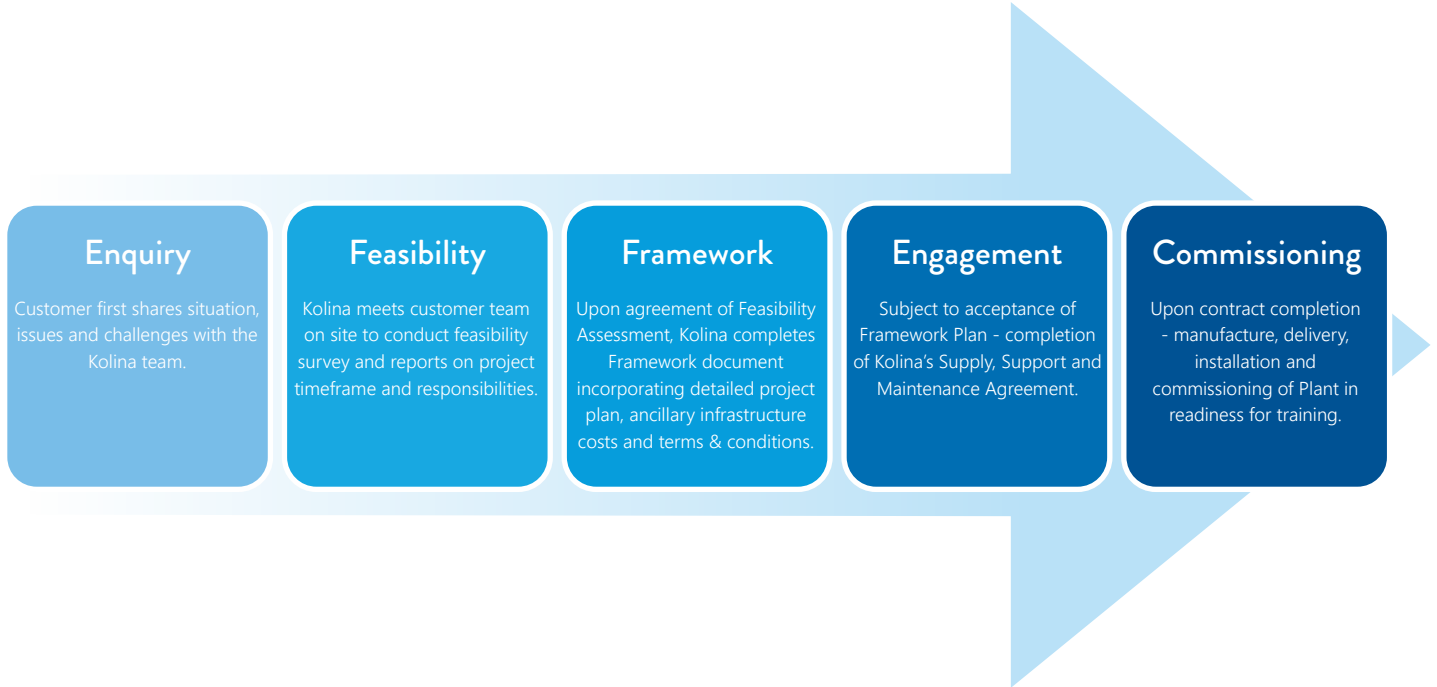
## Installation [ 1 week ]

Delivery, siting and connection of services to Plant, subject to readiness of client's site and infrastructure.

## Commissioning [ 1 week ]

Testing of Plant and training of client's nominated employees.

# How do we go about it?



## Contact Us



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# The Solution to Water Pollution

## Smarter Electrocoagulation

[www.kolina.co.uk](http://www.kolina.co.uk)





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**KOLINA®**  
Water treatment using electrocoagulation

"Playing our part in  
reducing the impact  
on the worlds most  
scarce resource"

