



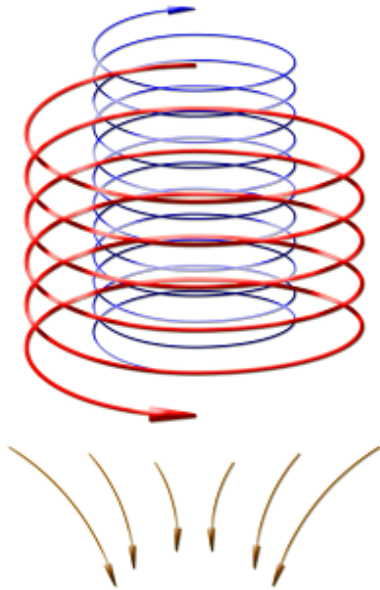
Rapid wastewater clarifying system

# ***GEOCLE*** Series

GWC 40

GWC 60

GWC 80



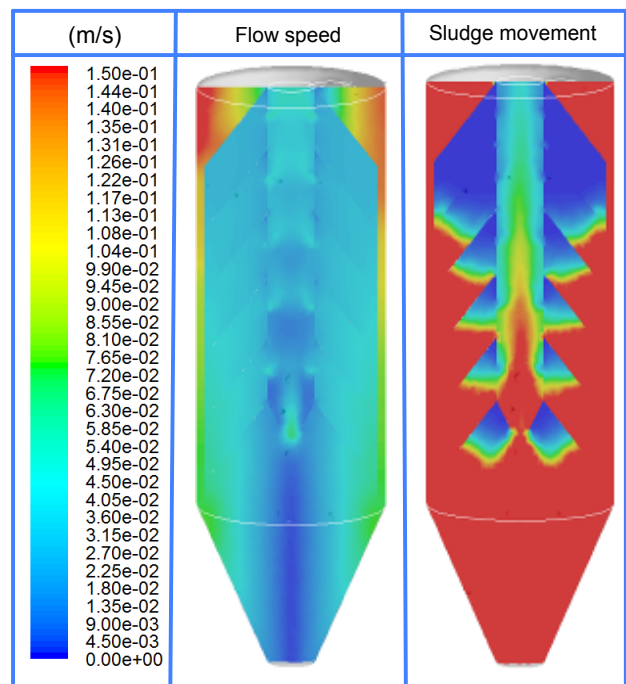
● **Hydro cyclone**

GEOCEL series, a rapid hydro-cyclone system is a device for separating solid waste from water in wastewater and sewage treatment using the method of cyclonic separation.

Generally, cyclonic separation is a method of removing particulates from an air, gas or liquid stream, without the use of filters, through vortex separation. Rotational effects and gravity are used to separate mixtures of solids and fluids.

A high speed rotating flow is established within a cylindrical or conical container called a cyclone. Air flows in a helical pattern, beginning at the top (wide end) of the cyclone and ending at the bottom (narrow) end before exiting the cyclone in a straight stream through the center of the cyclone and out the top.

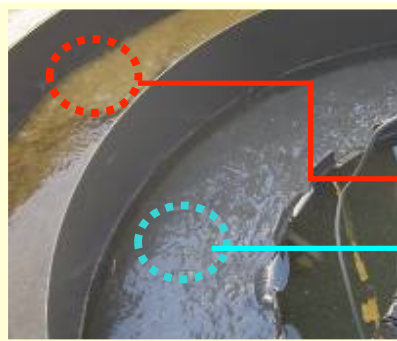
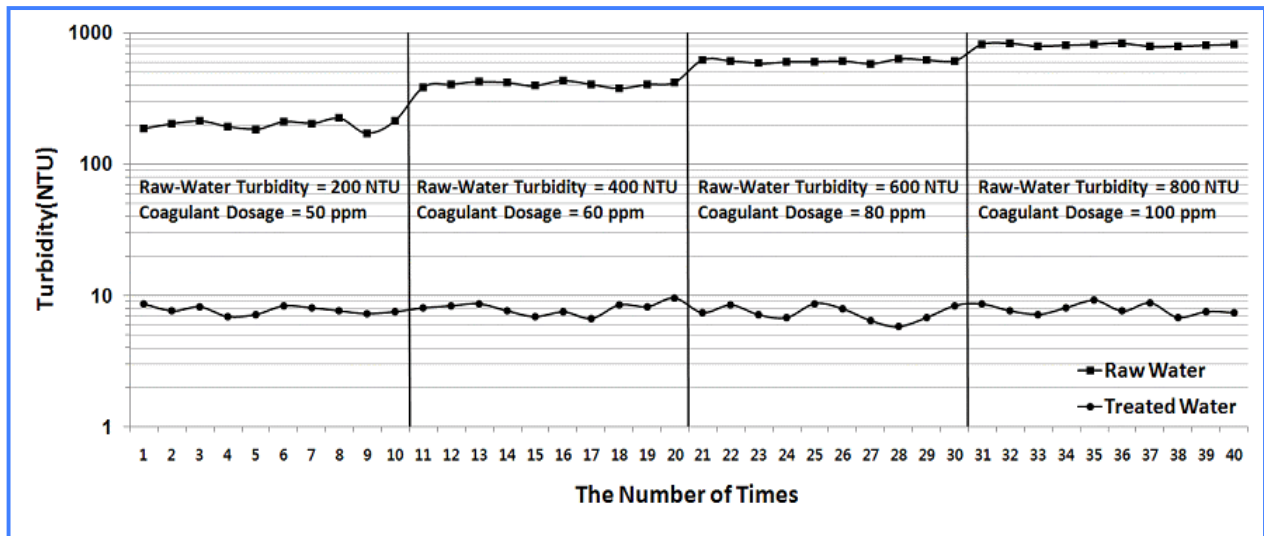
Larger (denser) particles in the rotating stream have too much inertia to follow the tight curve of the stream, and strike the outside wall, then falling to the bottom of the cyclone where they can be removed. In a conical system, as the rotating flow moves towards the narrow end of the cyclone, the rotational radius of the stream is reduced, thus separating smaller and smaller particles. The cyclone geometry, together with flow rate, defines the cut point of the cyclone. This is the size of particle that will be removed from the stream with a 50% efficiency. Particles larger than the cut point will be removed with a greater efficiency, and smaller particles with a lower efficiency.



**GEOCLE Series**

Water Reclaim Clarifier

*Performance*



*Before*  
800~1,000 NTU



*After*  
10~20 NTU

● **PH sensor & indicator (Option)**



● **Neutralizer(NaOH) injector (Option)**



# GEOCLE Series

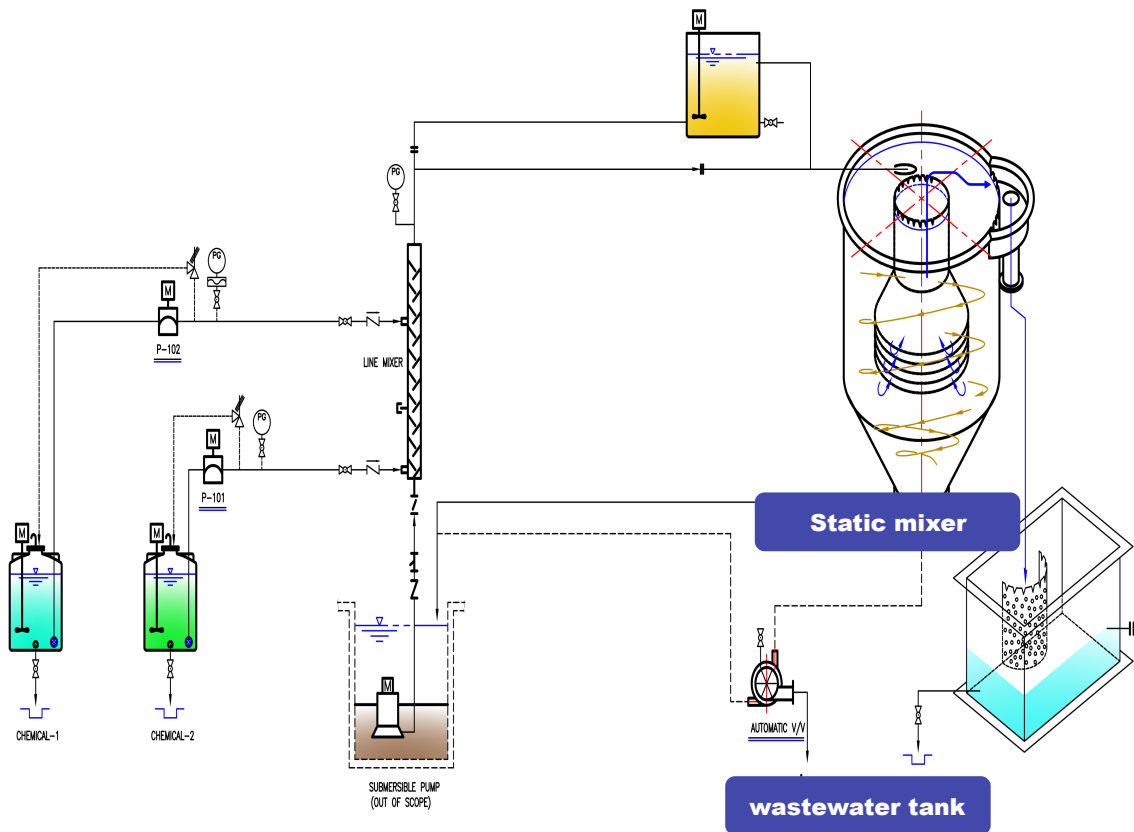
Water Reclaim Clarifier

## ● 약품 정보

Chemical type	Input ratio (L/min)	Figure
Chemical 1	1L	Anionic poly-acrylamid dispersed in water in oil emulsion
Chemical 2	0.95L	PAC(Poly Aluminium Chloride)

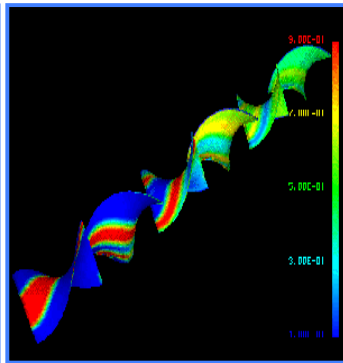
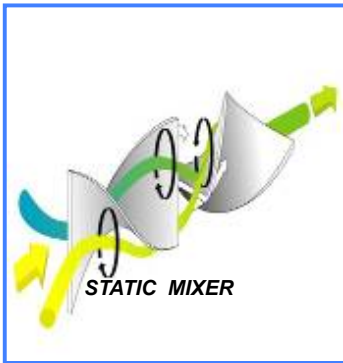
\* **Chemical 1** : polyacrylamide is to flocculate solids in a liquid. This process applies to wastewater treatment, and processes like paper making. Most polyacrylamide is supplied in a liquid form. The liquid is subcategorized as solution and emulsion polymer. Even though these products are often called 'polyacrylamide', many are actually copolymers of acrylamide and one or more other chemical species, such as an acrylic acid or a salt thereof. The main consequence of this is to give the 'modified' polymer a particular ionic character.

\* **Chemical 2** : Poly Aluminium Chlorides are synthetic polymers dissolved in water. They react to form insoluble aluminium poly-hydroxides which precipitate in big volumetric flocs. The flocs absorb suspended pollutants in the water which are precipitated with the PAC and can together be easily removed.



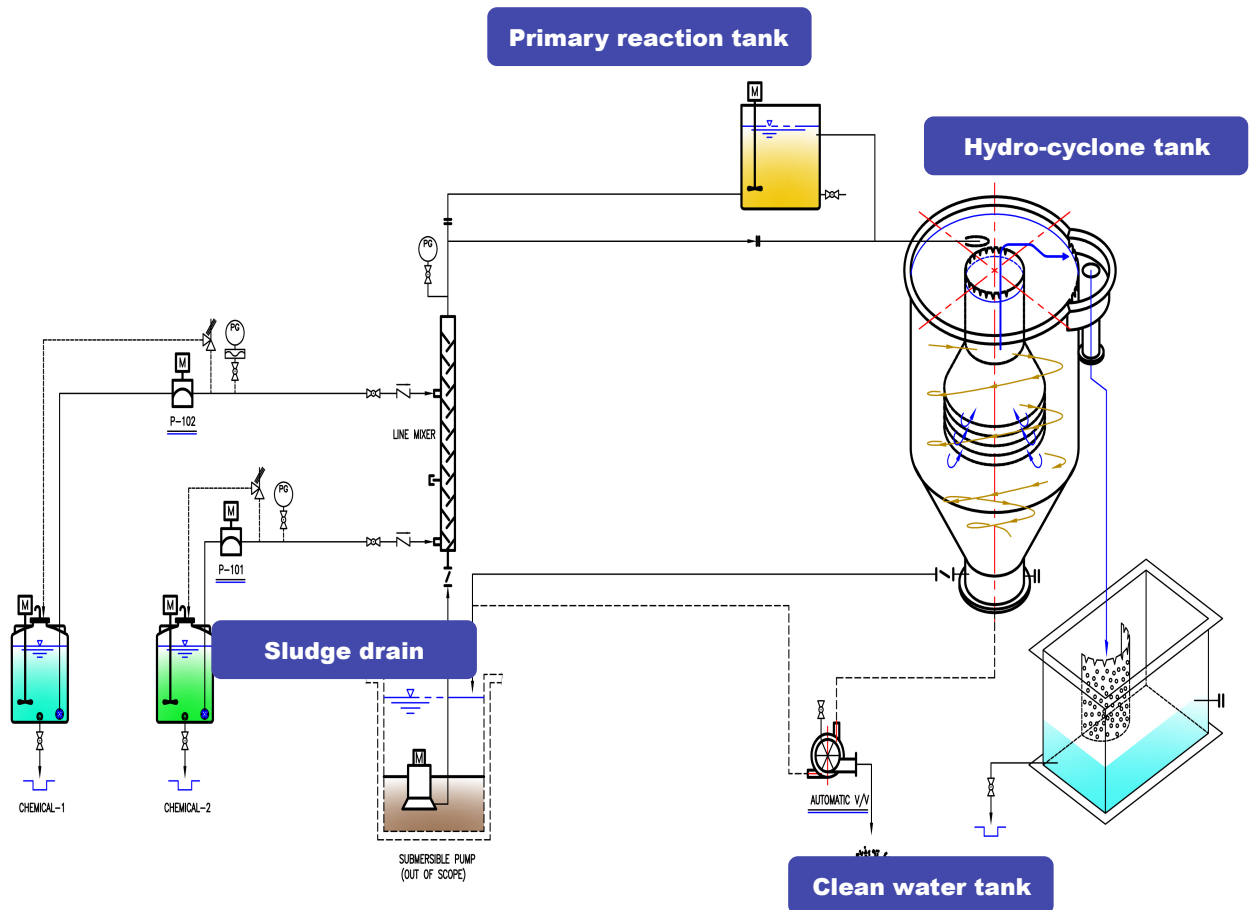
# GEOCLE Series

Water Reclaim Clarifier



## ● Static mixer

A **static mixer** is a device for mixing two fluid materials. Normally the fluids to be mixed are liquid. The device consists of mixer elements contained in a cylindrical (tube) or squared housing. A common application is mixing two-component adhesives and sealants. Other applications include [wastewater treatment](#) and [chemical processing](#).



# GEOCLE Series

Water Reclaim Clarifier

## MAIN COMPONENTS



### Other components



Inlet pump



Main Panel



Static mixer



Flow control valve



**● Specification**

Model	GWC 40	GWC 60	GWC 80
Size (m)	1,5(W) x 2,26(L) x 2,6(H)	2.0(W) x L3,8(L) x 3,74(H)	2,2(W) x L3,9(L) x 4,0(H)
Capacity (m <sup>3</sup> /h)	35-40	50-60	70-80
Gross weight	0.55 Ton	2.8 Ton	3.2 Ton
Power consumption	6.5Kw/h ( 380~440V / 2~3phase / 50~60Hz)		
Sludge discharge	Auto sludge discharge by motor valve (adjustable frequency)		
Level sensor type	Level switch		
Target turbidity	10~20 NTU		
Chemicals	Chemical 1 & Chemical 2		
Dosing pump	2 sets		
No. Mixing motor (Chemical Mixing)	2 sets		
Volume of primary reaction tank (m <sup>3</sup> )	6 cubic meter		
Option Function	pH System		
	NaOH System( Chemical tank, motor, Dosing pump)		

\* Above information are able to change without notice for system upgrade.

**● Application**

