



## **WATER TREATMENT & HYDROCYCLONES**

**Turbid water treatment  
and particle material**



# **ELKAYAM**

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**INDUSTRIES**

# CH Clarifier Densifier

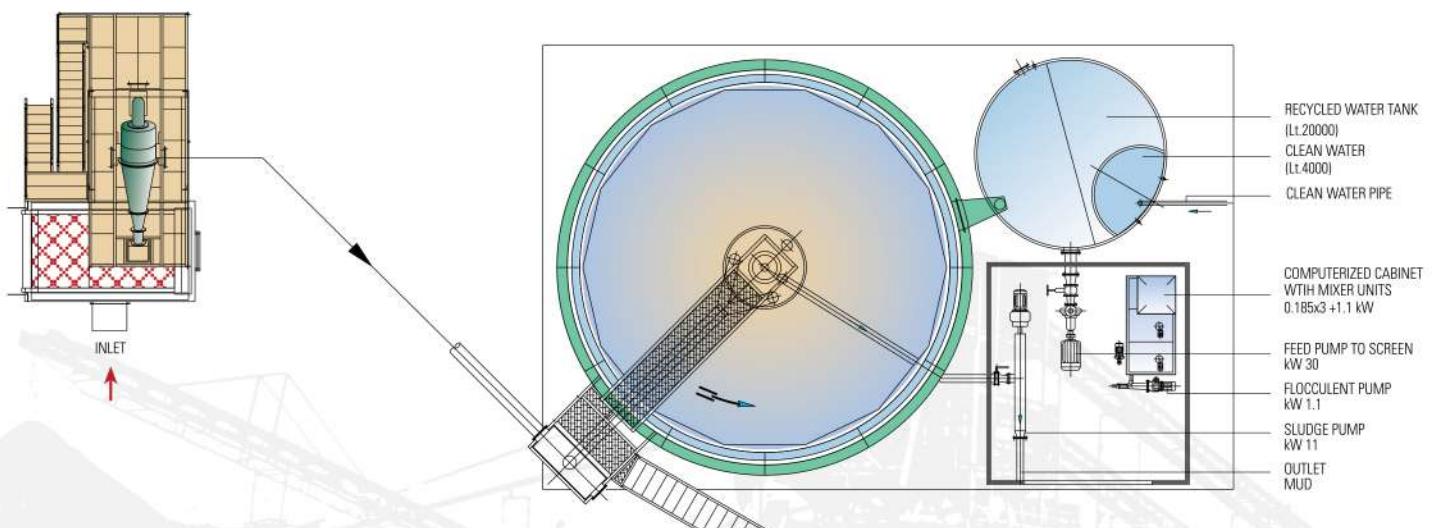
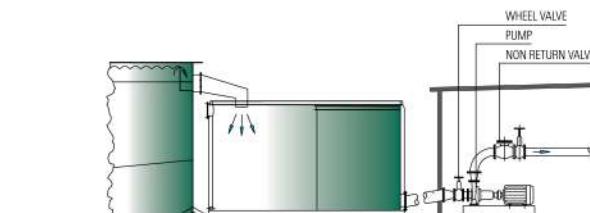
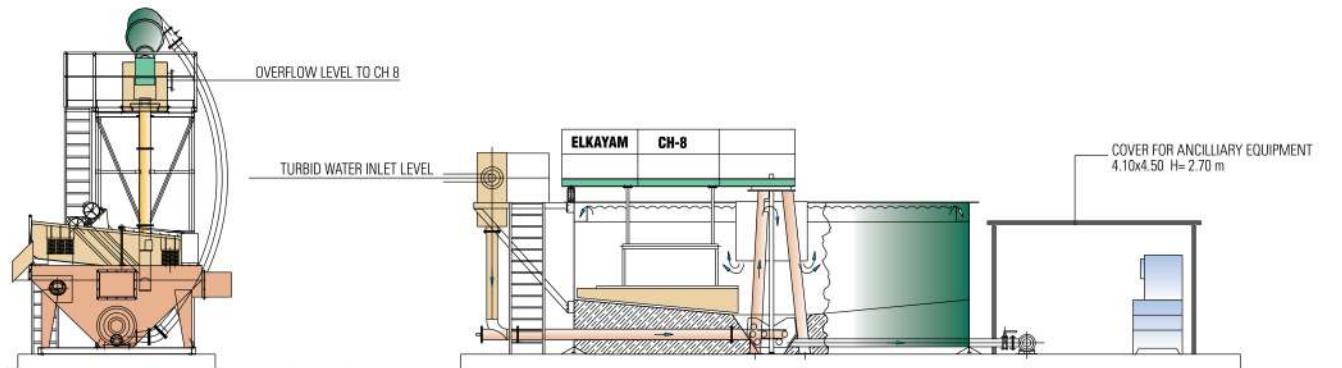
- Minimum infrastructure for low installation costs
- Adjustable oscillating scrapers for optimizing sludge density
- Central mixer for pre expulsion sludge homogenizing
- Angled sludge guide to ease the suction load of the evacuation pump
- ELKAYAM produced computerized polyelectrolyte dosing system – precise and practical
- Clarified water complies with the “Merli” law



# ELKAYAM

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## INDUSTRIES



# CH Clarifier Densifier

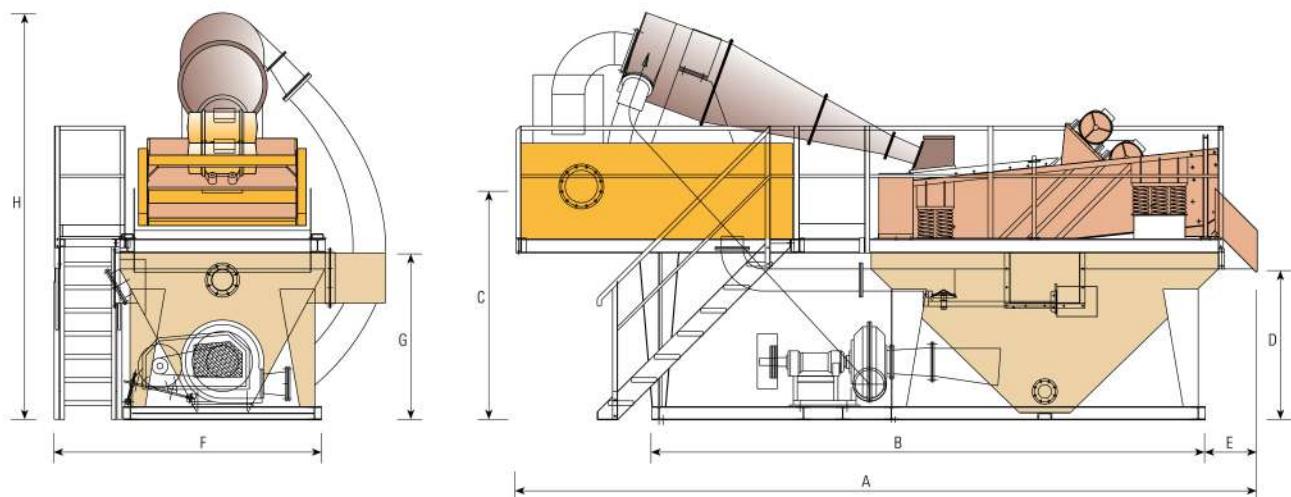


## General Specifications

Model	Max. turbid load	Ideal load	Cleansing tank	Height of turbid water entry	Power required - Sludge Pump	Power required - Clean Water Pump	Power required - Bridge and Polyelectrolyte
Units	m <sup>3</sup> /hour	m <sup>3</sup> /hour	ø meters	meters	Kw ~	Kw ~	Kw ~
<b>CH-3</b>	20	16	3	5	5.5	7.5	3
<b>CH-4.5</b>	50	40	4	8	7.5	11	3
<b>CH-6</b>	100	80	6	3	11	22	3
<b>CH-8</b>	190	150	8	3.5	15	37	4
<b>CH-10</b>	290	230	10	4	15	45	4
<b>CH-12</b>	420	330	12	4.5	22	55	4
<b>CH-14</b>	570	452	14	4.5	15+15	55	5
<b>CH-16</b>	750	600	16	5	15+15	37+37	5
<b>CH-18</b>	900	720	18	5	22+15	45+45	5
<b>CH-24</b>	1300	1100	24	5.5	22+22	75+75	5

# GS series Hydrocyclones

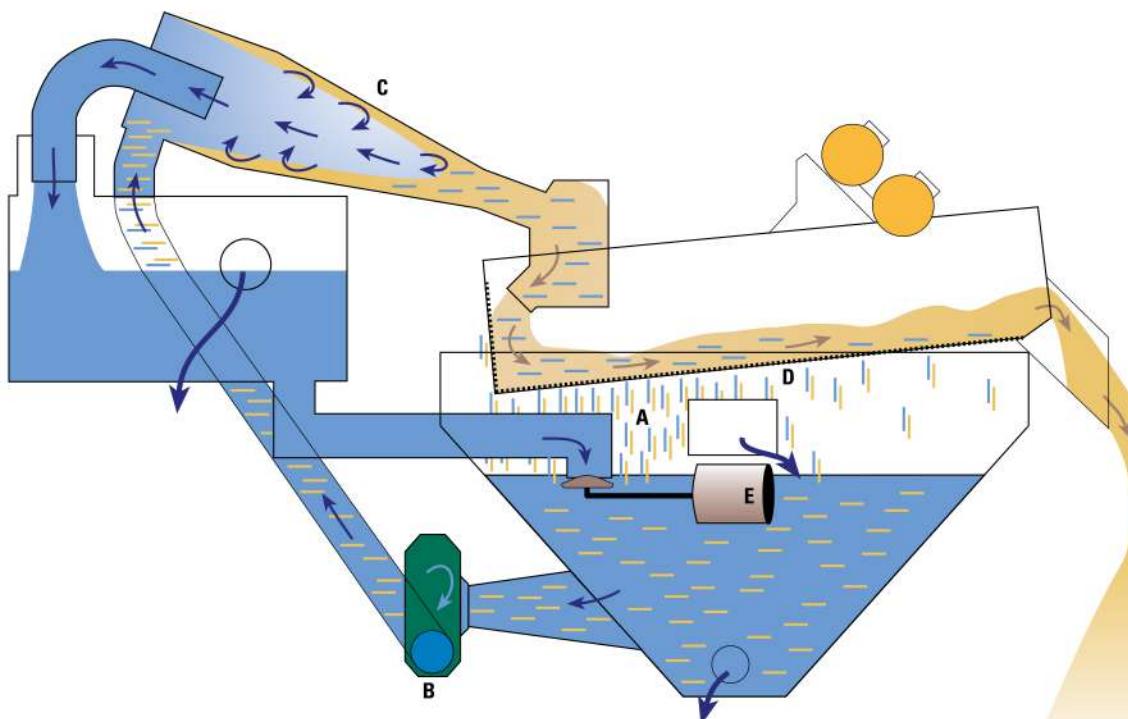
- High output recovery
- Easily replaceable cyclone wear parts for fast maintenance turn around
- Sturdy design in either horizontal or vertical configuration
- Special Linatex thick coated centrifugal pump
- High efficiency water separation drying screen
- Range of custom matched feeder screens to suit material where required



## General Specifications

	Sand recovery output	Turbid water treatment capacity	Pump power	Vibrator power	Weight									
Model	m³/hr	m³/hr	Kw	Kw	Kg	A	B	C	D	E	F	G	H	
<b>GS 100/425/140</b>	20	150	15-18.5	1.6+1.6	3300	4250	3500	1800	1050	450	2300	1160	2750	
<b>GS 100/425/225</b>	30	150	18.5	2.2+2.2	4200	3880	2650	2200	1470	500	2880	1660	3230	
<b>GS 150/550/140</b>	25	210	22	1.6+1.6	3800	4960	3750	1800	1500	450	2300	1660	2950	
<b>GS 150/550/225</b>	35	210	30	2.2+2.2	4600	5420	4250	2280	1470	500	2630	1660	3470	
<b>GS 150/550/300</b>	40	210	30	2.2+2.2	6000	5420	4250	2280	1470	500	2630	1660	3470	
<b>GS 200/675/300</b>	50	330	37	2.2+2.2	7100	6000	4400	2300	1470	500	2950	1660	3800	
<b>GS 200/675/360</b>	65	330	37-45	3.6+3.6	8600	6500	4800	2300	1470	500	2950	1660	3800	
<b>GS 200/675/450</b>	80	330	37-45	6+6	7500	6500	4800	2300	1470	500	3150	1660	3800	
<b>GS 200/800/360</b>	65	420	45	3.6+3.6	9000	6500	5500	2300	1470	500	2850	1660	4050	
<b>GS 200/800/450</b>	80	420	45	6+6	11200	7300	5500	2300	1470	500	3150	1660	4050	
<b>GS 250/800/450</b>	100	480	45	6+6	10200	7300	5500	2300	1470	500	3150	1660	4050	
<b>GS 200/800x2/630</b>	130	720	55-75	11	11700	8250	6000	2750	1470	500	3150	1660	4350	

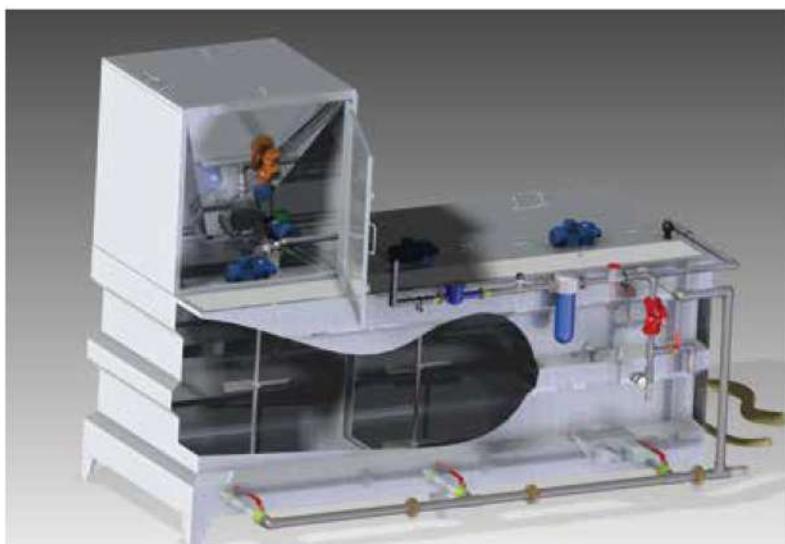
# Functioning of the Hydrocyclone



The water-sand-lime mixture is introduced into basin A. Pump B aspirates the water –sand-lime mixture from the bottom of basin A and sends it in a pressurized stream to cyclone C which, by cyclonic centrifuging, separates the clay, lime and the filler of the concentrated sand. The concentrated sand comes out of the top of the cyclone and ejects to the drying screen D which removes the water from the sand which then moves to the unloading chute. The mixture level in the basin A is stabilized by float E which opens and shuts the valve for the mixture (sand and water) recovery and keeps it at a constant level so as to ensure the pump cannot run dry.

# Poly-Electrolyte systems

- Durable stainless steel construction
- Easy access for all maintenance requirements
- Fully computerized integrated feed system.
- Polyelectrolyte metering
- Multiple stirrer mixing tanks for fast cycle time.
- Custom matched to the system.



**PES 3000**

## Poly-flocculant dosing units

	For a system capacity of m <sup>3</sup> /hr	No. of cells	Tank capacity ltrs	No. of stirrers	Kw	Kg (full)	Width Cm	Length Cm	Height Cm	Remarks
<b>PEL 1000</b>	60	1½	1000	1	1	1250	100	100	120	For liquid polyelectrolyte
<b>PEL 2000</b>	400	3	2000	3	2.5	2700	110	220	130	For liquid polyelectrolyte
<b>PES 2000</b>	400	3	2000	3	3	4220	110	220	230	For powder polyelectrolyte
<b>PES 3000</b>	1200	3	3500	3	4	4400	130	300	230	For powder polyelectrolyte



**PES 1000**



# **ELKAYAM**

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