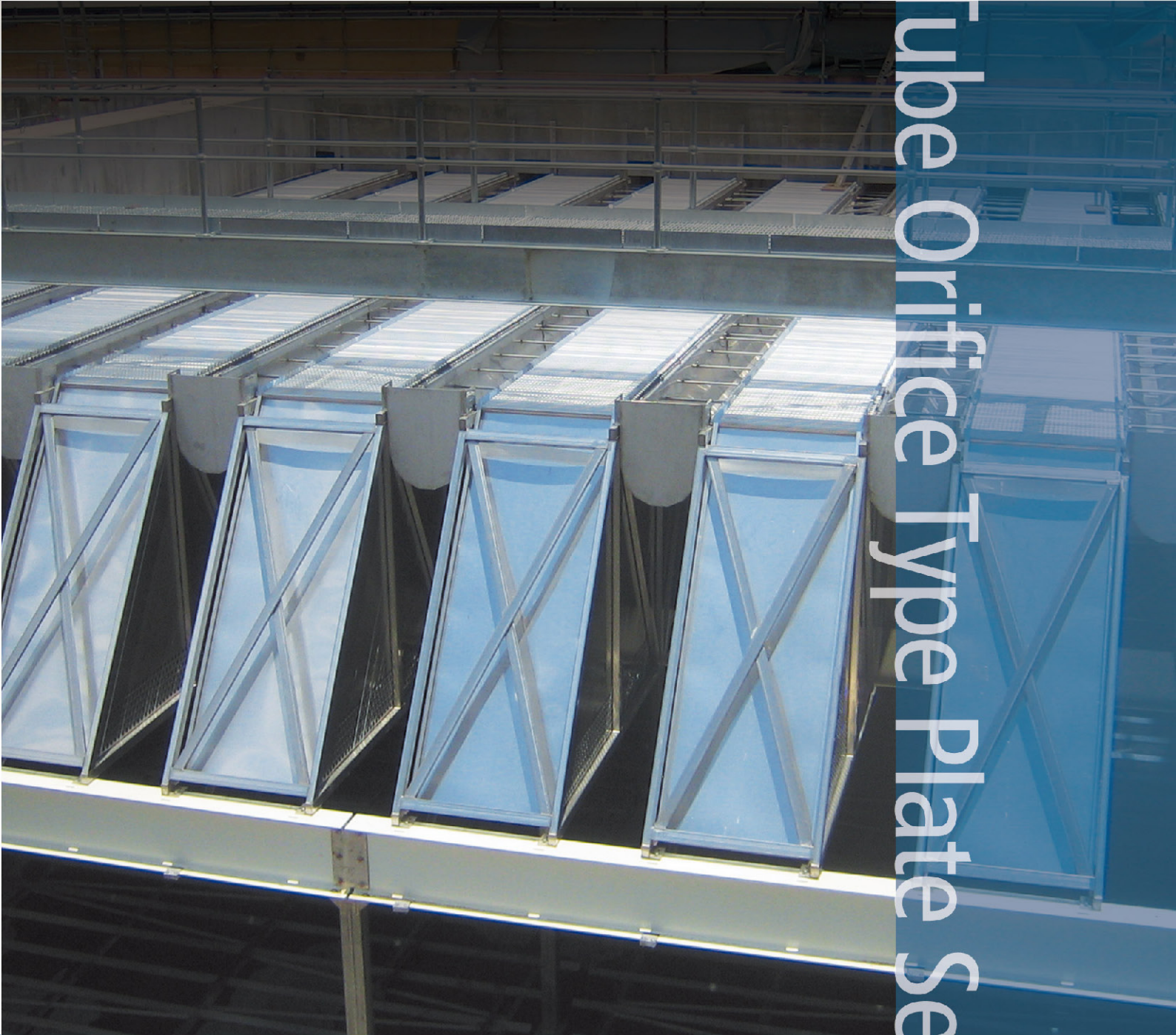



Clean & Sustainable
The Ofour Inc.,



Formerly Meurer Asia Inc.,

ADVANCED WATER AND WASTEWATER TREATMENT SYSTEM



Top Tube Orifice Type Plate Settler

The Ofour Inc.,
www.theofour.com

Plate Settler Outlook & Anatomy

Outlook

Flow Control Deck

Composed of top support/outlet tubes MRI's unique flow control deck extracts clarified water evenly across the plates and distributes it evenly into the effluent troughs.

RTR Sludge Collector Drive

Compact, Powerful, Reliable drive for underwater sludge collector.

Flow Control Orifices

Only MRI plates provide metered flow distribution across the entire plate width for even flow as water rises up through the plates and into the effluent tubes.

Self-Sealing Side Baffles

Plates are installed so that they stack and interlock to form a solid wall, which causes influent to enter the side inlet ports.

Inclined Plates

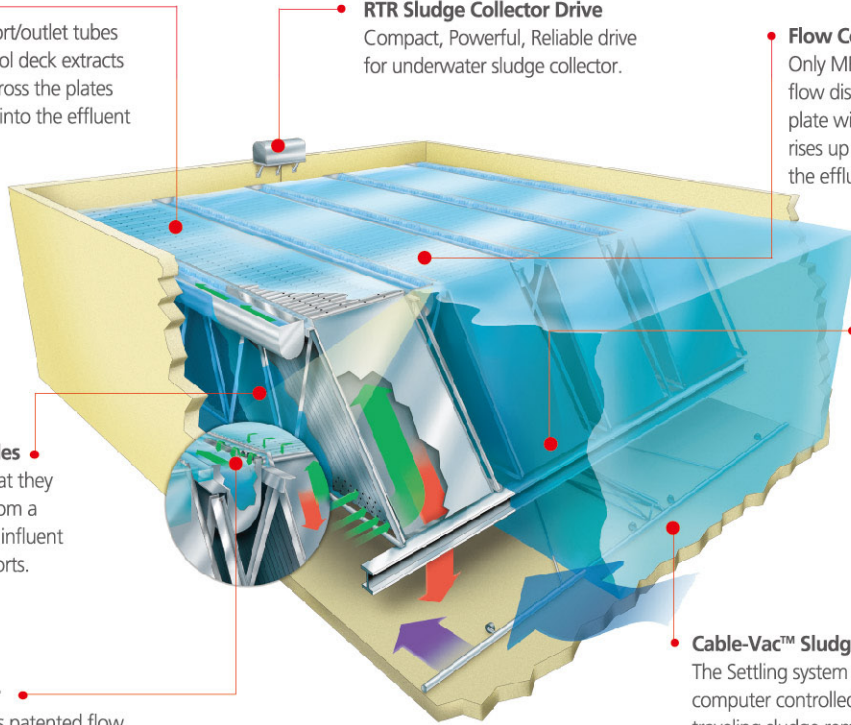
Available in 1.5~3.5m long in heights, the 100% stainless or non-metallic, such as ABS, plates are the smoothest, flattest and strongest plates in the industry

Leveling Flow Weir

Combined with MRI's patented flow control deck, The adjustable weir easily manages irregular flow velocities.

Cable-Vac™ Sludge Collector

The Settling system comes with a computer controlled, floor traveling sludge removal suction system designed specially for plates and manufactured by MRI

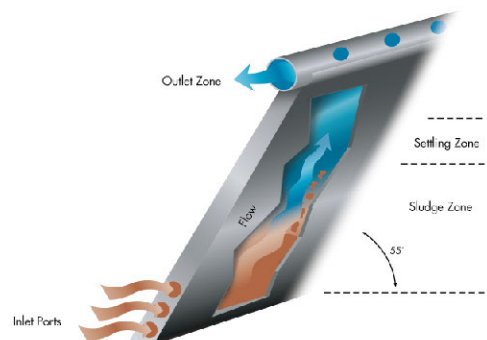


Outstanding Features of Plate Settler

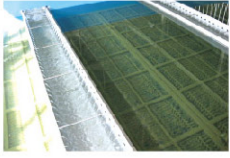
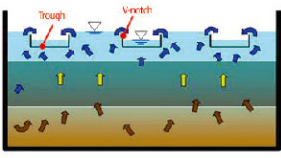
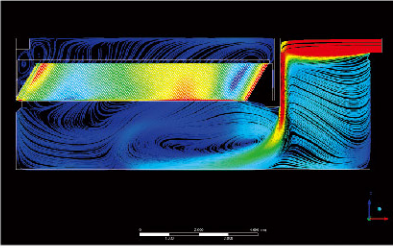

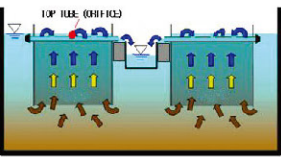
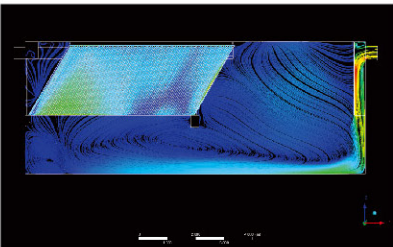
- ▶ Maximal settling performance with least footprint
- ▶ Hydraulically engineered modular plate
- ▶ Precise flow distribution by overflow orifice tube
- ▶ Stable clarified water quality
- ▶ Material-selective plate application
- ▶ Innovative time-saving in site installation
- ▶ Can be viewed and walked on
- ▶ Uninterrupted operation during maintenance

Ultimate Clarifier Performance

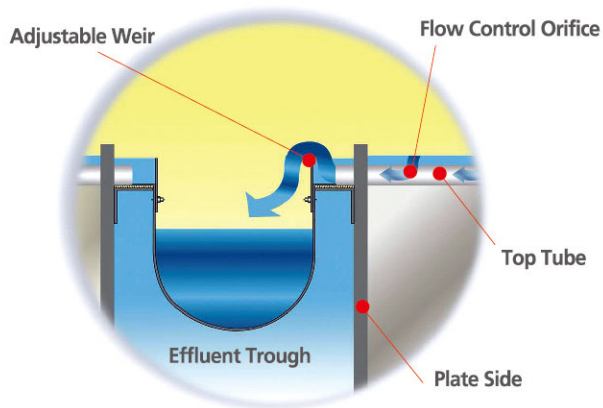
Meurer Research's inclined plate settlers dramatically shorten the distance particles must travel, greatly increasing the production of clarified water. Particles must travel only a few inches, rather than going several feet as in conventional clarifiers.



Hydraulic Movement Comparison

	Photo	Front view	CFD Simulation
Conventional Overhead Trough Type Plate			
		Non-uniform near the top of the plate as the flow tends to converge toward the weir outlet	
Top Tube Orifice Type Plate			
		Nice uniform up flow over the entire width and length of the plate	

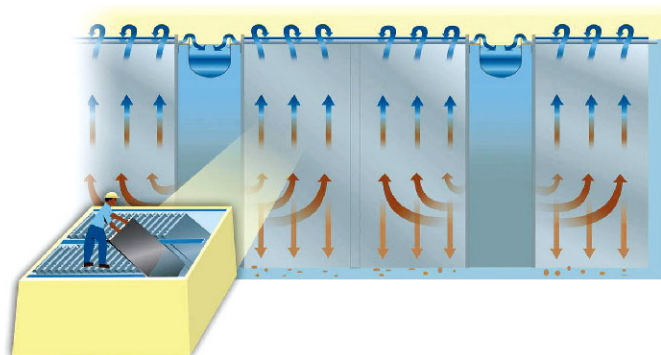
Outstanding Features



As clarified water is discharged from the top tubes at the top of the plates into the effluent troughs, MRI's micro-adjustable weir allows for precise control of flow velocity and equalization for enhanced efficiency.

Uniquely Designed for Easy Maintenance

Flow control orifices in the effluent tubes draw the flow up evenly across the entire plate width, utilizing the whole surface area for maximum settling efficiency. No other lamella clarifier system supports a 120kg concentrated load, and offers easy access without draining the basin.



MAJOR REFERENCES

▶ Samsung Electronics Tangjeong T.C LCD IWWTP(Asan.Korea)

Flow Rate	359,000 m ³ /day	
No. of Basins	84	
Process	Sedimentation with inclined plate settler	
Coagulants	Primary	Polymer & Lime
	Secondary	Gravital Settling
	Tertiary	Polymer & Ferric Chloride
Plate Material	304 S.S / ABS plastic	
Effluent Quality	Primary	Less than 20mg/l SS
	Secondary	Less than 10mg/l SS
	Tertiary	Less than 5mg/l SS
Completion Date	Aug 2006 ~ Dec 2011	



▶ LG Display LCD Plant IWWTP (Gumi / Paju, Korea)

Flow Rate	245,000 m ³ /day	
No. of Basins	29	
Process	Sedimentation with inclined plate settler	
Coagulants	Primary	Lime
	Secondary	Gravital Settling
	Tertiary	Polymer & Alum
Plate Material	304 S.S / ABS plastic	
Effluent Quality	Primary	Less than 50mg/l SS
	Secondary	Less than 20mg/l SS
	Tertiary	Less than 5mg/l SS
Completion Date	May 2004 ~ Sep 2011	



▶ Yeosu Joongheung IWWTP (Yeosu, Korea)

Flow Rate	32,000 m ³ /day	
No. of Basins	4	
Process	Sedimentation with inclined plate settler	
Coagulants	Polymer & Alum	
Plate Material	304 S.S / ABS plastic	
Effluent Quality	Less than 5mg/l SS	
Completion Date	Apr 2009	



▶ Sejong City MWWTP(Sejong, Korea)

Flow Rate	20,000 m ³ /day	
No. of Basins	2	
Process	Sedimentation with inclined plate settler	
Coagulants	Gravital Settling	
Plate Material	ABS plastic	
Effluent Quality	Less than 10mg/l SS, 10mg/l BOD	
Completion Date	Sep 2011	



▶ Suwon Seochocheon MWWTP (Suwon, Korea)

Flow Rate	47,000 m ³ /day	
No. of Basins	2	
Process	Sedimentation with inclined plate settler	
Coagulants	Polymer & Alum	
Plate Material	ABS plastic	
Effluent Quality	Less than 5mg/l SS, 0.5mg/l T-P	
Completion Date	May 2011	



▶ Juigalpa WTP(Juigalpa, Nicaragua)

Flow Rate	26,000 m ³ /day	
No. of Basins	7	
Process	Sedimentation with inclined plate settler	
Coagulants	Polymer & Alum	
Plate Material	ABS plastic	
Effluent Quality	Less than 2 NTU	
Completion Date	Feb 2010	



OUTSTANDING REFERENCES

Huge WTP Installation

Plant	Miramar Water Treatment Plant (San Diego, USA)
Engineer	Brown & Caldwell CDM Engineers MWH Engineers (on site)
Contractor	Western Summit Constructors
Flow	832,000 m ³ /day
Process	Sedimentation with inclined plate settlers followed by granular filtration
Coagulants	Polymer & Ferric Chloride
Raw Water Source	Miramar Lake
No. of Basins	4
No. of Plates	13,824
No. of Plate Packs	128
Plate Material	T-316L Stainless Steel
Effluent Quality	Under 2 ntu

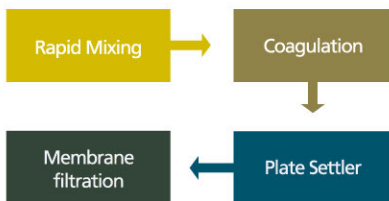


Pretreatment prior to Membrane Filtration

Plant Name	Location	Capacity	Kind of Water Source
Yeongdeungpo WTP	Seoul, Korea	26,500 m ³ /day(2010)	Lake
Erie WTP	Erie, USA	56,800 m ³ /day(2004)	Lake
Maple Grove WTP	Lakewood, USA	55,000 m ³ /day(2007)	Lake



YEONGDEUNGPO WTP



MAPLE GROVE DRINKING WTP



ERIE DRINKING WTP



Post Phosphate Removal in MWWTP

Plant	Cheongju MWWTP (Cheongju, Korea)
Flow Rate	330,000 m ³ /day
No. of Basins	7
Process	Alum Coagulated Clarification
Plate Material	ABS
Effluent Quality	Less than 0.29mg/l T-P, 4.8mg/l BOD
Completion Date	Sep, 2011

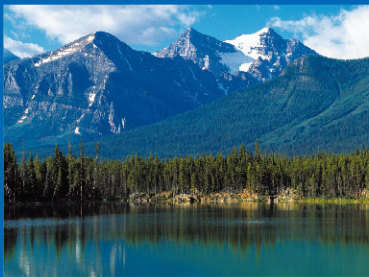
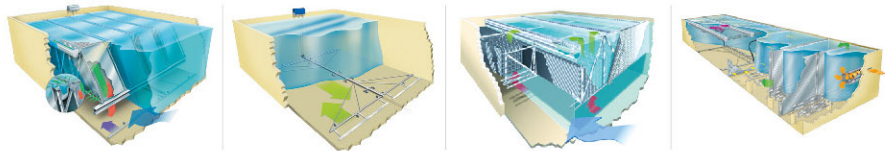


For Ecologically Clean Environment



Handling Items

- MRI plate settler
- Hoseless Cable-Vac sludge collector
- Tube settler
- Helical Inlet diffuser
- Flow equalization devices



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