



## WST兰美拉沉淀池

### WST Lamella Clarifier

#### 工作原理及理论

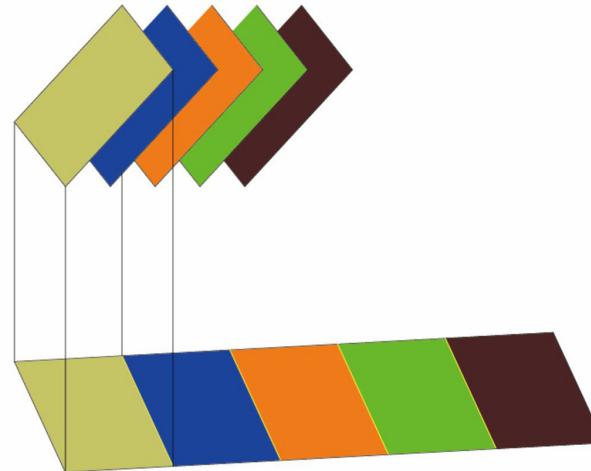
兰美拉沉淀系统基于德国哈真(Hazen)教授20世纪初提出的“浅池理论”。其核心是提出沉淀能力与沉淀池面积有关，与沉淀深度无关。

兰美拉沉淀面积为斜板投影面积积累加（如右原理图）

#### Working principle

Lamella Clarifier system is based on the "shallow pool theory" of German Hazen professor put forward the early 20th century. Core theory is: sedimentation performance depends on effective setting area, nothing to do with sedimentation depth. Lamella Clarifier system setting area is inclined plate projection area accumulation.

The precipitation area of lamella is accumulated by the projection area of inclined plate (as shown in the right schematic diagram)



#### 技术优势

- ▶ 地小：将斜板加长，提高沉淀器分离效率，节约1.5~2倍占地面积。
- ▶ 配水均匀：通过等阻力配水及上清液直接收集，保证每组斜板配水量的均衡。
- ▶ 无水力死角及漩涡。
- ▶ 斜板不堵塞：斜板倾角采用60度，板间距8~10cm且斜板区设反洗管。
- ▶ 坚固耐用：采用6mm硬质PVC或2mm不锈钢板作为分离薄板，模组块式嵌入，强度高且易冲洗保养。
- ▶ 排泥顺畅：集泥斗采用刮（浓缩）机，确保固体沉淀物不板结、不淤积堵塞。

#### Technical advantages

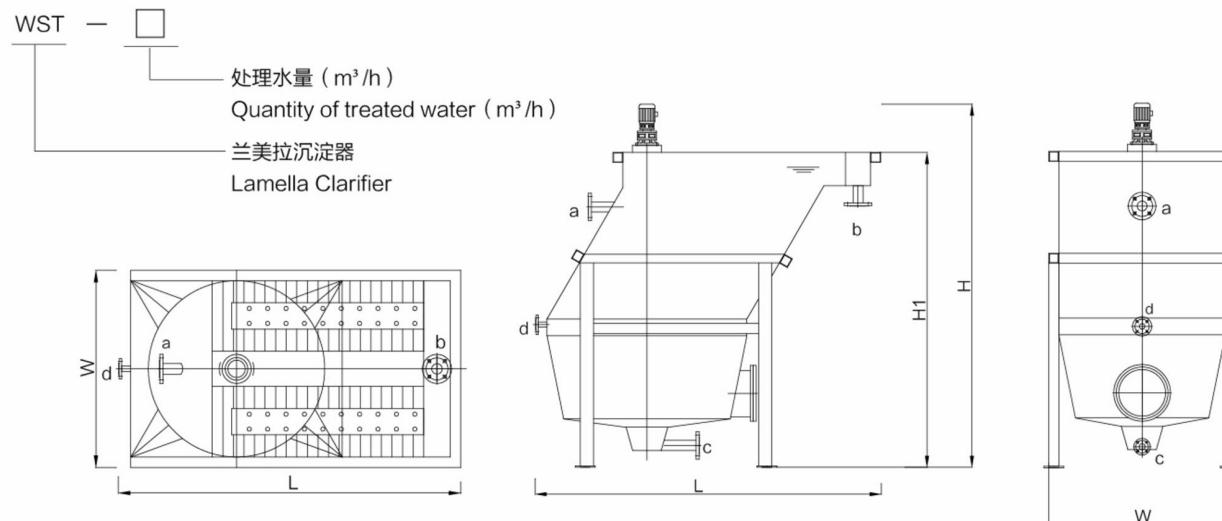
- ▶ Small floor area: lengthen the inclined plate, improve the separation efficiency of the precipitator, and save 1.5~2 times of the floor area.
- ▶ Uniform water distribution: through equal resistance water distribution and direct collection of supernatant, to ensure the balance of water distribution of each group of inclined plates.
- ▶ No dead angle or whirlpool.
- ▶ The inclined plate is not blocked: the inclined angle of the inclined plate is 60 degrees, the plate spacing is 8~10cm, and the inclined plate area is provided with backwash pipe.
- ▶ Strong and durable: 6mm rigid PVC or 2mm stainless steel plate is used as separation sheet, module block type is embedded, high strength and easy to wash and maintain.
- ▶ Smooth sludge discharge: scraper (thickener) is used for sludge collecting bucket to ensure that solid sediment is not hardened and silted up.



## 应用领域

- |            |            |        |   |
|------------|------------|--------|---|
| ▶ 工业生产用水   | ▶ 金属氢氧化物污水 | ▶ 电镀废水 | ▶ Industrial production water                 |
| ▶ 纸浆&造纸厂   | ▶ 市政污水     | ▶ 印染废水 | ▶ Pulp & paper mill                           |
| ▶ 钢铁行业, 除磷 | ▶ 制革废水杂质去除 |        | ▶ Iron and steel industry, phosphorus removal |
|            |            |        | ▶ Metal hydroxide sewage                      |
|            |            |        | ▶ Municipal Sewage                            |
|            |            |        | ▶ Removal of impurities in Tannery            |
|            |            |        | ▶ Wastewater                                  |
|            |            |        | ▶ Electroplating wastewater                   |
|            |            |        | ▶ Printing and dyeing wastewater              |

## 型号意义 Meaning of the model



## 型号规格及相关技术参数 Model specifications and related technical parameters

型号 Model	处理量 Capacity (m³/h)	功率表 Power (KW) 刮泥浓缩机 Mud scraper thickener	规格尺寸 Dimension (m)			管口表DN ( Nozzle list )			
			L	W	H/H1	进水口 inlet (A)	出水口 Outlet (B)	排泥口 Sludge outlet (C)	反洗口 Backw (D)
WST-2	~2	0.25	2	1.1	2.7/1.9	50	50	50	40
WST-5	~5	0.25	2.6	1.6	3.4/2.5	80	50	50	50
WST-10	~10	0.25	3.4	1.8	3.8/3.0	100	80	50	50
WST-20	~20	0.25	3.4	2.2	3.8/3.0	150	150	50	50
WST-30	~30	0.25	4.2	2.2	3.8/3.0	150	150	50	50
WST-40	~40	0.25	4.0	2.8	3.8/3.0	200	200	50	50
WST-50	~50	0.25	4.7	2.8	3.8/3.0	200	200	50	50
WST-60	~60	0.25	4.8	3.0	3.8/3.0	250	200	50	50
WST-70	~70	0.25	5.1	3.2	3.8/3.0	250	200	50	50
WST-80	~80	0.25	5.1	3.4	4.0/3.2	250	250	80	50
WST-90	~90	0.25	6.3	3.0	4.0/3.2	250	250	80	50
WST-100	~100	0.25	7.1	3.0	4.0/3.2	250	250	80	50
WST-110	~110	0.25	7.8	3.0	4.0/3.2	300	250	80	50
WST-120	~120	0.25	8.3	3.0	4.0/3.2	300	300	80	50