



## Aries Inclined Plate Clarifier

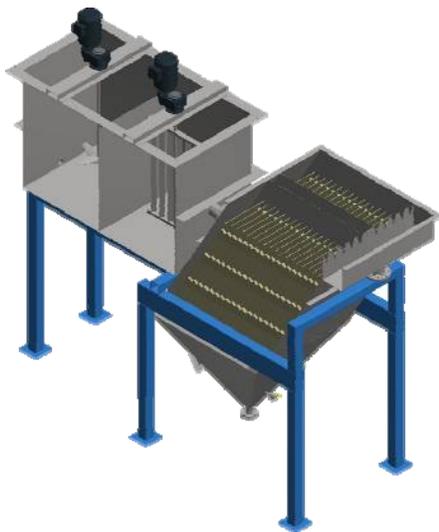
### IPC Specifications

The inclined plate clarifier shall be used to separate entrained suspended solids from a wastewater stream having a flow rate of up to 0.25 gallons per minute per horizontally projected settling area of the clarifier. Water enters the clarifiers flash mix tank where we rapidly mix the flocculant that is typically applied to pull together colloidal suspended solids. One flocculation tank with mixer is provided for more detention time while mixing the polyelectrolyte with the wastewater.

The floc mix section provides 15 minutes detention time. The floc mixer shall be of the "picket fence" design with variable speed drive. The floc tank discharge shall be a low velocity design to evenly distribute the flow to the IPC center feed section.

The majority of the flocculated suspended solids settle into the bottom cone as the flow enters the feed chamber section that is in the center of the IPC body. As the hydraulic flow moves into the clarifier's inclined plate stacks it becomes laminar which permits remaining suspended solids to settle onto the lower plate surface and slide down the incline, falling into the clarifier cone sludge hopper. The settled sludges collect in the sludge hopper and continue to concentrate and are discharged on an as needed, typically by diaphragm pump.

This inclined plate clarifier has 316 SS plates at a 60 degree incline from the horizontal. This steep angle assists the downward flow of settled solids to the bottom hopper. Plates have 2" spacing. All metal fasteners are 316 SS. The inclined plates are supported the full length on both sides of the plates. The maximum plate width is 24" to promote uniform laminar flow. Extended area slots are utilized to reduce clogging.



The outlet area utilizes removable type weir boxes with orifices to force uniform upward pressure over the entire plate area. Each plate section provides equalized flow to prevent channeling. The clarified water gravity flows from the top of the clarifier to the customers discharge point.

Aries offers polypropylene and well as stainless and carbon steel construction of mixing tanks and IPC body.

#### Carbon Steel Coating Surface Preparation:

Sand blast steel surfaces to meet Society for Protective Coatings SSPC-SP6 cleaning specifications

#### Prime Coat:

Sherwin Williams Macropoxy 646 High Solids Epoxy @ 3.0-6.0 mils DFT

#### Finish Coat:

Sherwin Williams Macropoxy 646 High Solids Epoxy @ 3.0-6.0 mils DFT

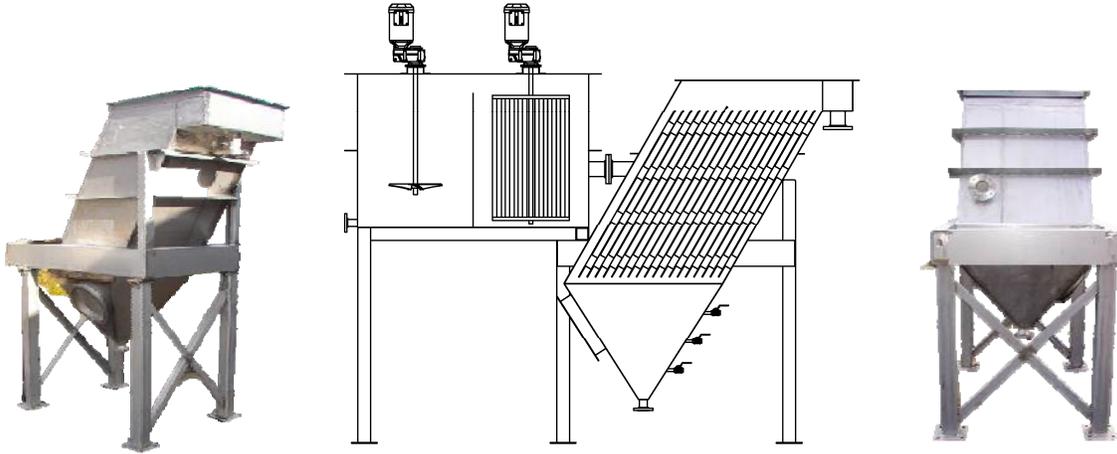
Color of coating shall be safety blue SW-4086. Refer to Sherwin Williams Macropoxy 646 High Solids Epoxy product bulletin for additional application details.

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## Aries Indined Plate Clarifier



Aries Model #	Projected Settling Area (ft <sup>2</sup> )	Flow (gpm)	Clarifier Width (ft)	Clarifier Length (ft)	Clarifier Height (ft)
IPC/80/60	80	20	4.5	10.0	8.5
IPC/100/60	100	25	4.5	11.0	9.0
IPC/120/60	120	30	4.5	11.5	9.5
IPC/140/60	140	35	4.5	12.0	10.0
IPC/180/60	180	45	4.5	12.5	10.5
IPC/200/60	200	50	5.5	10.5	11.0
IPC/300/60	300	75	5.5	13.0	12.0
IPC/400/60	400	100	5.5	13.5	12.5
IPC/500/60	500	125	6.0	14.5	13.5
IPC/600/60	600	150	6.0	16.0	14.5
IPC/800/60	800	200	8.0	13.0	14.5
IPC/1000/60	1000	250	8.0	15.0	15.5
IPC/1500/60	1500	375	11.0	17.0	18.0
IPC/2000/60	2000	500	11.0	23.0	20.0

**Notes:**

- Above chart is for 60-degree Inclined Plate Clarifier with Floc Tank (IPC)
- Flow (gpm) rating is based upon conservative 0.25 gpm/ft<sup>2</sup> projected settling area

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