



Inclined Plate Clarifier – IPC

GENERAL INFORMATION

The **Westlake Environmental** Inclined Plate Clarifier (WIPC) is designed for settling solids and precipitated metals. One of the more desirable features of the WIPC is its compact design. The units easily fit in tight locations with low ceiling height and do not require expensive access platforms for maintenance. With proper chemical pre-treatment, the suspended solids in the effluent are often less than 10 mg/L.

The WIPC is unique in the industry offering many advantages over conventional plate clarifiers.

- ✓ Large inlet water chamber to dissipate the dynamic energy of the water and distribute the flow.
- ✓ Solids settle directly into the sludge chamber. Only fines and clarified water enter the inclined plates.
- ✓ Plate spacing of one inch allows twice the projected settling area per clarifier volume.
- ✓ An optional full width stainless steel auger is offered to convey sludge to a single discharge port.

The 55-degree inclined plates are slick UV stabilized polypropylene sheets assembled in bundles with stainless steel rods, PVC spacers and fasteners. The plates are locked in at the proper angle and spacing by a unique design that provides both strength and rigidity. The plate packs are designed to be cleaned in place so maintenance is minimal. Sizes are available from 5 GPM to 1,100 GPM.



OPERATION

The raw water enters the WIPC inlet chamber and is immediately dispersed through a non-clog diffuser across the width of the clarifier, which reduces velocities and turbulent flow, and begins the settling process. The flow leaves the inlet chamber under a weir that directs the flow evenly under the plate pack for heavier solids settling. Fines in the water then begin a vertical path through the plate pack and stop their vertical motion, fall downward to the plate surfaces beneath them and descend into the sludge chamber. Clean water flows upward along the bottom of the plates into the effluent chamber prior to discharge via an effluent flange.

APPLICATIONS

- Air Scrubbers
- Aircraft Wash Racks
- Automotive
- Chemical Plants
- Groundwater Remediation
- Fabricated Metal Plants
- Utility Companies
- Microprocessors
- Glass Factories
- Manufacturing Process
- Plating Waste
- Metal Hydroxides
- Metal Platers
- Stone, Glass, Clay Ind.
- Power Plants
- Mining
- Pulp & Paper
- Steel Mills

Westlake Environmental LLC | Water Cleaning Systems

P.O. Box 480, Grand Haven, MI 49417 | 616-610-1450 | www.WestlakeEnv.com

Inclined Plate Clarifier – IPC

HOW DO THE PLATES WORK?

The inclined plates sit at a 55° angle from horizontal and are the heart of the Inclined Plate Clarifier. Descending solids settle on the top of the plates and descend into the sludge chamber, while the clean water flows upward along the bottom of the plates and into the effluent chamber.

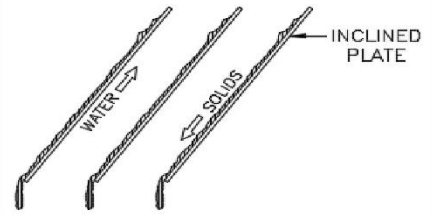


PLATE PACK DETAIL

Polypropylene plates spaced 1" on center are standard. Fiberglass, PVC and stainless-steel plates are also available, with spacing up to 2".

MATERIALS OF CONSTRUCTION

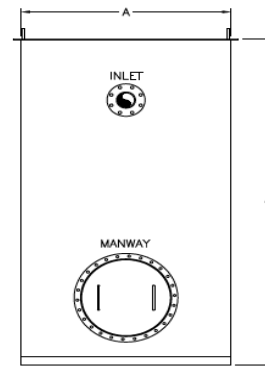
The WIPC is offered in A36 carbon, 304 and 316 stainless steel materials. Plate pack is offered in polypropylene, 304 and 316 stainless steel materials. Plate spacing ranges from 1" to 2", 1" is standard.

AVAILABLE OPTIONS

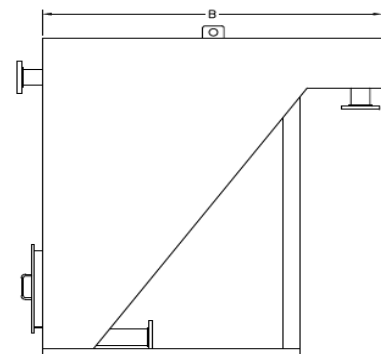
- Influent Feed System
- Effluent Pump Out
- Sludge Pump Package
- NEMA 7 Controls
- pH Adjustment Systems
- Solids Contact Recycle
- Covers
- Walkways
- Sludge Dewatering

MODEL	MAX FLOW	(A)	(B)	(C)
WIPC-4-110	30	2'-1"	6'-4"	7'-4"
WIPC-4-220	60	4'-1"	6'-4"	7'-4"
WIPC-4-330	90	6'-1"	6'-4"	7'-4"
WIPC-4-440	120	8'-1"	6'-4"	7'-4"
WIPC-4-550	150	10'-1"	6'-4"	7'-4"
WIPC-4-660	180	12'-1"	6'-4"	7'-4"
WIPC-4-770	210	14'-1"	6'-4"	7'-4"
WIPC-4-880	240	16'-1"	6'-4"	7'-4"
WIPC-4-990	270	18'-1"	6'-4"	7'-4"
WIPC-4-1100	300	20'-1"	6'-4"	7'-4"
WIPC-8-1320	350	12'-1"	8'-8"	11'-0"
WIPC-8-1540	400	14'-1"	8'-8"	11'-0"
WIPC-8-1760	460	16'-1"	8'-8"	11'-0"
WIPC-8-1980	520	18'-1"	8'-8"	11'-0"
WIPC-8-2200	600	20'-1"	8'-8"	11'-0"
WIPC-8-2420	660	22'-1"	8'-8"	11'-0"
WIPC-8-2640	770	24'-1"	8'-8"	11'-0"
WIPC-8-2860	880	26'-1"	8'-8"	11'-0"
WIPC-8-3080	990	28'-1"	8'-8"	11'-0"
WIPC-8-3300	1,100	30'-1"	8'-8"	11'-0"

Max flow rate is in GPM and varies based on TSS concentration.
Information subject to change without notice.



INFLUENT END VIEW



SIDE VIEW

