PEERLESS Europe
MAKING ENERGY SAFE, EFFICIENT AND CLEAN

skimovex

Oily Water Separators
IGF Recycle Type.

General

The Peerless Europe Ltd R-Series flotation units offer the same advantages as the impellor type, i.e. packaged units, quick opening access doors, ease of operation and low maintenance costs.

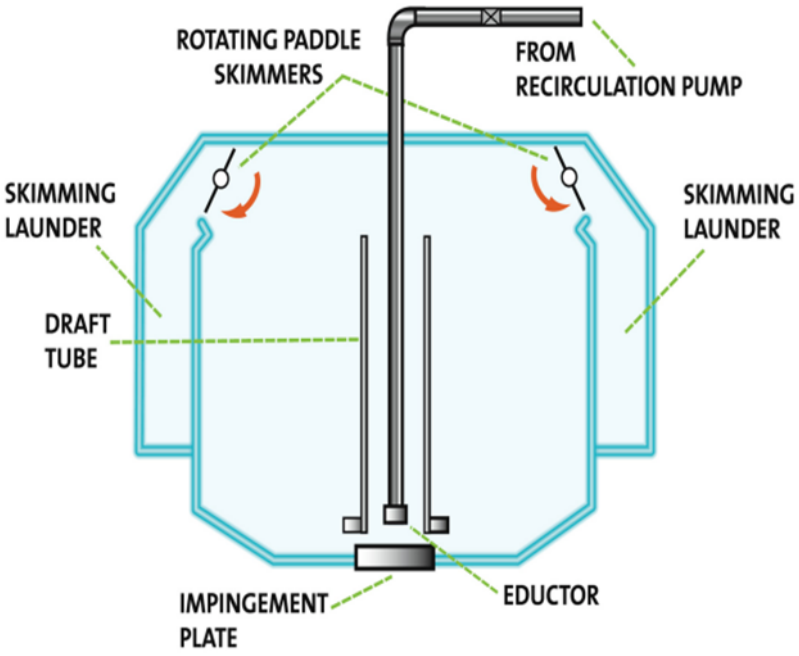
Number Of Cells	Four
Retention time per cell	1-2 Minutes
Bubble Size	0.5mm

PRINCIPAL OF OPERATION

This system is normally used on offshore produced water clean-up and generally follows a tilted plate separator to give back-up and final polishing before discharge.

The wastewater enters the first cell where the clean effluent is injected through an eductor under pressure by the recycle pumps. Inside the eductor, a venturi is placed which creates locally a low-pressure area. Via the T-bar, air is sucked in from above the water level inside each cell and subsequently injected into the cell along with the clean effluent. The injected air (or blanketing gas in cases where the unit is blanketed for safety or process reasons) will attach itself to the impurities, which will float to the surface and form a froth layer.

The water level inside the unit is maintained by a level control valve mounted in the outlet line of the unit, which is in itself operated by a level controller mounted on the unit.



WHY IGF

The Recycle type unit is particularly suitable for clarifying (waste) water in environments such as offshore applications, refineries and desert applications. The reliability however, may be just as important to operators who require an installation with minimum attendance by maintenance crews.

The heavy duty type flotation unit is especially designed for ease of maintenance, accessibility, simple operation, plus a rigid construction and low energy requirements.

The skid mounted unit can be placed on any suitable level area such as a production deck, an offshore platform or a concrete base onshore.

Installation Requirements

Installation requirements are minimal:

- Sufficient pressure or head to feed the desired amount of liquid to the unit.
- A suitable below grade effluent discharge if gravity discharge is acceptable, otherwise treated effluent pumps will be required.
- A discharge point for the concentrated oil or contaminant removed in the flotation process. In oil production operations this is usually accomplished by draining the oil by gravity to a collection sump, or by pumping the oil back into the primary separation system or pre skimmer upstream of the flotation unit.
- A suitable power supply for the particular unit chosen.
- Where pneumatic level controls are used, a suitable air supply is required.

Typical IGF Type unit supplied by Peerless.