"Chiariflus®" LAMELLA OIL SEPARATORS

"Chiariflus®" lamella oil separators work by coalescence, according to the basic working principles of the CPI and TPI oil separators first used by american oil indutries.

Compared with those ones, **"chiariflus®"** oil separators optimize the process results, as they are not realized with parallel plates, but with tubolar ducts that increase their efficiency.

This is possibile thanks to the larger contact surface, size given, and to the exclusion of preferencial lanes.

The physical aggregation of oil drops thus raises. As the drops diameter becomes larger, they can float more easily.

The oil separator is diveded in three main parts:

- A first roughing compartment, where the greatest part of oil surfaces and the present sedimentable solids precipitate. Oils are then eliminated by a suitable level spillway, whereas solids are discharged through the bottom drain.
- A second finishing compartment, where the remaining oil surfaces thanks to the lamella pack. This one, crossed top-down by the liquid to be treated, makes oil drops' velocity become lower. These drops, striking against the walls of the pack, thicken by aggregation and they consequently surface more easily, coming out from a second level spillway.
- A third compartment for clarified water outlet. This one may be completed with a special polyurethane foam absorbent filter, to hold possible residual little traces of oil and grease.

The oil separator performance depends not only on oil features and inlet liquid temperature, but also on the flow rate and therefore on the flow-speed through the lamellar pack, such as on the hydraulic load for each square-meter of surface.