ALLEGRI ecologia

Technologies and solutions for water treatment

company

Since the 80's we have been taking care of municipal and industrial wastewater treatment for **new plants** and for the **upgrading** of already existing ones through technologies that achieve the best performance with small management costs and low footprint.

research and development

We have always aimed to perfection respecting environmental sustainability. That's why our skilled and expert team is constantly engaged in the research and development of new products.

From the design drawing, by realizing prototypes and pilot plants, we develop better and better solutions as for efficiency, reliability and durability.

Municipal wastewater

Industrial wastewater

Drinking water

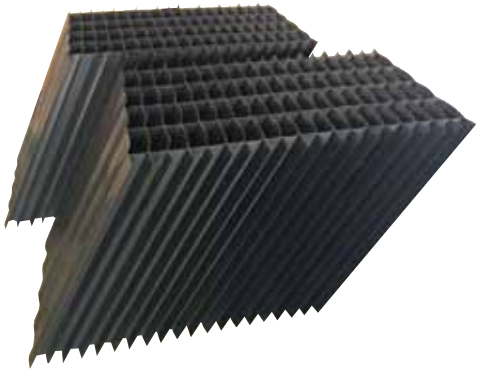
Reuse

Lamella chiariflus®

Chiariflus® lamella settlers speed up precipitation of settling solids and work statically according to physical laws that highly improve the performance compared with traditional static systems.

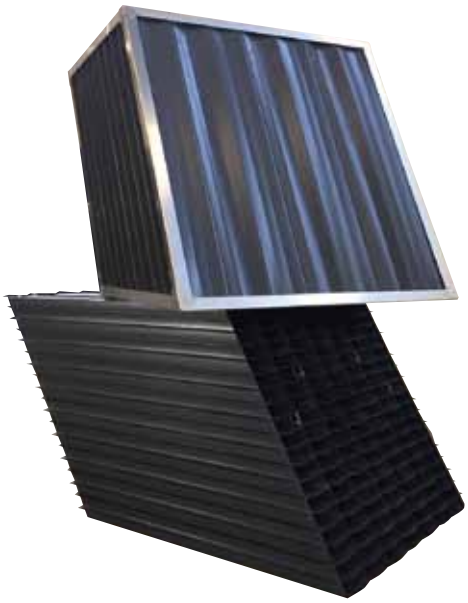
Chiariflus® lamella settlers allow reducing drastically the required area for the sedimentation sector, by about 90%; this means a considerable reduction in civil or prefabricated works and ancillary electromechanical equipments together with a low environmental impact.

Chiariflus® lamella packs applications are the most different: primary treatment, secondary treatment, tertiary treatment, physico-chemical treatment, drinking water, upgrading of existing settlers, oil separation. They can be successfully used both for municipal and for industrial water, both in new plants and for the upgrading of facilities that have become inadequate due to population increase, as for municipal plants, or to the processing water increase, as for industrial plants.



Chiariflus® lamella benefits can be summarised as follows: low environmental impact – general management costs saving – maintenance costs saving – energy consumption saving – simple management – minimization of negative effects of wind and temperature changes – reuse of a great part of water for some kind of processing – modular system.

The long experience in the different performed installations and the constant commitment to meet each Customer's peculiar requirements have let us find and take the key features for our chiariflus® lamella to optimize results and be so sturdy to overcome every drawback still present in competitors' products all over the world.



Chiariflus® lamella packs, patented, are made of modular self-supporting tubular ducts. They are the best solution for water clarification, they are custom-made according to each specific case, can be fitted with perimeter stainless steel frame and equipped with all the ancillary carpentry tools for proper installation.

The PVC employed for our models CI/43.50 and CI/80.105 complies with the most restrictive standards, having high mechanical strength, resistance to chemicals, resistance to biological aggression; it is self-extinguishing and resistant to fire, hydrophilic, light and characterized by small load loss.

Model	CI/43.50	CI/80.105	CV/43.50	CV/80.93
Material	PVC	PVC	PS	PS
60° Lamella pitch	50 mm	105 mm	50 mm	95 mm
45° Lamella pitch	61 mm	130 mm	-	-
60° Duct size	50 x 135 mm	105 x 135 mm	80 x 95 mm	150 x 150 mm
45° Duct size	61 x 135 mm	130 x 135 mm	-	-
60° Equivalent surface	19,60 m²/m³	10,60 m²/m³	15,00 m²/m³	8,15 m²/m³
45° Equivalent surface	24,50 m²/m³	13,25 m²/m³	-	-
60° Vertical height (*)	500/2000 mm	500/2000 mm	500/2000 mm	500/2000 mm
45° Vertical height (*)	730/870 mm	730/870 mm	-	-

(*) Possibility of different heights depending on the specific case.

Enbloc lamella settlers chiariflus® & chiariflus monovasca®

Enbloc lamella settlers chiariflus® SLM are wholly made of 4 mm thick carbon steel sheet properly treated according to the specific case or AISI 304L or AISI 316L stainless steel sheet. Besides, the tank, on the outside, has 8 mm thick perimeter ribs ; the resultant high structural strength, necessary to resist water pressure on the walls, ensures perfect durability, thus avoiding possible deflections.

Enbloc lamella settlers chiariflus® SLM are designed and manufactured considering all the fundamental parameters of sizing according to the peculiar kind of application.

Enbloc lamella settlers chiariflus® SLM are designed and manufactured with a longitudinal perimeter flange that divides the tank into two sections , so that they can always be carried in standard trucks and/ or containers, to be then easily coupled on-site .

Allegri Ecologia is provided with standard models, but our technical staff can develop different solutions according to the specific case in order to meet any peculiar customer's requirement. In this regard, Enbloc lamella settlers chiariflus® SLM can also be supplied with the relative integrated calm and contact compartment, inside the same structure.

The opportunity of installing one single machine allows to reduce significantly installation time and to have a better environmental impact.

Enbloc lamella settlers chiariflus® SLM can be supplied with the standard static sludge extraction system but also with the dynamical version by bottom screw.

Enbloc lamella oil separators chiariflus®

Enbloc lamella coalescence oil separators chiariflus® DLM rely on the basic principles of operation of CPI e TPI oil separators.

Compared with the latest, Enbloc lamella oil separators chiariflus® DLM optimize the process results: they are not made of parallel plates , but of tubular ducts which increase efficiency, both because of the developed contact surface, size given, and because of the exclusion of preferential paths; in this way, the physical aggregation effect of present oil drops increases. The larger diameter achieved thus facilitates the relative surface skimming.

Enbloc lamella oil separators chiariflus® DLM are basically composed of three sections:

- roughing compartment
- finishing compartment with lamella pack
- compartment for clarified water outlet; this one can be integrated with a special polyurethane foam absorbent filter

Biological Disk Rotors

Biological Disk Rotors RBD® are a proper alternative solution to the traditional oxidative process, with the following advantages: activation speed, process autonomy, high elasticity, better performance at low temperature, insensitivity to mineral oils, hydrocarbon and toxic substances, no exhalation or insects, no aerosol effect and absolute silence, simple and cheap management, saving of areas, civil works and equipments.

Biological Disk Rotors RBD® are the only ones with a cross-linked anti-collapse supporting framework.

Biological Disk Rotors RBD® have a steel radial-ply bearing structure that is combined with the central shaft into a single body: this type of construction ensures high resistance to bending and twisting for long service life.

The disks composing the RBD® Biological Rotors are divided into interchangeable modular sections.

They are not subject to strains that could be damaging and their possible replacement can be easily made without removing the machine from its housing.

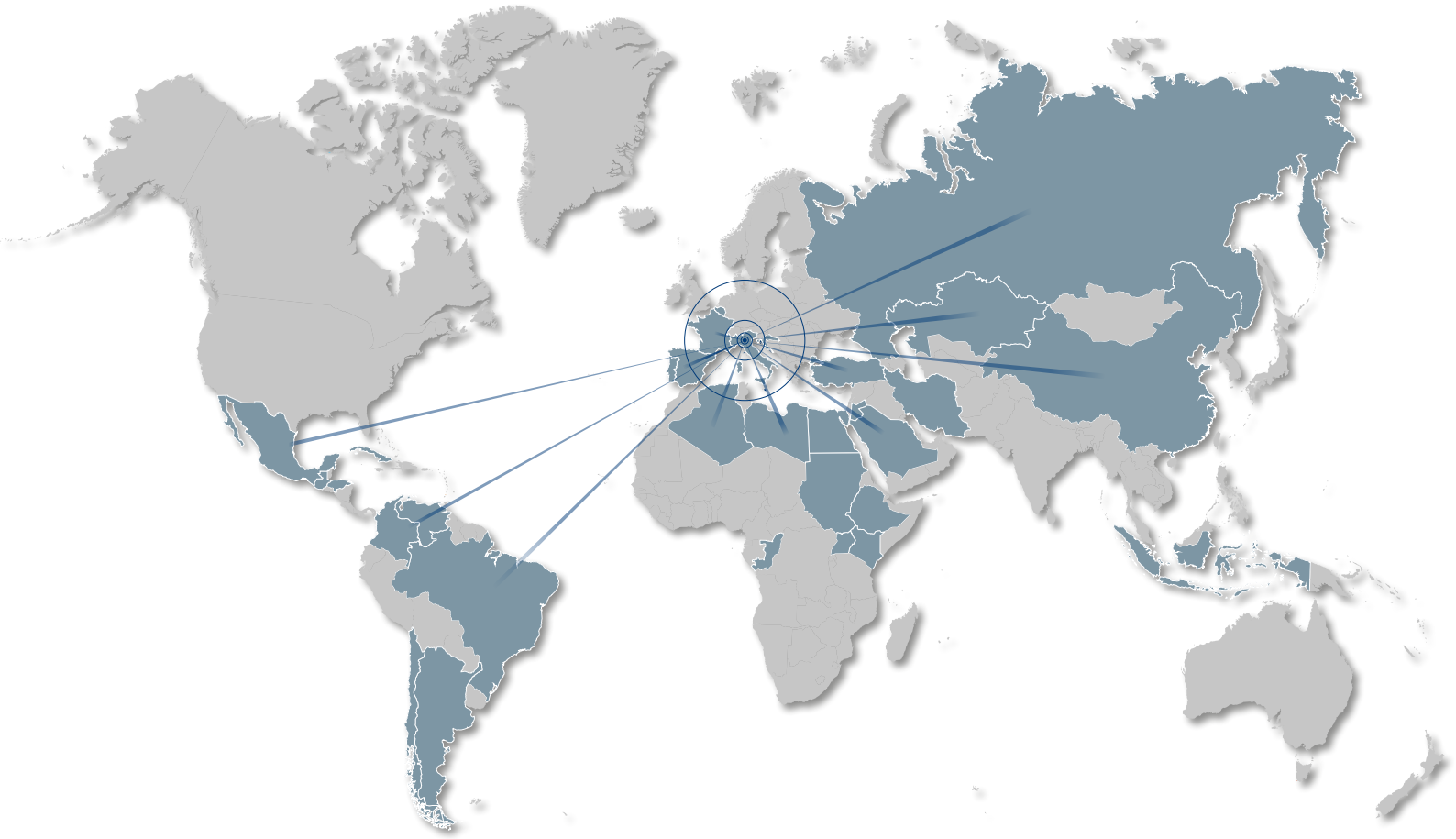
The RBD® system allows to develop different biological active surfaces inside the same machine, with the further possibility of implementing the surface by simple replacement of the modular sections, according to the specific requirement – HD model.

The RBD® system can be employed both in new plants as full or roughing treatment for a load reduction that goes from 50% to 90%, and in already existing plants for their upgrading, with small electricity and area requirement.

The RBD® system can be employed in the most disparate fields, such as for the treatment of sewage effluents coming from urban and touristic settlements, campsites, food, wine and canning industries, breweries, distilleries, dairies, dyeworks, farms etc.

Allegri Ecologia offers a standard range of RBD® models, but can also give specific quotes and solutions to meet any peculiar request, with custom-made and even turn-key arrangements.

Italy	Libya	Jordan	Mexico
Croatia	Egypt	Saudi Arabia	Honduras
Belgium	Sudan	Iran	Guatemala
France	Ethiopia	Russia	Colombia
Spain	Kenya	Kazakistan	Venezuela
Portugal	Uganda	China	Brazil
Malta	Congo	Indonesia	Chile
Algeria	Turkey	Cuba	Argentine



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