



Especialistas en mecánica de fluidos

## Rotary distributors SC, DC y M



### INTRODUCTION:

**FILTRAMAS, S.A.** supplies **rotary distributors** designed to meet the customer's needs. The design takes into account the available data regarding diameter, maximum flow rate and minimum flow rate. If the customer so desires, our technical service will advise him on the available options and which is the configuration and intensity of flow that better adapt to his needs.

There are single chamber models with splitter arms, double or triple chamber for strong flow rate variations, and motorized with the possibility of speed control. They are manufactured in stainless steel and protected carbon steel.

Bacterial beds or trickling filters are among the oldest biological wastewater treatment systems. It is an aerobic biological purification system whose operation is based on circulating air and wastewater through a porous medium. They are configured in the form of a fixed non-submerged crop and are composed of a bed, usually of large diameter, which may be made up of natural materials - boulders, metallurgical coke, slag or anthracite - or plastics, and on whose surface the waste water is uniformly applied by means of distributors, in the form of rain. At the bottom of the bed are the drainage system for the effluent discharge from the process and the air intake system for ventilation.

### DESCRIPTION:

**FILTRAMAS rotary distributors** are designed to distribute water evenly over the surface of the bacterial bed. For this purpose, the distributor arms have a series of holes located in the centres of gravity of a series of rings which distribute the wastewater proportionally over the surface of the bacterial bed, the jets being opened by means of deflectors.



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Depending on the characteristics of the installation, the rotary distributors will comply with the following nomenclature:

- **Model SC:** Single chamber rotary distributors. They have 2 delivery arms. They can be installed as long as the flow rate is constant, or at least does not vary by more than 50% over a nominal flow rate.
- **DC Model:** Double chamber rotary distributors. They have 4 delivery arms. Two arms are impellers and the remaining two arms are connected to an overflow chamber. They are used as long as the maximum/minimum flow ratio is variable and does not exceed 5:1.
- **DCM model:** The **M** series distributors are equipped with a centrally driven geared motor, which guarantees a controlled speed of rotation. This allows the regulation of the flow intensity, and greater control over the process.

**FILTRAMAS rotary distributors** have the following **FEATURES:**

- Maximum inlet flow rate  $Q_{max}$
- Minimum inlet flow  $Q_{min}$
- Bacterial bed diameter

These are the **materials** used for its manufacture:

- Galvanized carbon steel
- Stainless steel AISI 304
- Stainless steel AISI 316