

WATER TREATMENT



COAGULATION – FLOCCULATION principles

Coagulation – flocculation is physico-chemical process that facilitates the agglomeration of fine particles (colloids) contained in water to form a floc that can be easily filtered from water. Effluent (waste water) must be treated before it is discharged or before the water is re-used. Coagulation – flocculation helps remove compounds from effluent and thereby makes it possible to separate water and particles.

COAGULANT and FLOCCULANT products must be used for paint spray booths, robots and tunnels with a water curtain to remain clean and operate as efficiently as possible.

Coagulant



Coagulants are liquid products that are mainly used to treat water circulating in paint spray booths. Colloidal particles suspended in water are destabilised when a coagulation reagent is added to waste water. Indeed, the coagulant is used to decrease or even cancel the colloid's negative electric charge in order to bring them closer together.

The particles will agglomerate to form what is known as "flocs". However, these flocs remain small and fragile; therefore a flocculant must be added.

Flocculant

Flocculants are liquid products that facilitate the contact between particles previously destabilised and discharged by coagulation. The agitation of the fluid results in the agglomeration of pigments. This reaction increases the size of flocs which will facilitate and improve the solid-liquid separation; separation is achieved by sedimentation or flotation.

Advantages

For booths & robots with a water curtain, PROFLO+ flocculants and PROCOAGU coagulants are the ideal solution to treat residual paint and varnish in water from booths, tunnels and paint robots. Our products will provide you with the following advantages:

- High quality separation of particles and water
- Prevents unpleasant odours
- Reduces the maintenance and cleaning time of installations
- Less frequent water changes, significant water savings and reduced maintenance time
- Fast, efficient and easy to use
- Equipment maintenance and fewer breakdowns
- No reaction on ferrous and non-ferrous metals
- Maximum amount of overspray captured by the water curtain

For companies seeking an approval such as ISO 14 000, the physico-chemical treatment + the mechanical treatment (ASPIFLOC Product range) must be carried out to obtain a zero pollutant discharge.

PRODUCT	REFERENCE	USE
Biocide	PROBIO	Prevents unpleasant odours
Anti mousse product	PROMOUSS	Provides a curative or preventive treatment against mosses, lichens, fungi and algae.
Coagulant	PROCOAGU	Reduces the cleaning time of installations and accelerates the sedimentation of large particles while limiting their "sticky" characteristics.
Coagulation-flocculation	PROCOAGU et PROFLO+	Reduces the frequency of water changes Saves water Reduces cleaning time Prevents pumps and pipes from clogging up
Water treatment systems	Gamme ASPIFLOC	Continually reuse water while removing solid particles.

INTERNATIONAL



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