

Danish design handcrafted by people with unique knowhow

Industrial finishing systems have been our expertise for more than 60 years, and our worldwide company has a consistently high level of technical knowledge for our customers to benefit from.

We manufacture finishing systems for powder coating, e-coat and wet paint. Due to proven designs and modular build systems, we are able to supply high quality customized solutions.

AABO-IDEAL has over 30 business units and more than 4500 systems installed world wide.





AABO = IDEAL

Electrophoretic painting systems

AABO-IDEAL is one of the leading suppliers of painting lines worldwide. With more than 60 years of experience within painting lines and 25 years of experience with e-coat, we know how to produce the ideal system for surface treatment and how to customize it to the customers' needs.

In our headquarter in DK our project team carries out projects in 2D and 3D construction, and with the production next door we are able to control the process very carefully.

Electrophoretic coating (e-coat) is an advanced liquid paint process for exacting customer groups. It is widely used as primer for a further process or for stand-alone coating. Typical customer groups are automotive, agricultural, radiators etc.



Pre-treatment

To get full advantage of the e-coat and to ensure that the e-coat will not be destroyed, a well designed pretreatment is needed.

When cooperating with AABO-IDEAL, you are ensured the optimal process with only one supplier and by that optimal communication.

The main components for the anaphoretic system as well as the cataphoretic system are:

- dipping tank the e-coat
- spraying / dipping in ultrafiltration (UF) 1
- spraying / dipping in UF 2
- spraying / dipping in UF 3 or demi water

Function

The process functions with having the items as either cathode or anode. The control of voltage and current is essential and we only use the best rectifiers with extreme low ripple.

The controls are often supplied with automatic control of V and I according to e.g. the submerged m² and with divided rectifiers in order to obtain the best possible results. Either the systems are fitted with cranes or continuously running conveyor; it depends on the item type and layout.

Construction

Strong steel welded tank, coated inside with an insulating coat which – unlike the plastic tank – does not wear out and can be repaired more easily.

Heating/cooling

As the paint demands a constant temperature for the application, the paint tank can be provided with a temperature control. A heat exchanger regulates the temperature.

Ultrafiltration circuit

We use the most efficient ultrafiltration modules with very long lasting performance. The used system allows continuous control and regeneration during operation of the device. The ultrafiltration circuit is essential for the result and we take care that the systems are easy to maintain.

- Easily expandable.
- Robust construction ensures stabil production.
- Energy-efficient, zero bypass, KPAK spirals.
- Reverse cleaning of flow for better utilization.
- Easy and quick replacement of membrane module.
- Individual CIP module with no interruption of the production.

We cover all industries almost

Over time AABO-IDEAL has had the privilege to work with and supply to almost all industries.

Each industry has their own set of operational and even legislative requirements that need to be met. Therefore, we are very focused on the continuous education of our service engineers and technical staff and aim to provide the best professional support.

We keep updated and constantly develop our products in order to offer you the very best solutions regardless of industry and location.

- Off-highway machinery
- Home appliances
- Outdoor machinery and products
- Heating











The typical range for e-coat

- Automotive parts
- Agricultural machinery





Painting efficiency

prevails over other solutions.

i.e. single-layer coating.

ANODES

Tubes: As standard, we use high quality tubes which are characterized by high efficiency and low energy consumption. The lifetime of the membranes is 10-12 years and they have an operation ratio of 1:5 to 1:8.

The most effective

E-coat is a highly economical and environmentally friendly way of coating. It belongs to the most effective technologies of surface treatment of metal products, and it is mainly used for protection, either as primer or as final surface treatment,

You can use cataphoretic coating for many products to

able for many other technologies, cataphoresis currently

achieve a substantial increase in their utility, durability and

thus competitiveness and marketability. Thanks to the properties of the process and its coating results, which are unattain-

Boxes: Depending of the form of the item, a solution with boxes is optional.

Titanium iridium electrodes: For long lifetime, the titanium iridium electrodes can be used.

Rectifier module of high quality

Our rectifier modules are all made by international well-known producers and have ripple less than 1-2%. The module makes it possible to control the surface and adjust V and I according to the surface. Data collection is possible for e.g. costumer audit.

Control system for easy operation

With the control system you will be able to recieve output on the service phone. This makes operation easy and flexible. The pumps are started by SOFT STARTERS – we use only quality pumps e.g. KSB, Gusher pumps and ISH with online customer service. The control system gives you the ability of checking status offline including on-line service manual for minimizing risk of failure.

Two types of anolyte circuits:











