

KOVO FINIŠ

3



DIP PAINTING

Surface treatment equipment and waste water treatment plants producer

KOVOFINIŠ is a modern Czech company with a tradition dating back to 1951. During its existence KOVOFINIŠ has successfully implemented projects all over the world. Our company has its own technical, development and production facilities. Thanks to the continuous development of know-how, we are the leading European manufacturer of equipment for surface treatment and disposal of industrial waste water. All the equipment we supply is designed with the environment in mind and according to the customer's needs.

Services:

- › Technology proposals
- › Project outline incl. documentation for negotiation with government and local authorities
- › Drafts for building works
- › Planning, design and efficient construction process
- › Production, delivery and installation incl. commissioning
- › Auditor's reports
- › User and service training, Participation during Test Run Operation
- › Operation and maintenance instructions incl. technical documentation
- › Service
- › Commercial - financial consulting, Technical consulting
- › Process automation systems and visualization

The KOVOFINIŠ company premises consist of an administrative building, production facilities, warehouses and a canteen. The production facilities cover 17,500 m². The production area includes - electroplating coating line, painting line, research laboratory and waste water treatment plant.



The quality of our management is certified according to ISO 9001. The environmental management of the company is certified according to ISO 14001. We are also holders of the German WHG certificate for surface treatment and waste water treatment.

Paint coating is one of the oldest and most common method of surface protection. Dip painting is a special way of paint coating. Paint is coated by dipping the product into the bath with dissolved paint.

Dip painting is highly economic and ecological way of paint coating. It is considered as one of the most efficient way of applying paint. There are no oversprays as in spray painting. The paint is evenly distributed on the surface. Paint dipping produces minimal amount of waste water. Most of the waste water is produced in surface pretreatment which is necessary prior to all painting methods.

Our product line consists of dip painting and electrophoretic painting lines. Our main customers are in automotive

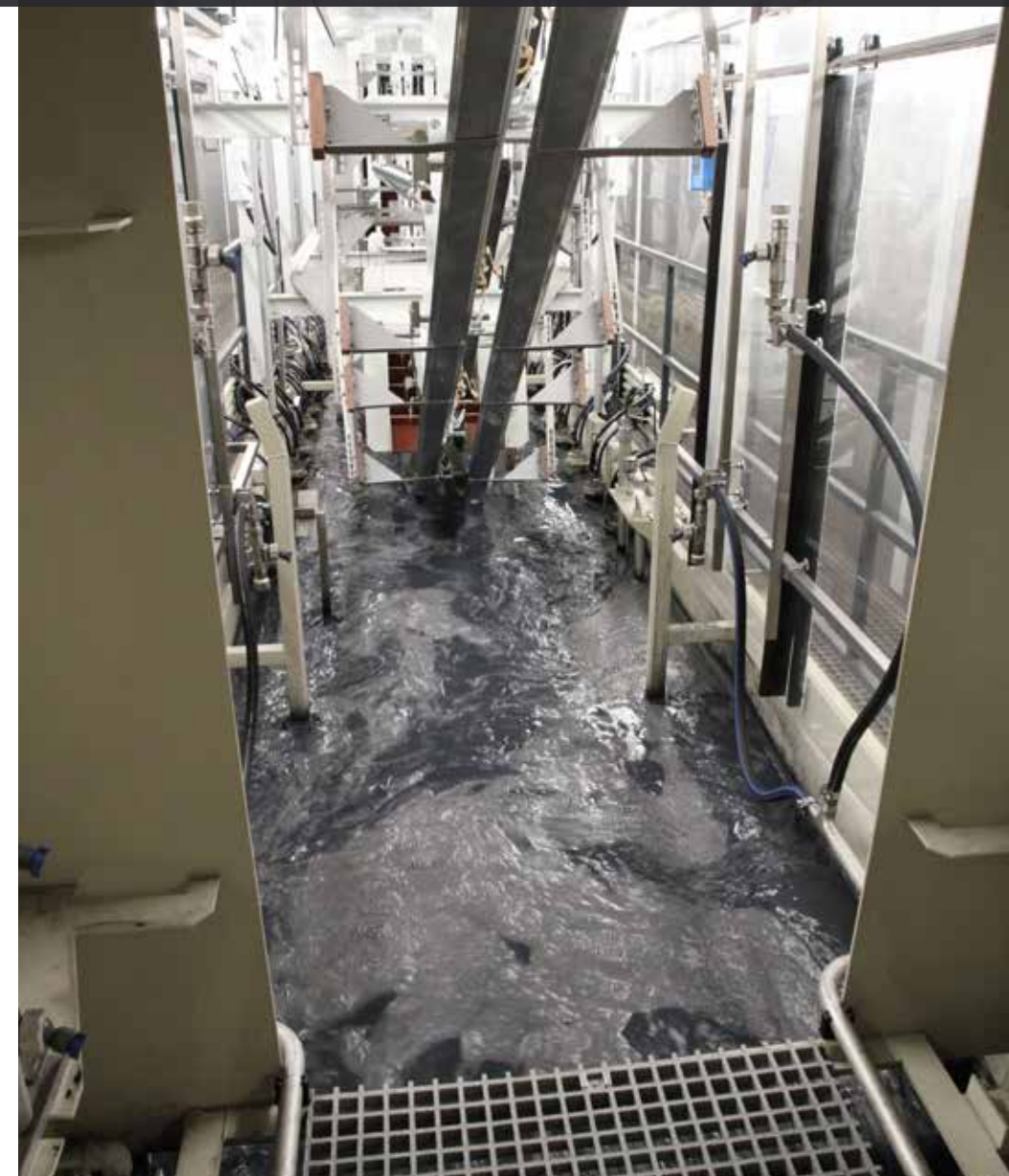
industry, as well as manufactures of agricultural and building machines.

Our experience in the field enables us to guarantee the highest technical level, quality and efficiency of the supplied equipment. We deliver complete technology equipment from design through the structure design, manufacture of individual components to final installation on-site. Our cooperation with customer does not end by commissioning of plant, but continues with warranty and after-warranty service.





- › Highly productive
- › Suitable for large series of similar parts
- › Transport system
 - Single-track chain conveyor
 - Power&Free Conveyor
- › With pretreatment system
 - Spraying
 - Combination spraying-dipping

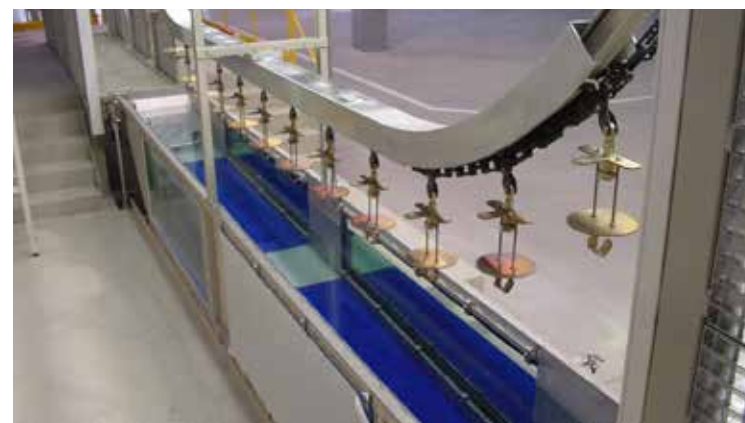


- › Highly flexible and programmable
- › Suitable for variable product line
- › Products transported with transport manipulators
- › With dip pretreatment





Lines for dip painting with organic solvent based or water based paints





Lines for paint coating with the use of cataphoresis or anaphoresis





Solutions for improving effectivity and efficiency of process and decreasing impact on environment

- › Bath ejector agitation
- › Rinse water saving systems with controlled water refilling
- › Oil separation from degreasing baths – separators or microfiltration
- › Sludge removal systems from phosphate baths
- › Paint recycling with ultrafiltration and cascade rinse
- › Production of demineralized water with reverse osmosis from ultrafiltrate
- › Waste air cleaning with thermal incineration
- › Waste air heat recuperation



Ultrafiltration

Thermal incineration



Sludge removal system from phosphate bath



Ejector agitation



Demineralized water production from ultrafiltrate



Thermal incineration

Storage tanks



Back-up power supply



Automatic dosing unit



Demineralization station



Equipment for securing the operation of the line and facilitating the maintenance and control

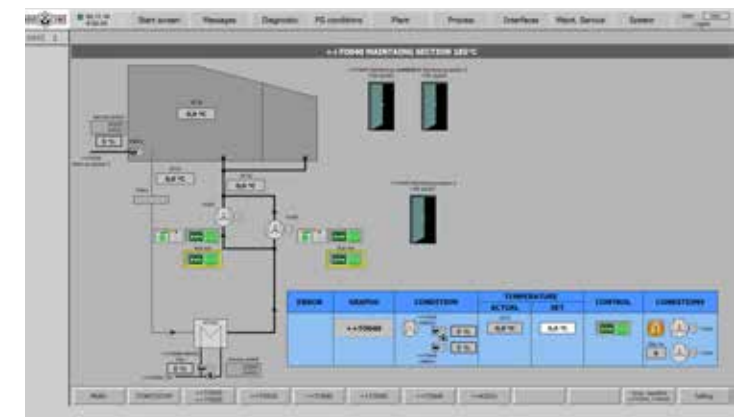
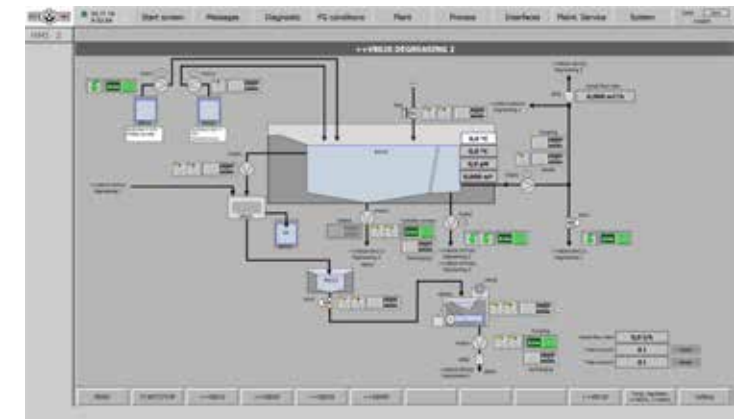
- › Chemical preparation units
- › Storage tanks for
 - Pretreatment baths
 - Paint baths
 - Chemicals

- › Automatic additive dosing
- › Demineralization station
 - Ion exchangers
 - Reverse osmosis units
 - Storage tanks for demineralised water

- › Air supply duct-work
- › Back-up power supplies

Equipment for technological process control based on SIEMENS platform

- › Display of device activity on
 - PC screen
 - Touch-screen
- › Batch parameter settings
- › Alarm signalization
- › Access control system
- › Remote access
- › Archiving
 - Records and parameter lists
 - Product records: product code, date and real-time, process times, temperatures
 - Event records: date and time of start-ups, alarms, idleness and additive dosing



We provide warranty and after-warranty service for all installed plants:

Service includes complete care of the installed equipment and preventive maintenance inspections

- › Assistance during the production start-up
- › Regular equipment inspection to extend operation life-time
- › Service on demand including 24-hours intervention





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