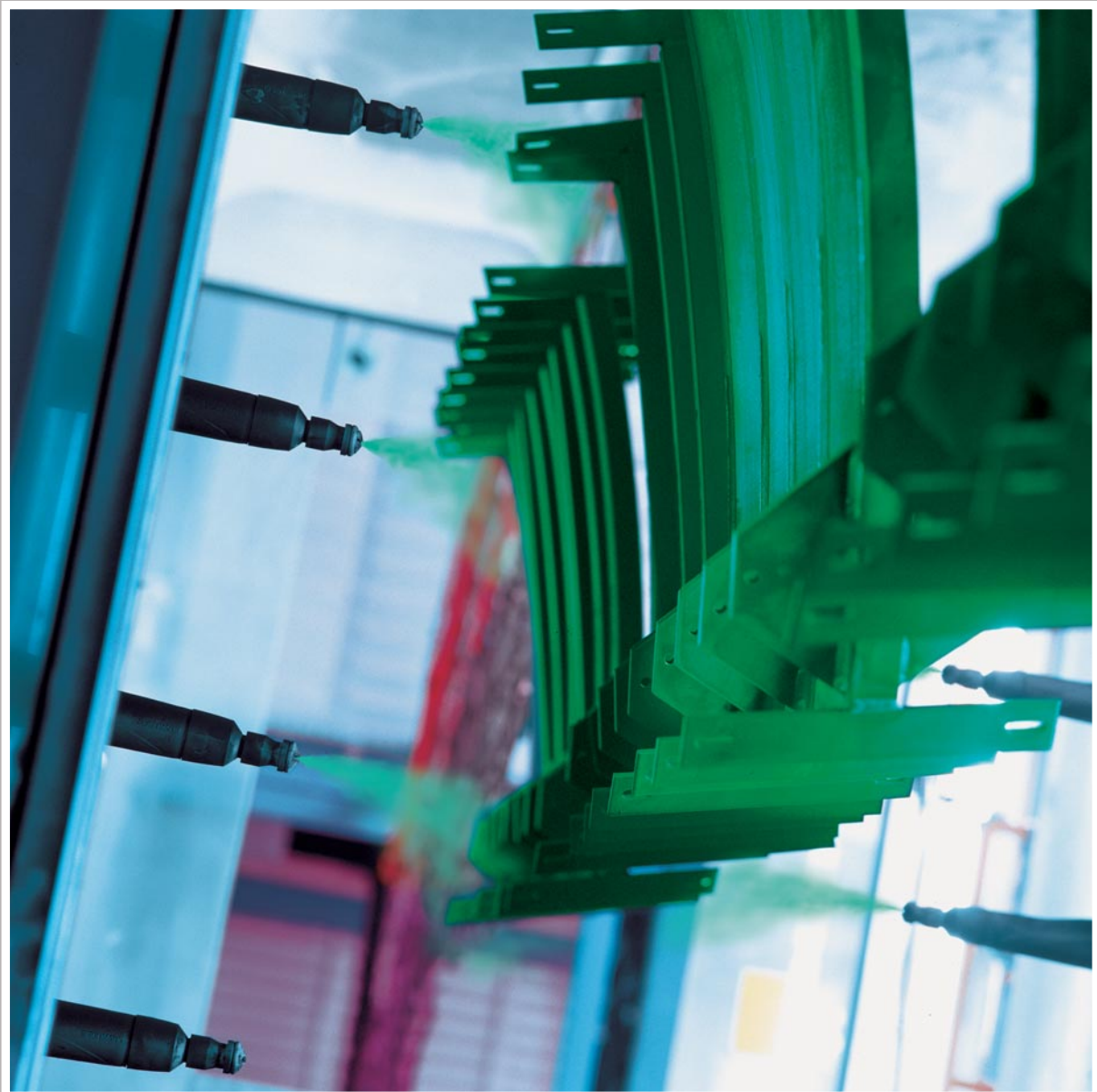


# EISENMANN

## Surface Finishing

Paint Technology · Material Flow Automation  
Environmental Technology



## Complete paint finishing systems from one source

EISENMANN offers complete solutions for modern surface finishing: priming, powder, spray and dip-coating systems, material flow systems, environmental and process technology.

As a general contractor, EISENMANN provides top-quality turnkey solutions for high efficiency, enhanced flexibility and continuous availability at low maintenance.






Powder coating is not only the most environmentally friendly type of process; it can also be easily automated, requires little space, and can be integrated into existing production lines.



Electrophoretic dip coating is supremely suited to prevent corrosion, and can be used in mass production as well as for single-size lots

## Contents

	Surface finishing	2
	Paint finishing systems for metal, plastics and wood	
	Material flow automation	6
	Conveyor technology, handling technology controls technology	
	Environmental technology	8
	exhaust air purification, wastewater treatment	



Always combined with: EISENMANN environmental technology purifies exhaust air and wastewater

**I**nnovations and strategies for optimum production, process technology and in-house logistics is what we do best. EISENMANN builds systems for surface finishing, material flow automation, environmental technology, firing systems for the ceramics industry as well as special systems for coating, recycling, heat treatment and energy recovery.

Our staff of approximately 2,400 employees, half of them engineers or technicians, are busy all around the world with the development of new ideas for your future needs in production, paint shop, assembly or distribution. They include experts and specialists with a sound know-how from different professional disciplines and industries. A big plus, which is reflected in our customized solutions is the state-of-the-art technology and resulting high efficiency.

Another feature of our streamlined production and installation strategy: our manufacturing centers are designed to accommodate the individual requirements of our customers. They enable us to manufacture system configurations in-house that meet your specific needs.

Our unique installation concept constitutes a major contribution in support of quality and on-time delivery. Complex systems are completely installed in our plant prior to delivery and subjected to the most rigorous tests. Only after all tests have been successfully

passed do we deliver the pre-assembled functional units to our customers. Your benefit: an installation effort that is reduced to the absolute

necessary minimum. This saves you time and money, and allows the installation on your premises without down time.

We are, of course, always available to you after you have started to operate the new system: Our after sales service provides professional maintenance, quick repairs and immediate access to spare parts.

By the way: did you know that EISENMANN not only offers modern system technology, but also future-oriented business models? After all, we introduced the first Operator Model paint system for the automotive industry and many others for a variety of industries, which we operate to this day.

## This is EISENMANN



EISENMANN Technology Center at Holzgerlingen

**A** perfect design, safe functioning and superior surface quality make a successful product. They are the result of excellent engineering and a paint shop that meets the highest standards.

We are here to develop the systems and the technology for you to achieve these results. All in one, for all parts of the painting process. Independent of the fact if you are using water-based paint or powder. We deliver everything from pretreatment to dryers, curing ovens, wet-spray and powder-spray booths to cathodic and anodic electrophoretic coating. All this, of course, with an optimized material flow and state of the art process technology.

As a general contractor, we plan, project and manufacture your entire paint center as a turnkey project. We take care of the legal requirements, support you in obtaining the necessary permits, and train your employees in the operation and maintenance of the system. Our after sales service is always available to you, based on your own customized service package.

Environmental protection is part of the deal: Our engineers believe in emission-free processes and methods that save energy and water. Only when the limits are

being exceeded do we integrate our systems for exhaust air purification, wastewater treatment and residue disposal. This enables you to save valuable resources and reduces your operating costs.

## Surface Finishing



Glass booth at a powder-coating line for switch gear cabinet parts

In many parts of the industry, i.e. in the manufacture of radiators, lamps, automotive fittings, white goods or painting systems for car wheels, EISENMANN is recognized as the leading systems supplier. However, not only for metal parts; EISENMANN has also built various renowned systems for plastics parts like bumpers, mirror housings, front ends, fittings and electronics cabinets. With more than 200 installed paint systems for plastics, with the largest located in Europe, we are the world market leader in this sector of the industry.



Cataphoretic E-coat hoist system for the truck components



Pretreatment system as part of a powder coating line for wheels



E-coat hoist system for automotive parts



Powder coating line with power & free conveyor for forklift components



Combined E-coat and powder coating system for truck frames



Powder coating line for white ware



Wet-spray system for forklifts



Continuous cathodic dip paint facility for trailer hitches



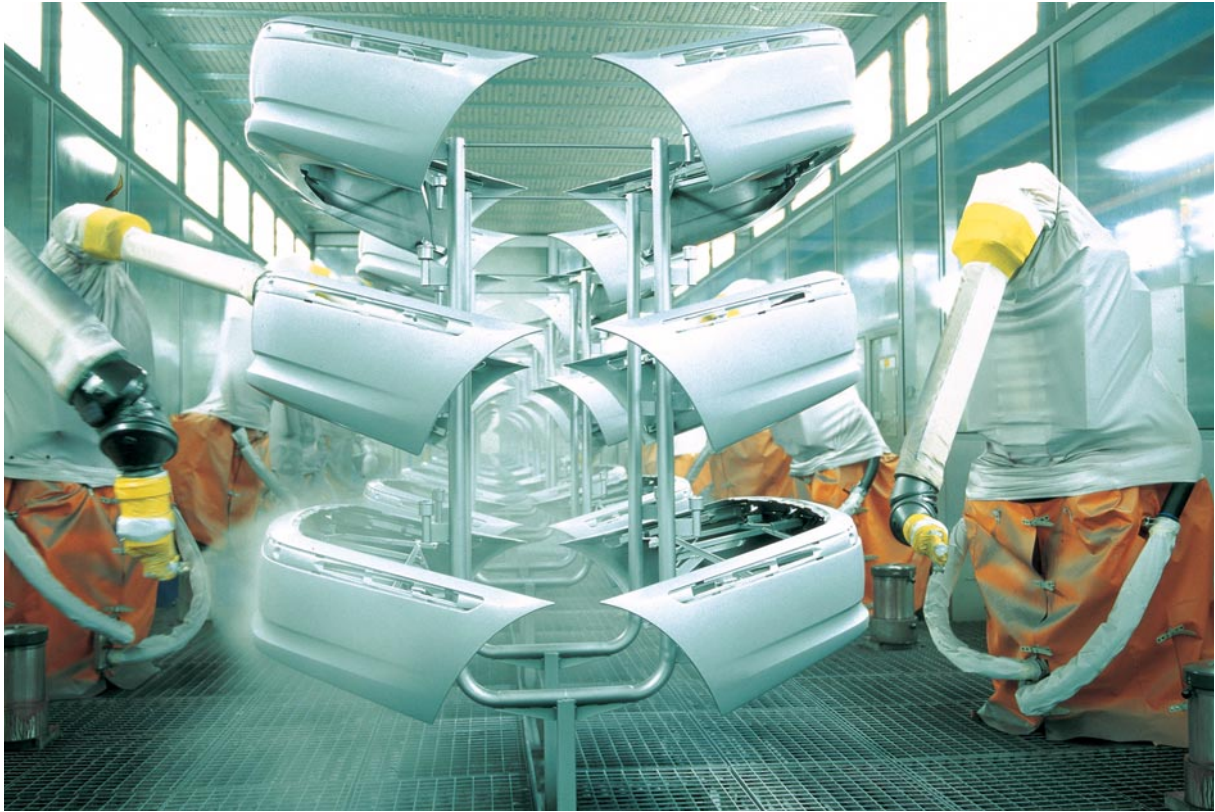
Complete plastics 3 coat paint line using water-based paint



Powder enameling system for white ware

Flow coating facility for the scratch-resistant coating of diffusing screens made of plastic





Plastics paint line for bumpers



Furniture paint line with underfloor conveyor system

Left: Plastics paint system with skid conveyor system for outside rearview mirrors

**P**ainting is an important step in the manufacturing process, and should be integrated into production in flexible fashion. Upstream and downstream processes are directly linked to it, and the flow of information remains uninterrupted. In-house logistics require intelligent concepts, future-oriented conveyor systems and flawless process technology. EISENMANN has the complete program in-house, and can therefore recommend the best solution for your individual need: destination-controlled power & free conveyors or electric monorails, skid conveyor technology or carousel conveyors, underfloor conveyors or roller conveyors,

spindle conveyors, slat conveyors, etc. Each conveyor system has specific benefits, which in combination with other systems often leads to an enhanced performance. In this regard, EISENMANN has numerous complex references setting the standard for the flexible and efficient integration of the painting step into the manufacturing process. This includes the separation of the material flow of the painting and curing process, separate buffer conveyors, system-independent storage technology or shuttle concepts. All of these processes are linked by automatic transfer, handling devices or gantry robots.

## Material Flow Automation



Top: Power & Free conveyor for destination controlled transport and stacking in the cross buffer in the smallest available space



Top right: PC controlled load station for dip-coating lines



Right: Because they are flexible and clean, skid conveyors are often used for the painting of plastic parts





Complex Power & Free conveyor system with numerous pick-up stations, interim storage and process destinations in the automotive industry



Gantry robots loading the painted parts onto the spindle conveyor of the powder curing oven



Radiator painting: Dual-rail gantry robots unstack the parts and load the paint line

**A** safe environment and modern production do not need to exclude one another. To the contrary: they go hand in hand. How can it be done? With the help of sophisticated engineering, where the manufacturing process is designed to work in concert with ecological principles. Here too, EISENMANN offers a wide array of customized solutions for your specific needs. From exhaust air purification to wastewater treatment to resource-recycling, ultrapure water and energy recovery.

Huge benefits for you: You profit twice – from our special know-how in the field of environmental technology and from our extensive engineering competence in the field of manufacturing and process technology. Right from the start, our systems are designed to prevent the generation of bothersome emissions and residues. Or, we make sure that the processing heat

from one part of the system flows back into another in the form of energy.

This is EISENMANN's holistic approach. A perfect match between economics and ecology. Ensuring that your customers are more than happy with your product while you don't have to worry about polluting the environment.

## Environmental Technology



Water treatment system for the extraction of 100% desalinated processing water

### The Program:

Thermal and adsorptive exhaust air purification systems

Water treatment

Wastewater treatment

Wastewater decontamination

Residue utilization

Thermal waste disposal

Resource recycling



Exhaust air purification with thermal oxidation



Ultrafiltration for the controlled circulation of degreasing baths



Compact exhaust air purification system with regenerative thermal oxidation (RTO)



Complete wastewater disposal facility for metal processing, including dip-coating line

# EISENMANN

www.eisenmann.com

---

EISENMANN Anlagenbau GmbH & Co.KG  
Tuebinger Strasse 81  
71032 Boeblingen · Germany  
Daimlerstrasse 5  
71088 Holzgerlingen · Germany  
Phone +49 7031 78-0  
Fax +49 7031 78-1000  
info@eisenmann.com

EISENMANN Service GmbH & Co.KG  
Tuebinger Strasse 81  
71032 Boeblingen · Germany  
Phone +49 7031 78-3000 (6.30 - 18.30 h)  
Fax +49 7031 78-3200  
info@eisenmann.com

EISENMANN Ingeniería S.A.  
Parc de Negocis Mas Blau  
Edificio Prima Muntadas  
c/Berguedà, 1 · Barcelona  
08820 El Prat de Llobregat  
Phone +34 93 479-6610  
Fax +34 93 479-6620  
info.spain@eisenmann.com

EISENMANN France S.a.r.l.  
Espace Lumière · 2, Rue Pathé  
78406 Chatou Cedex  
Phone +33 1 30159800  
Fax +33 1 30531009  
info.paris@eisenmann.com

EISENMANN Italia S.r.l.  
Via Ferrari, 21  
21047 Saronno (VA)  
Phone +39 02 96718-626  
Fax +39 02 96718-629  
info.italia@eisenmann.com

EISENMANN U.K. Ltd.  
Unit 118 Severn House  
Anson Court Business Centre  
Staffordshire Technology Park  
Beaconside · Stafford  
Staffordshire ST18 0GB  
Phone +44 1785 283790  
Fax +44 1785 283799  
info.uk@eisenmann.com

EISENMANN Corporation  
150 East Dartmoor Drive  
Crystal Lake · Illinois 60014 · USA  
Phone +1 815 4554100  
Fax +1 815 4551018  
info@eisenmann.com

EISENMANN do Brasil  
Avenida Duquesa de Goiás, 716  
3º andar · Bairro Real Parque  
CEP: 05686-002 São Paulo SP  
Phone +55 11 21611200  
Fax +55 11 37580030  
info.brasil@eisenmann.com.br

EISENMANN S.A. DE C.V. Mexico  
Blvd. 15 de Mayo 2933  
Fracc. Las Hadas  
72070 Puebla, Pue.  
Phone +52 222 2311712  
Fax +52 222 2498835  
info.mexico@eisenmann.com

EISENMANN Shanghai Co. Ltd.  
Room 301, Gubei Intern. Fortune Center  
No. 1452, Hong Qiao Road  
Changning District  
Shanghai 200336 · P.R. China  
Phone +86 21 31352188  
Fax +86 21 31352199  
info@eisenmann.sh.cn

OOO EISENMANN  
Ul. Pyatnitskaya 47-1  
119017 Moscow  
Russian Federation  
Phone +7 495 951-6824  
Fax +7 495 951-5211  
info.russia@eisenmann.com

EISENMANN India Pvt. Ltd.  
EISENMANN Surface Finishing Systems  
India Pvt. Ltd.  
Technosoft Knowledge Gateway · 1st Floor  
Plot No. B-14 · Road No. 1  
Wagle Industrial Estate  
Thane (W) 400 604 Maharashtra · India  
Phone + 91 22 2583 2929  
Fax + 91 22 2583 3800  
info.india@eisenmann.com