

# KOERNER **KVK**



**Planning**

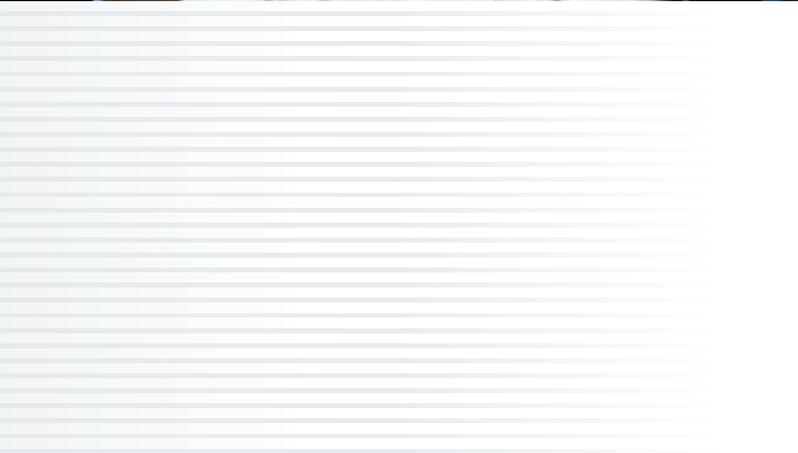


**Implementation**



**Follow-up support**

## **KVK Galvanising Plants**



# KVK Galvanising Plants

Customised, ready to use, and with the highest level of environmental protection



KVK KOERNER has been active in the field of hot dip galvanising for more than 40 years and has many years of experience in planning and implementing galvanising projects.

Together with our customers, we analyse the requirements that are necessary to achieve the objectives. Based on this, we create customised concepts with our business partners for optimum material flow, taking into consideration the specific requirements of the respective products to be galvanised.

Our worldwide customers include both companies that offer galvanising as a service, as well as companies that, for example, manufacture power poles,

light poles, crash barriers, grates or that are active in general constructional steelwork. Special concepts and individual solutions are required for each sector.

KVK KOERNER plans for all stages of development, from manually operated up to semi- or fully-automated systems thus covering the entire spectrum. This ranges from the planning and bidding process, continues with the construction phase, right up to hand-over. Naturally, this involves compliance with the strictest environmental and safety-related conditions.



# KVK Pre-Treatment Facility

The basis for brilliant results



The quality of the surface is decided in pre-treatment. The robust, self-supporting KVK pickling tanks, specifically developed for rugged operation in hot dip galvanising plants, are the basis of every pre-treatment facility.

Additional reliability is provided by the collecting basins in which the free-standing tanks are placed. They are also coated with the special KVK laminate and are seamless and diffusion-proof. The KVK laminate is an acid- and alkali-resistant coating with a reinforced fibreglass design that complies with all the conditions imposed by the European Water Resources Act – the world's strictest Act.

KVK heating plates can be used for all KVK pickling tanks, which ensure the exact operating temperature as required. Circulation takes place in a natural, thermal way without pumps.

Acid- and alkali-resistant KVK floor foundation slabs are absolutely diffusion-proof to the housing and the tanks. Fresh and used acid pipework as well as rinsing lines are placed in the dry basement area.

Numerous patents certify the uniqueness of this innovative KVK system.



# KVK Pickling Tanks

## The heart of each galvanising plant



KVK pickling tanks are the heart of each pickling plant. They are the start of the success story of KVK KOERNER.

Since the installation of the first free-standing pickling tanks in the mid seventies, which more than complied with the first ever environmental protection regulations, they have become the embodiment of robustness and reliability. KVK pickling tanks continue to set quality standards.

KVK pickling tanks are self-supporting and designed for a long service life due to the special KVK laminate multilayer coating.

The world's largest pickling tank, which is 31 metres long, has been in operation since 1996. It still meets the requirements of rugged everyday operations in a galvanising plant delivering constant quality.



# KVK Exhaust Air Scrubbers

So that a clean environment has a future



With its plant concept constructed with a completely encapsulated pickling plant, KVK KOERNER has made an important contribution to hot dip galvanising technology, making it a cleaner and environmentally friendly technology.

Due to permanent low pressure in the completely encapsulated plant, no exhaust air can escape when the products to be pickled are being fed through the lock.

KVK galvanising plants work on a cyclic principle thus functioning free of wastewater. Wastewater and exhaust air are constantly purified and fed back into the production process.

That means the best possible protection for people and the environment.



# Technical Assistance and Personnel Training

Equipped for efficiency right from the start

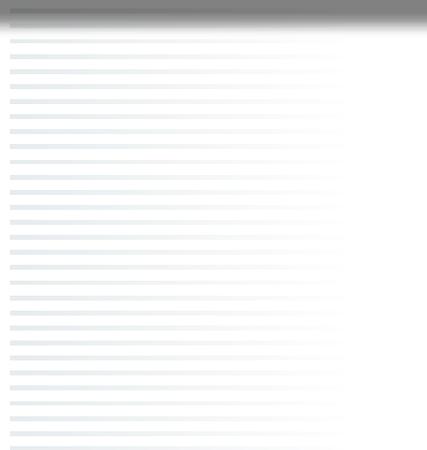
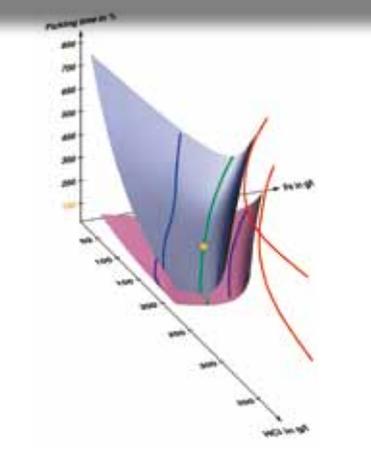
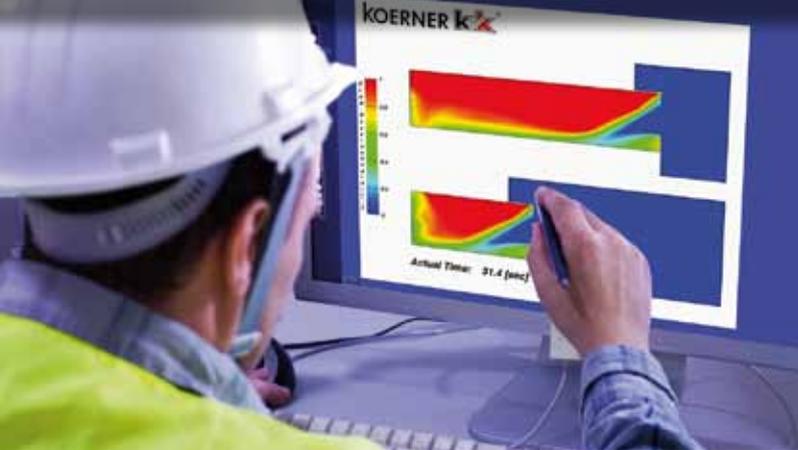


KVK KOERNER does more than just plan galvanising plants. Highly trained KOERNER employees manufacture and install the components and plants personally.

Our own staff also performs the start-up and provides system training. This training plan equally includes orientation in our extensive plant documentation and in service and maintenance measures.

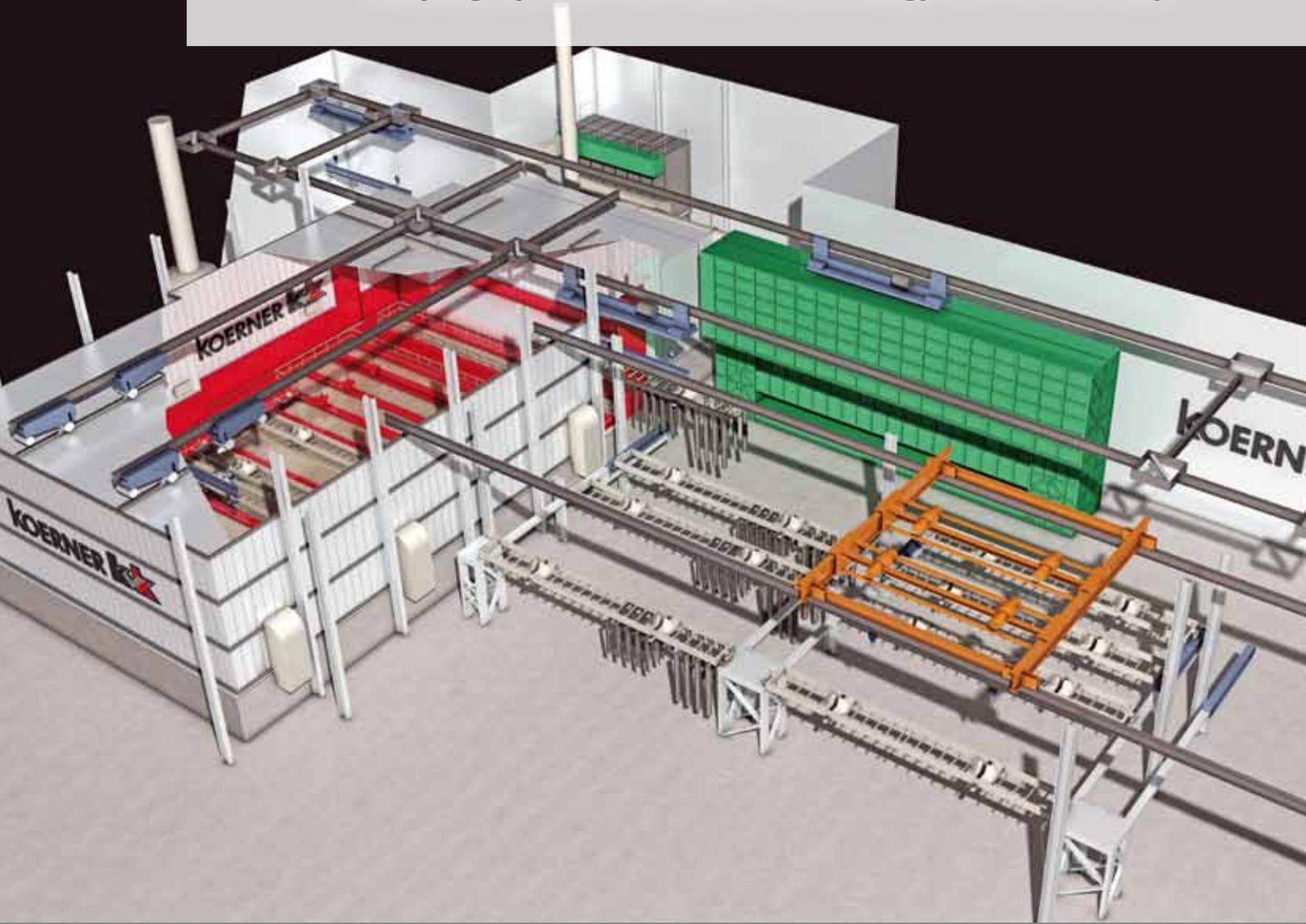
For the start of the production phase, KVK KOERNER provides experienced production managers for customers dealing with hot dip galvanising for the first time as well as those who aim to operate their plants according to latest research in the galvanising industry.

This training covers all the necessary activities (quality management, material suspension, alloy care, chemicals management, materials management, boiler care, etc.) in order to guarantee optimum operation of the plant right from the start.



# KVK Plant Optimisation

Keeping up with the latest technology can be so easy!



From today's perspective, galvanising plants that were built more than 20 years ago are no longer state of the art and have to be renewed not least because of the lack of environmental protection equipment.

KVK KOERNER also offers assistance here. Most of the time, it is not necessary to build a completely new plant. Together with our customers we develop concepts that make it possible, for example, to integrate an existing zinc bath into a modern plant concept.

KVK KOERNER also offers its customers training and production optimisation after delivery and start-up of the plant.

Due to the fact that our specialists are permanently involved in the planning and implementation of plant concepts, we are able to pass on the latest experience in the area of optimum production management. Many KVK KOERNER software tools, like the „KVK Pickling Optimizer“ will considerably simplify day to day work for our customers.

Together with our partner companies, we simulate material flows in order to optimise them after in-depth analysis. Productivity increases in a double-digit range are not unusual.



# Crane Systems

Meticulous precision step by step



KVK KOERNER also develops the logistics for galvanising plants suited especially to the specific requirements of the customer and the processing of the respective products.

Here, KVK KOERNER uses the know-how of partner companies like SCHEFFER Krantechnik. KVK KOERNER has worked together with this company for many years and has realised projects worldwide.

Concepts are developed together, designing processes in the hall efficiently and safely, taking the applicable standards and laws into consideration in each case.

The modular crane systems also make it possible to expand or retrofit a system at a later date as needed.

 **SCHEFFER**  
Krantechnik

[www.scheffer.de](http://www.scheffer.de)



# KVK Galvanising Plants

From the collection trough to the zinc bath





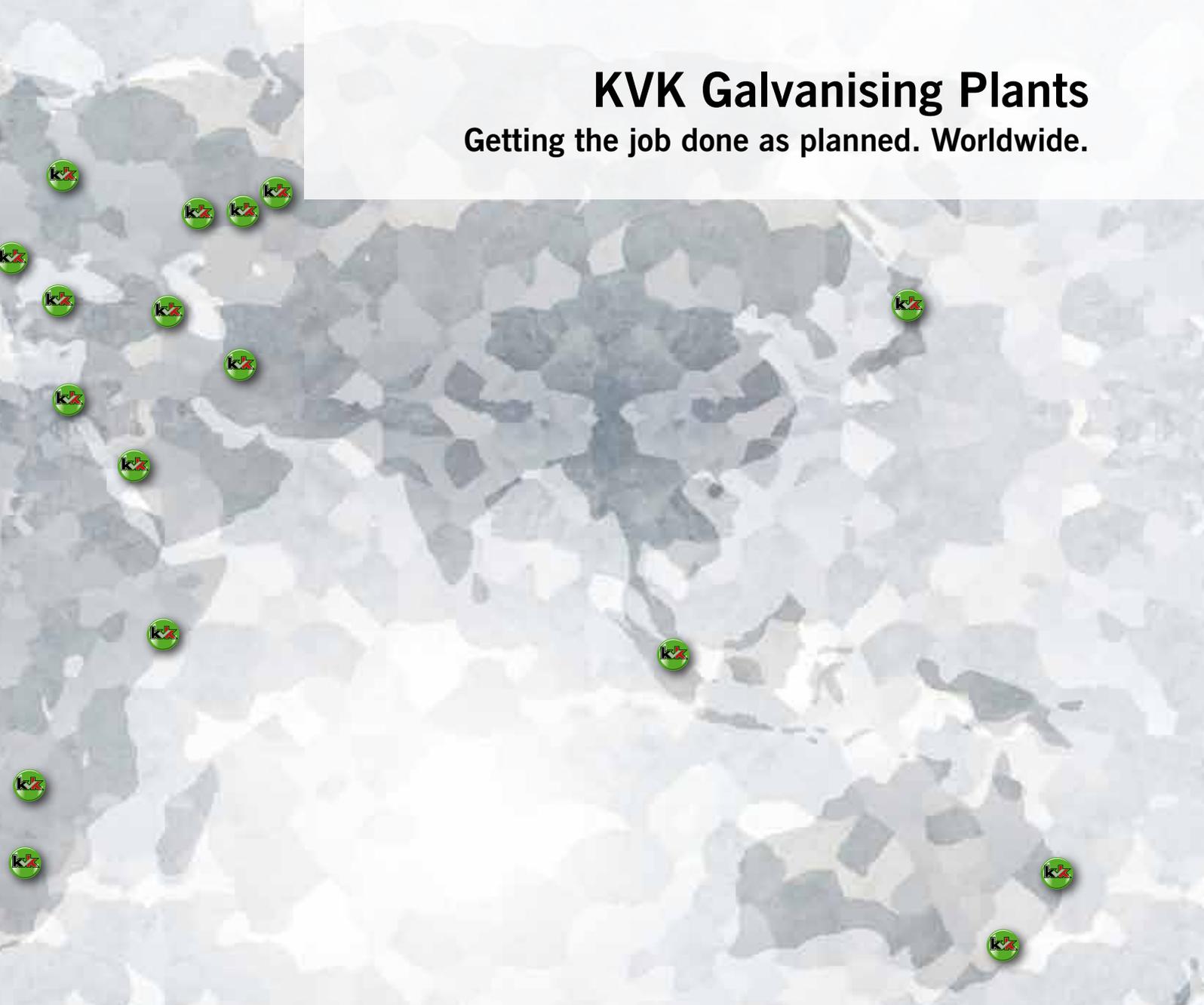
OTN Sinabelkirchen, Austria, 2006



DIEREN, Netherlands, 2010

# KVK Galvanising Plants

Getting the job done as planned. Worldwide.



SBG, France, 2010

Azerbaijanda ilk qaynar sinklama zavodu  
 1. Feuerverzinkungsanlage in Aserbaidschan

Qaynar sinklama işi üçün Azərbaycanın ilk zavodu Koerner şirkəti tərəfindən hazırlanmışdır. Təchiz və montaj işləri Azərbaycanın ilk zavodunda yerinə yetirilmişdir. Zavodun məhsuldarlığı ildə 40.000 tən qədər çelik və alüminium istehsalına bəslənir. Təchiz edilmiş KVK texnologiyası yüksək effektiv və ekoloji təmiz istehsal prosesini təmin edir.

Diese Feuerverzinkungsanlage wurde Auftrag von Azenco AZC von der Fa. KOERNER, Österreich, geliefert und montiert. In der Anlage können bis zu 15 m lange Stahlteile verzinkt werden. Jahreskapazität 40.000 t. verzinkter Stahl. Die hier im Einsatz stehende KVK-Technologie garantiert effiziente und umweltchonende Produktionsprozesse.

[www.stp.az](http://www.stp.az) [www.koerner.at](http://www.koerner.at)



Austrian Foreign Minister Dr. Michael Spindelegger (right) at the grand opening of the Hot Dip Galvanizing Plant in Azerbaijan.

# KOERNER **kk**

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