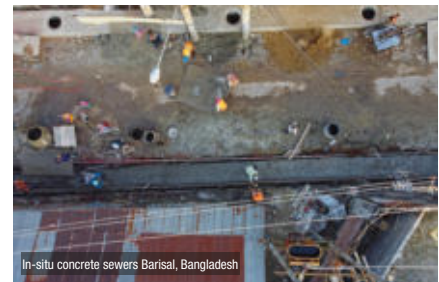


Storage sewer "Berger Feld", Gelsenkirchen



Construction of bypass road L 332n Troisdorf, Lot 2.2



In-situ concrete sewers Barisal, Bangladesh

KOCKS
INGENIEURE

Comprehensive Engineering Solutions - worldwide since 1946

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ENGINEERS



Four-lane extension of highway A 40



Bridge inspection at industrial port Mainz



Extension of beverage can production site Ardagh, Weidenburg

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Dear clients, dear employees, dear friends of the house,

The development of our company in 2022 was again very positive and we thank you all for your contributions and good cooperation! In 2022, we successfully implemented more than 450 projects in Germany and abroad, for the public sector, the private sector and IFI-funded programs within our broad spectrum of services.

TRANSPORT: FEDERAL HIGHWAYS ++ RURAL AND DISTRICT ROADS ++ URBAN ROADS ++ TRAFFIC STRUCTURES ++ AIRPORTS ++ RAILWAYS ++ INTERNATIONAL HIGHWAYS **AREA DEVELOPMENT:** BUILDING AREAS ++ INVESTMENT PROJECTS ++ INDUSTRIAL PARKS ++ FREIGHT CENTRES **URBAN AND SPATIAL PLANNING:** URBAN LAND-USE PLANNING ++ DEVELOPMENT PLANS ++ ECOLOGY AND LANDSCAPE DESIGN **INDUSTRY:** AUTOMOTIVE ++ CONSTRUCTION MATERIALS ++ ENERGY INDUSTRY ++ GLASS PRODUCTION ++ MECHANICAL ENGINEERING ++ PAPER AND CHEMICAL INDUSTRY **STRUCTURAL ENGINEERING:** INSPECTION OF STRUCTURES ++ REINFORCED CONCRETE STRUCTURES ++ REHABILITATION ++ STEEL CONSTRUCTION ++ CIVIL AND FOUNDATION ENGINEERING **TECHNICAL EQUIPMENT AND FACILITIES:** ELECTRICAL ENGINEERING ++ HEATING/AIR CONDITIONING/ VENTILATION ++ MECHANICAL ENGINEERING ++ MEDIA SUPPLY ++ SANITARY PROVISIONS **WATER:** SEWER SYSTEMS ++ SEWER REHABILITATION ++ WASTEWATER TREATMENT PLANTS ++ WATER SUPPLY **ENERGY INFRASTRUCTURE:** COGENERATION PLANTS ++ MEDIA SUPPLY **CLIMATE-SENSITIVE PLANNING:** CO²-REDUCTION THROUGH DISTRICT HEATING SYSTEMS ++ CONSULTING IN CLIMATE-SENSITIVE PLANNING OF INFRASTRUCTURE PROJECTS ++ RECYCLING ECONOMY IN INDUSTRIAL PARKS ++ FLOOD PROTECTION ++ URBAN DEVELOPMENT **WASTE:** LANDFILL CONSTRUCTION ++ WASTE TREATMENT AND DISPOSAL ++ LANDFILL GAS UTILIZATION ++ LANDFILL LEACHATE TREATMENT **ENVIRONMENTAL & NOISE PROTECTION, OCCUPATIONAL SAFETY:** ENVIRONMENTAL AND SOCIAL MONITORING AND STUDIES ++ NATURE AND SPECIES PROTECTION ++ NOISE AND VIBRATION ASSESSMENT ++ HEALTH AND SAFETY COORDINATION

We hope you enjoy reading our COMPANY UPDATE 2022, wish you a relaxing holiday season and a happy New Year!

Stay healthy and visit us on our webpage www.kocks-ing.de.

Dr. Henning Kocks Michael Brinkmann



"Breite Straße", Euskirchen

Rehabilitation of a municipal street in the center of Euskirchen

Renewal of the combined sewer by replacement construction including property connection lines. Construction of a new road surface, areas for stationary traffic and parking areas and traffic areas for non-motorized traffic.

Client Municipality of Euskirchen

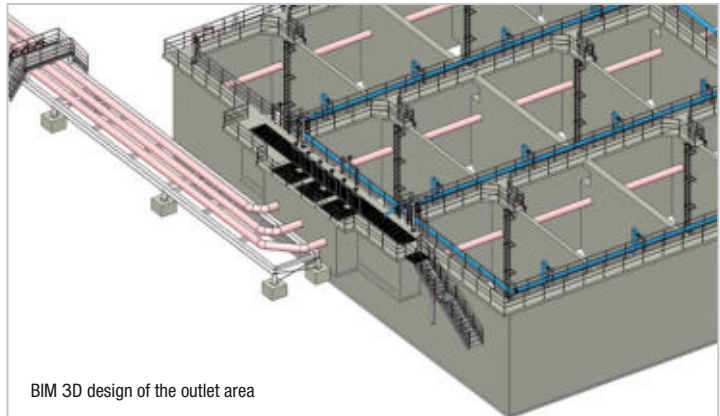
Services KOCKS ENGINEERS Design, tendering, construction supervision.

BIM design for the extension of the main sewage treatment plant of Trier, 140,000 PE

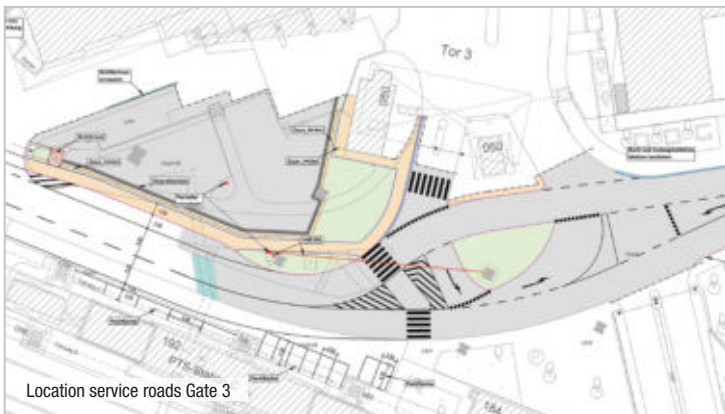
Construction of new aeration basins, a blower station, an additional wastewater and return sludge pumping station and MID shaft with connection to the existing secondary sedimentation.

Client Municipal Enterprise of the City of Trier

Services KOCKS ENGINEERS BIM-compliant design of engineering structures, technical equipment as well as structural design and construction supervision.



BIM 3D design of the outlet area



Location service roads Gate 3

Frankfurt Airport traffic development: New traffic facility Gate 3, Terminal 3

Redesign of traffic facilities of the central operational gateway 3 at Frankfurt Airport and optimization of operational areas of the Airmail Center Frankfurt while maintaining operational traffic.

Client Frankfurt Airport AG

Services KOCKS ENGINEERS Design of transport facilities and construction supervision.

Expansion of the road network in Georgia

Construction of a new 52 km long four-lane highway in the Samtredia-Grigoleti road section as part of the East-West Transport Corridor to improve Georgia's sustainable economic growth.

Client Roads Department of Georgia

Financier European Investment Bank

Services KOCKS ENGINEERS Construction supervision.



Asphalt works at Lot 4 – Project road



Aerial view of discharge facility "Berger Feld"

BIM design for the storage sewer "Berger Feld"

In the course of the renaturation of the Emscher River, 12 stormwater treatment plants were built between Herne and Bottrop/Essen. KOCKS ENGINEERS were involved in the realization of the plant at Berger Feld pumping station in Gelsenkirchen, consisting of a reservoir canal, a spillway, a throttle structure and various manholes.

Client Emscher cooperative society / Emscher Wassertechnik GmbH

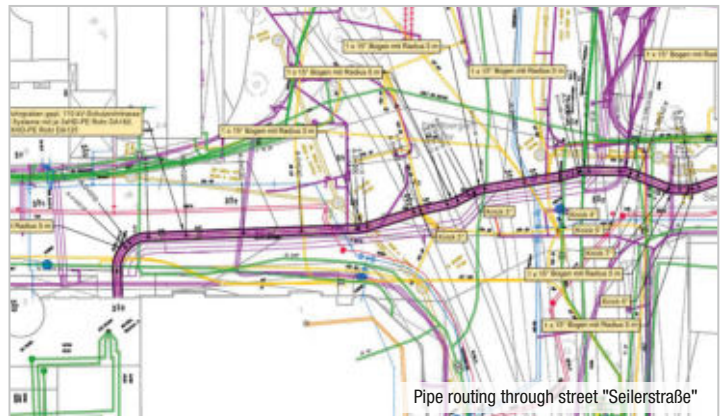
Services KOCKS ENGINEERS BIM-compliant design of engineering structures, technical equipment as well as structural design.

Routing of a 110 kV line through the city centre of Frankfurt/M

Planning of a new conduit route for high-voltage cables to replace existing oil cable routes from 1959 and 1963. Coordination of the planned route with other carriers and the operators of the city's road and subway network. Elaboration of coordinated construction sections in terms of traffic connection, route length approx. 1.5 km.

Client Grid Services "Netzdienste Rhein-Main GmbH"

Services KOCKS ENGINEERS Design and preparation of routing plans.



Pipe routing through street "Seilerstraße"



Bridge structure at strip storage facility

Upgrading of strip storage facility at pickling plant, Andernach

Structural analysis of the existing bridge-like steel structure in truss construction. Elaboration of retrofitting measures and implementation supervision. Design and dimensioning of several external footbridge and walkway constructions for the execution of the regular bridge inspections according to DIN 1076.

Client thyssenkrupp Rasselstein GmbH

Services KOCKS ENGINEERS Structural design, steel construction workshop planning, tender documents, construction supervision, bridge inspections according to DIN 1076.

Reconstruction and extension of the federal highway interchange at Kaiserberg

Six-lane widening of the highways A 3 and A 40 at the interchange Duisburg-Kaiserberg. Renewal of three-level ramp system. Reconstruction of the junction Duisburg-Kaiserberg. The extension length is approx. 5.0 km plus ramp carriageways and affected roads in the remaining network.

Client Federal highway authority of Germany

Services KOCKS ENGINEERS Detailed design, preparation of tendering for traffic facility and road drainage constructions.



Interchange Duisburg-Kaiserberg



Bridge inspection at industrial port Mainz

Bridge inspection at the industrial port of Mainz

Main structural inspection of the road bridge over the industrial port of Mainz according to DIN 1076 as well as other bridges and noise barriers in the city area.

Client Municipality of Mainz

Services **KOCKS ENGINEERS** Bridge inspection according to DIN 1076.

Modernization of the railroad from Kovel via Yahodyn (Ukraine) to Polish border

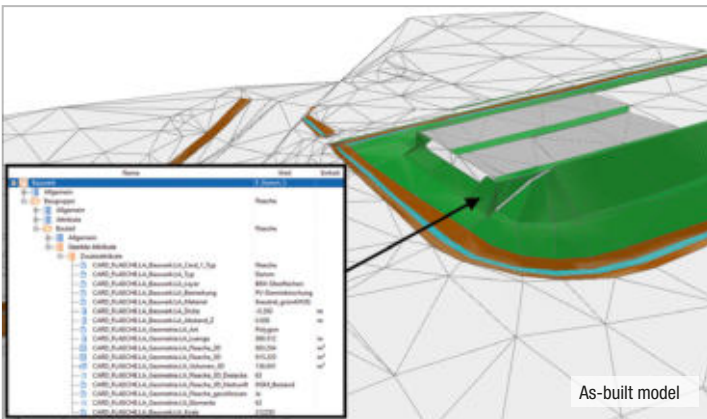
Modernization of approx. 60 km of railroad line with different track gauges for improved connection of the Ukrainian rail network to the European Union.

Client European Investment Bank (EIB)

Services **KOCKS ENGINEERS** Feasibility study, variant studies for alignment and technical equipment, cost-benefit analysis, investment plan, environmental and social studies, land acquisition plan, draft design.



Railway station building in the city of Kovel, Ukraine



As-built model

BIM design highway A 44 - Replacement construction of the viaduct at Diemel

Replacement construction of a viaduct at Diemel on the federal highway A 44 including traffic facility.

Client Ingenieurbüro GRASSL GmbH (on behalf of the Federal highway authority of Germany)

Services **KOCKS ENGINEERS** BIM-compliant design of partial models of as-built survey and utility lines. Preliminary design of the traffic facility and BIM specific model of the road in accordance with the client information requirements and the BIM execution plan.

Relocation of the gas and drinking water pipeline at the railway crossing "Frankenallee" in Frankfurt

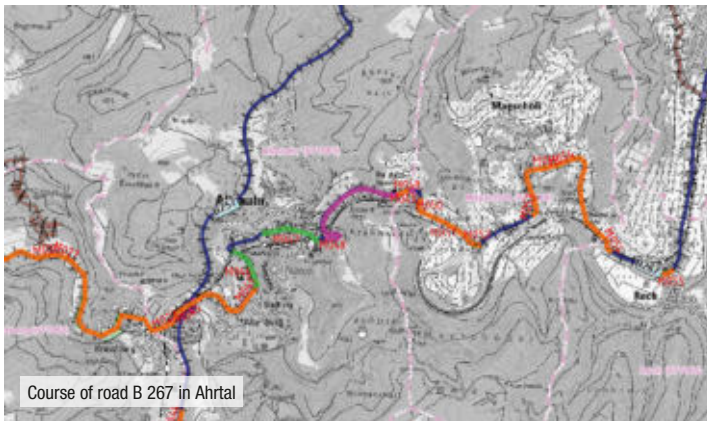
Renewal of a drinking water pipeline (DN 400 GGG) in an existing steel pipe crossing under the suburban railway line of the German railroad. Additional laying of a gas pipeline (DA 200 HDPE) and four empty pipes for the laying of media cables. Planning of a new shaft structure for the drinking water pipeline.

Client Grid services "Netzdienste Rhein-Main GmbH"

Services **KOCKS ENGINEERS** Project planning for engineering constructions, structural design, health and safety coordination and construction supervision.



Insertion steel protection pipes



Course of road B 267 in Ahrtal

Master plan for road reconstruction in the Ahrtal region after the 2021 flood catastrophe

Establishment of the prioritized master plan for the restoration of the classified traffic infrastructure of the Ahrtal valley after the significant damage caused by the flood disaster in July 2021.

Client State enterprise LBM Cochem-Koblenz

Services KOCKS ENGINEERS Preparation of the master plan, identification and evaluation of approx. 60 measures. Prioritization, documentation and implementation concept.

General drainage plan for the city of St. Goar

Verification of the hydraulic capacity of the sewer network on the basis of DIN EN 752 and DWA Worksheet A 118 using a hydrodynamic calculation model for the actual and final condition as a prerequisite for the planned rehabilitation of the existing combined sewer pumping station II located on the state road B 9.

Client Municipality administration of Hunsrück-Mittelrhein

Services KOCKS ENGINEERS General drainage plan.



Overview of catchment areas



Site plan cutout

Sewer reconstruction at professional school "Klingerschule", Frankfurt/Main

The City of Frankfurt is planning to relocate a DN 600 sewer over a length of approx. 120 m in the northeast of the city center. In the area under the residential buildings, the sewer will be designed to be explosion-proof and will be laid in sections by cut-and-cover techniques, in steel protective pipe and also by open cast construction.

Client Municipal enterprise of the City of Frankfurt

Services KOCKS ENGINEERS Design of engineering constructions, construction supervision, preparation of traffic routing plans and overall pipe route layout plans.

Wastewater pumping station at Frankfurt Airport

Construction of a new wastewater pumping station with a pumping capacity of 35 l/s including the inlet and outlet channels for the drainage of gate G at the new Terminal 3 of Frankfurt Airport.

Client Frankfurt Airport AG

Services KOCKS ENGINEERS Design of engineering constructions, technical equipment, structural design and construction supervision.



Technical equipment machinery room pumping station East



Current washboard track of project road Ulaangom – Khovd

Climate change induced road development Mongolia

Expansion of two regional roads in the western part of Mongolia with a total length of 361 km.

Client / Financier Asian Development Bank (ADB)

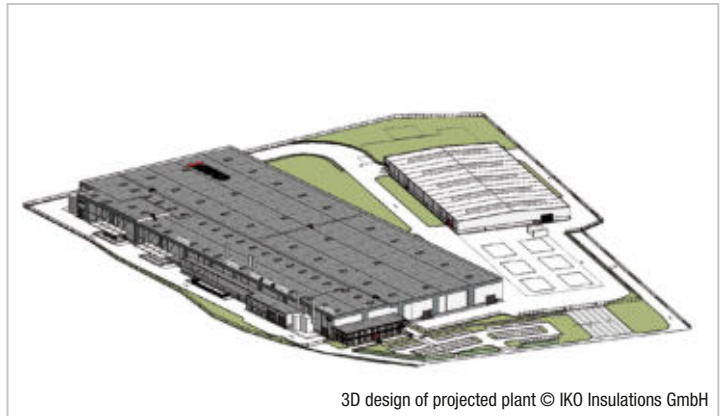
Services KOCKS ENGINEERS Design review of existing design, identification of climate risks and compensation measures. Road safety audit, economic feasibility calculations and financial capacity assessment. Environmental study, support to the client / PIU during project implementation.

Obtaining of construction permission for an insulation production plant at Kaisersesch

BlmSchG application for the new construction of a production plant for PIR insulation boards with storage and administration building and outdoor/transport facilities.

Client IKO Insulations GmbH

Services KOCKS ENGINEERS Building application, structural design, drainage and traffic system planning, tendering.



3D design of projected plant © IKO Insulations GmbH



Rhine bridge Duisburg-Neuenkamp

Performance-based federal highway expansion at Europe's largest inland port in Duisburg

Eight-lane widening of the federal highway A 40 between junctions DU-Homberg and DU-Häfen including construction of the new Rhine bridge at Duisburg-Neuenkamp .

Client Federal Republic of Germany through DEGES

Services KOCKS ENGINEERS Design of traffic facilities, drainage design, preparation of contract award. Noise study and report, construction logistics, construction site management, support of the client during construction.

Site extension of construction material supplier near Berlin

Application and procurement of the legal planning basis for the new construction of a production hall, an intermediate storage facility and the extension of storage space to improve the product portfolio and secure the competitiveness of the Mittenwalde-Telz site (Berlin) of KANN GmbH Baustoffwerke.

Client KANN GmbH Baustoffwerke, Bendorf

Services KOCKS ENGINEERS Urban land use planning, BlmSchG and building application, design of traffic and drainage systems.



KANN GmbH Baustoffwerke producion site Mittenwalde-Telz



Runway Canouan Airport

Modernization of Canouan Island Airport, St. Vincent and the Grenadines, Caribbean

Rehabilitation of the runway with special consideration of environmental impacts from climate change. Modernization of technical equipment and infrastructure for firefighting, security and lighting. Preparation of guidelines for future maintenance and operational requirements.

Client Ministry of Transport, St. Vincent and the Grenadines

Financier Caribbean Development Bank (CDB)

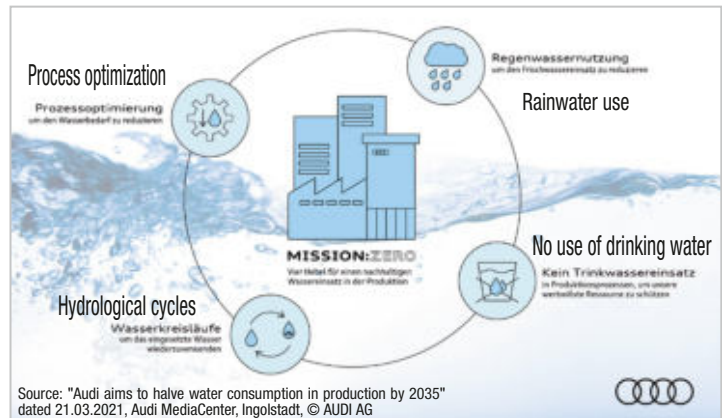
Services KOCKS ENGINEERS Assessment of climate change impacts and risks. ESIA, feasibility studies, preliminary and detailed design, tender documents.

Wastewater treatment in automotive production

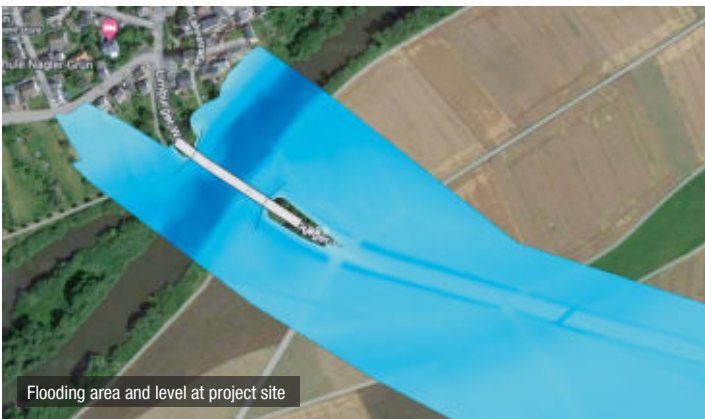
New construction of a multi-stage wastewater treatment plant for the treatment of process water at the new Audi plant in China. Treatment of the production and sanitary wastewater with membrane bioreactor and reverse osmosis and recirculation into the production process.

Client M&P Braunschweig GmbH for Audi AG

Services KOCKS ENGINEERS Interdisciplinary BIM-cloud-based preliminary design of wastewater treatment plant. Support to the client during overall project planning and design of technical equipment.



Source: "Audi aims to halve water consumption in production by 2035" dated 21.03.2021, Audi MediaCenter, Ingolstadt, © AUDI AG



Flooding area and level at project site

Two-dimensional flooding prognosis of the river Lahn at Limburg-Staffel

Determination of discharge changes for the hundred-year flood (HQ100) of the Lahn River in the course of the replacement construction of the Lahn bridge at Limburg-Staffel. Consideration of different discharge cross sections for the existing bridge, the replacement bridge and the temporary bridge.

Client Administrative district Limburg-Weilburg

Services KOCKS ENGINEERS Hydraulic studies and analyses.

Mechanical engineering assessment of the river water pumping station at Westside Frankfurt/M

Engineering assessment, evaluation and technical examination of possible design options to increase the pumping capacity of the pumping station. Preparation of rehabilitation concept whilst maintaining the fire water supply to the industrial area of Griesheim.

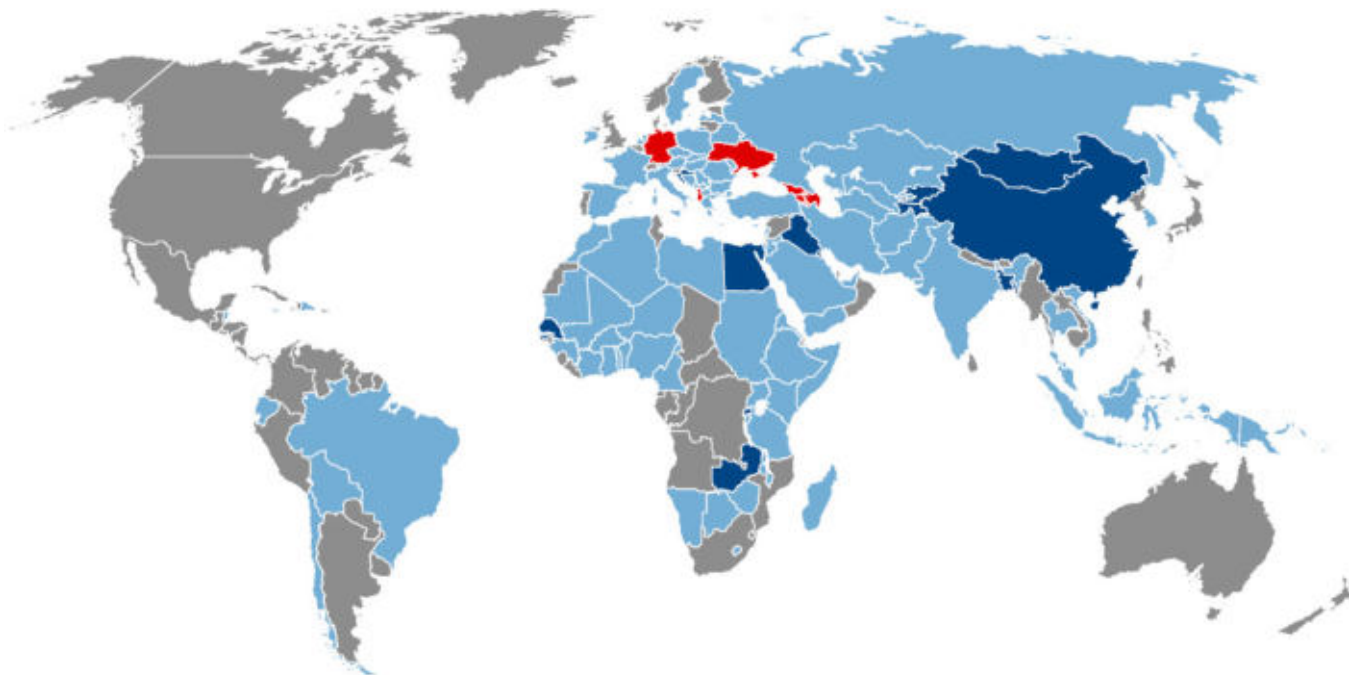
Client BEOS AG

Services KOCKS ENGINEERS Engineering consulting services.



Pipe system in river water pumping station

Comprehensive Engineering Solutions worldwide since 1946



Registered KOCKS Branches: Albania, Armenia, Azerbaijan, Georgia, Germany, Ukraine

Projects 2022 in: Albania, Armenia, Azerbaijan, Bangladesh, China, Croatia, Egypt, Georgia, Iraq, Kyrgyzstan, Kuwait, Luxembourg, Maldives, Mongolia, Rwanda, Zambia, Senegal, St. Vincent and the Grenadines, Tajikistan, Ukraine

Project since 1946 (historical overview)

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