KOCH Technology, Management and a Passion for Projects

The KOCH Pipe Conveyor®
The KOCH Pipe Conveyor®: No. 1 in the World

With more than 190 installed systems with more than 90 km (56 miles) of conveying length located in 30 countries, the KOCH Pipe Conveyor® is clearly No. 1 in the world. No other pipe conveyor system is so fully developed, installed in so many applications and so successfully tested in operation.

KOCH Pipe Conveyor® Systems: Setting New Standards.
The KOCH Pipe Conveyor®:
The Superior Features.

Conveying in tight spaces
KOCH Pipe Conveyors® integrate optimally in existing plants, and minimize conveying distances, regardless of the landscape parameters, thereby permitting cost effective line arrangements.

Dust free with minimal noise emissions, securely protected
KOCH Pipe Conveyors® transport bulk materials dust free with low noise emissions and totally enclosed over roads, tracks, waterways or open seas, through existing plants, over public streets, in environmentally protected zones. Even contaminated materials are conveyed without any negative environmental impact.

For all types of topography, flexible – and innovative
KOCH Pipe Conveyors® easily handle long distances and problematic topographic areas. Customized designs incorporate complex client needs: downhill conveying in difficult topographies; conveying various materials in one system. Whatever is technically possible, we can implement based on our experience from 190 operating systems – and relying on the innovative competence of the market leader.

Cost effective and reliable
Limited spatial requirements, elimination of high cost and maintenance intensive transfer stations as well as secure conveyance without expensive housings assure the cost effectiveness of the KOCH Pipe Conveyor® system. A high level of operating availability reflecting the KOCH training program and KOCH service guarantees your investment decision.
The KOCH Pipe Conveyor®: Fully Developed Technology, Operationally Tested Details.

Each KOCH Pipe Conveyor® incorporates extensive know how for dealing with the most varied types of materials – and the experience from implementing more than 190 systems.

Fully developed technology as well as the most state of the art planning and design aids such as, for example, special software and extensive data banks, form the basis for the success of the KOCH Pipe Conveyor®. Numerous specially developed design elements, tested and optimized in actual operation, make all the difference. Thus, to assure the highest level of reliability even with widely fluctuating load factors, the belt construction of the KOCH Pipe Conveyors® is designed using the finite element method and computer simulations. Using overload panels and a level monitor for the material flow, the KOCH Pipe Conveyor® in its base model provides a double guarantee against overfilling. Guide stations along the standard conveyor sections always hold the belt in the proper alignment along the entire line. The belt scale, which can be installed in the closed belt pipe section, was specifically developed for use in the pipe conveyor.

A multitude of supplementary components – from spillage conveyors through belt turning stations for the simultaneous conveying of different materials – complete the offerings of the KOCH Pipe Conveyor® line and lay the foundation for the development of new conveying designs for new tasks, new materials, and new applications. And do it reliably and according to time schedules – from the initial layout through the bid process, fabrication, erection and commissioning.

KOCH | Leading Pipe Conveyor Technology
The KOCH Pipe Conveyor®:
Customized Designs for Every Application.

KOCH Pipe Conveyors® reliably transport the most diverse materials: wet and fly ash, coal and substitute fuels from recycled industrial wastes, wood chips and raw material pellets, filtered sludges and biomass, coarse overburden and the finest powders such as gypsum or cement.

KOCH Pipe Conveyors® handle conveying tasks in the basic industries and in power plants, in lime mills and cement plants, in the paper products, particle board and synthetic fiber industries, as well as in smelting plants – all in an environmentally secure system that protects the material conveyed while saving space and costs.

KOCH designs pipe conveyor systems for every conceivable application from small, compact units to convey within a plant through kilometer long systems for overland conveying. Designed individually based on the client’s requirements, adjusted carefully in every detail to the environmental parameters as well as the characteristics of the conveyed material.

1. Kronospan Inc / Switzerland, Particle Board Plant
   Secure conveying of wood chips directly across roads and rail tracks. KOCH’s design to cross rail tracks and roads without supports: a 57 m long curved bridge with both horizontal and vertical curves.

2. Marti Inc / Switzerland, Lötschberg Base Tunnel
   Clean and secure in the tightest space: During the construction of the Lötschberg Base tunnel KOCH Pipe Conveyors® transported overburden, concrete gravel and quarry sand using a small window gallery parallel to the rolling traffic of the construction site. The system becomes extra narrow for that purpose. Two of the conveyors operate as a dual stand with one on top of the other while the third runs transversely along the tunnel ceiling – at times in 3D curves with radii ranging between 75 and 160 meters.

3. Lenzing Inc / Austria, Synthetic Fiber Production
   Conveying remnant materials through a tight, haphazard layout. The KOCH Pipe Conveyor® handles the task brilliantly. To integrate the plant seamlessly into the existing environment, the conveyor runs a line at times 30 m high carried by specially designed supports mounted on existing buildings.

4. Wismut Inc / Germany, Uranium Mining Stockpile
   Transporting contaminated material for a distance of 1.8 km over streets, a river and an intercity rail line – passing inhabited areas. The KOCH Pipe Conveyor® successfully handles all its tasks at no additional cost. Following a retrofit to increase capacity after 7 years of reliable operation, the system can now convey the increasingly common clumpy material as well as the rolling bulk material.

5. Deutsche Steinkohle AG, SBW Enseldorf / Germany, Bituminous Coal Mine
   Difficult topography, steep inclines. This KOCH Pipe Conveyor® transports tailings over virtually impassable terrain including a 20° incline to reach the mine pile. The unit is designed to be mobile in order to compensate for pile depressions without any problems.

6. Famsa / Switzerland, Stone Quarry
   Virtually impassable mountainous terrain with inclines up to 29°, strict protective laws for flora, fauna and residents: This KOCH Pipe Conveyor® successfully carries up to 500 tons of gravel in an environmentally protective manner from the quarry to the plant located 208 m lower – and then carries up to 300 tons of slag back up on its return. The plant also makes use of the elevation drop to generate electrical power.

7. CEZ a.s., Elektrarna Melnik / Czech Republic, Power Plant
   Transporting wet ash from the power plant to the disposal area. The 2 km long KOCH Pipe Conveyor® fulfills its task by winding its way through the plant, the surrounding landscape and an embankment using 3 horizontal and 4 vertical curves. In order to be able later to return the ash for processing into the power plant, the conveyor system is designed to be reversible – convertible in 24 hours.

8. Malayan Cement / Malaysia, Cement Production
   In this unit, fresh cement is conveyed to a ship loading station at sea – securely protected in the KOCH Pipe Conveyor® against the high humidity. Since 1995, the system has proven to be highly reliable and available for operation under extreme conditions.
The KOCH Pipe Conveyor®: Flexible and Expandable – Right up to Turnkey Industrial Systems.

For larger tasks, the entire KOCH product line spanning all output levels is available to supplement the pipe conveyor. Thus, we design and supply customized conveying systems for any requirement – right up to turnkey systems, for example, power plant coal feeding systems or port loading and unloading facilities.

Service for smooth operation and long service life
KOCH Pipe Conveyors® are characterized by their long service life and reliability. Each installation includes a thorough system training cycle and comprehensive technical documentation to assure smooth operation. A fully trained staff handles the start up and commissioning and is always available during the service life of the unit; for maintenance and conditioned monitoring and servicing based on a special KOCH inspection program, either as express service or to adapt the system if the tasks or the parameters of operation change.

The KOCH Pipe Conveyor®: The conveying system which can handle all challenges. When will you challenge us?