

# Belt Conveyors

## Long Distance Haulage Solutions

Excellence in Technology



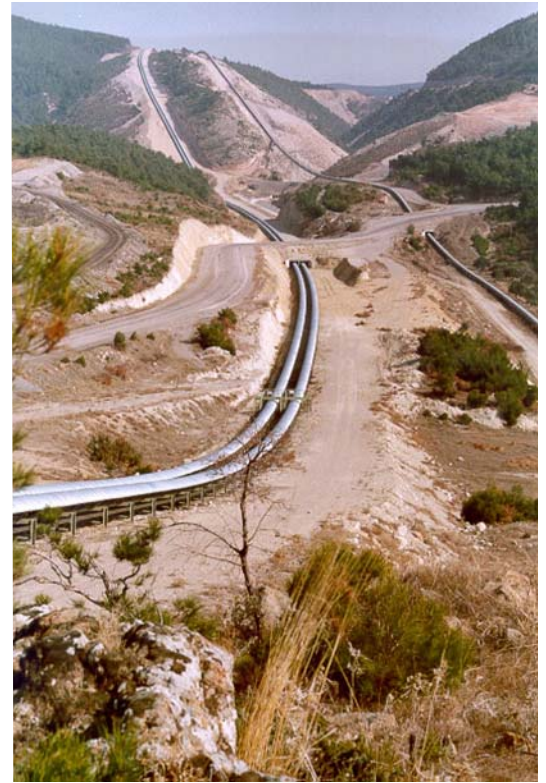
**ThyssenKrupp Robins**



**ThyssenKrupp**

# Overland Conveyor Systems:

## A Reliable Means of Bulk Material Transport



### THIS PAGE:

#### Upper Left:

A belt conveyor carrying lignite coal.

#### Right:

An Overland Conveyor system transporting coal to a power plant.

#### Lower Left:

An Overland Conveyor with multiple compound curves conveying aggregates.

#### Lower Center:

An Overland Conveyor carrying coal in Wyoming.

### NEXT PAGE:

#### Left :

A Pipe Conveyor that carried ore safely through a town to the processing plant.

#### Center:

A Pipe Conveyor conveying coal in mountainous terrain.

#### Upper Right

A Pipe Conveyor is trained open into a conventional troughed shape as it enters the offloading point.

#### Lower Right:

The Pipe Conveyor is trained into the closed position as it leaves the loading point.

Designed and built by specialists, ThyssenKrupp Robins' belt conveyors provide reliability even under adverse conditions.

### Innovative Design

Conveyor systems are the accepted connection between the phases of mining, processing, and storage.

Our Overland Belt Conveyor Systems are custom-designed to meet the specific demands of the client's needs, for the type and volume of material to be handled, the existing topography of the route, and prevailing climatic conditions. We provide conveyors with belt widths of up to 120 inches (3.0 m) and belt speed as high as 1500 ft/min (7.6 m/s).

ThyssenKrupp Robins' conveyors provide maximum availability with designs that reduce maintenance time and can integrate monitoring systems to alert operators in time to perform preventative maintenance.

ThyssenKrupp Robins' development of efficient and reliable curved belt conveyor technology has opened up new horizons for conveyor transport of bulk materials. Conveyors can now be optimally routed to follow the contours of the terrain.

### Long Distance Efficiency

Overland Conveyors are the most effective means of transporting bulk materials over long distances, and costs are often lower than with truck or rail transportation.

Costs can be kept down by installing the conveyor beside the existing roadbed to facilitate easy maintenance and eliminate the cost of creating special routing for the conveyor.

## Pipe Conveyors:

### Environmental Solutions to Conventional Conveying Challenges



#### Benefits of a Pipe Conveyor

- (1) Completely enclosed and dust free transport of material.
- (2) No spillage or scattering of material from the loaded belt.
- (3) No dropping of material from the return belt.
- (4) Conveyor can be curved both horizontally and vertically.
- (5) Conveyor can rise at steep angles.
- (6) Return belt can also be used to convey material.



The Pipe Conveyor provides a modern solution to material transport problems that cannot be handled by conventional conveyor systems.

#### Best of Both Worlds

The "Pipe Conveyor" is used to address problems where spillage of materials, environmental issues, and limitations in routing prevent the use of conventional conveying systems.

At the loading point, the Pipe Conveyor is open in a conventional troughed form, after which it is formed into a pipe shape for the transport length. This completely encloses the material within the "pipe".

At the end of the transport run, and just before the discharge pulley, the belt again opens thus allowing materials to be discharged in a normal fashion.

Horizontal as well as vertical curves may be accomplished with the Pipe Conveyor that are impossible to follow with conventional troughed belt conveyors.

#### Working with the Environment

The Pipe Conveyor is the ideal solution to overland haulage where use of conventional conveyors in remote or difficult terrain would create the potential for spillage and pollution. It protects the material being transported and prevents access to the material from outside sources.

With all materials completely enclosed within the rolled belt, pollution, environmental damage, and dust can be effectively controlled.

A further concern when conveying materials in heavily populated areas is the problem of safely negotiating obstacles such as buildings and roads with the least disruption to existing facilities. Pipe Conveyors are ideally suited to situations where transport by conventional conveyor systems would prove too hazardous or costly due to environmental or community-based concerns.

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