

# PHOENAPIPE<sup>®</sup>

## Conveyor Belts



Highest efficiency  
pipe conveyor belts



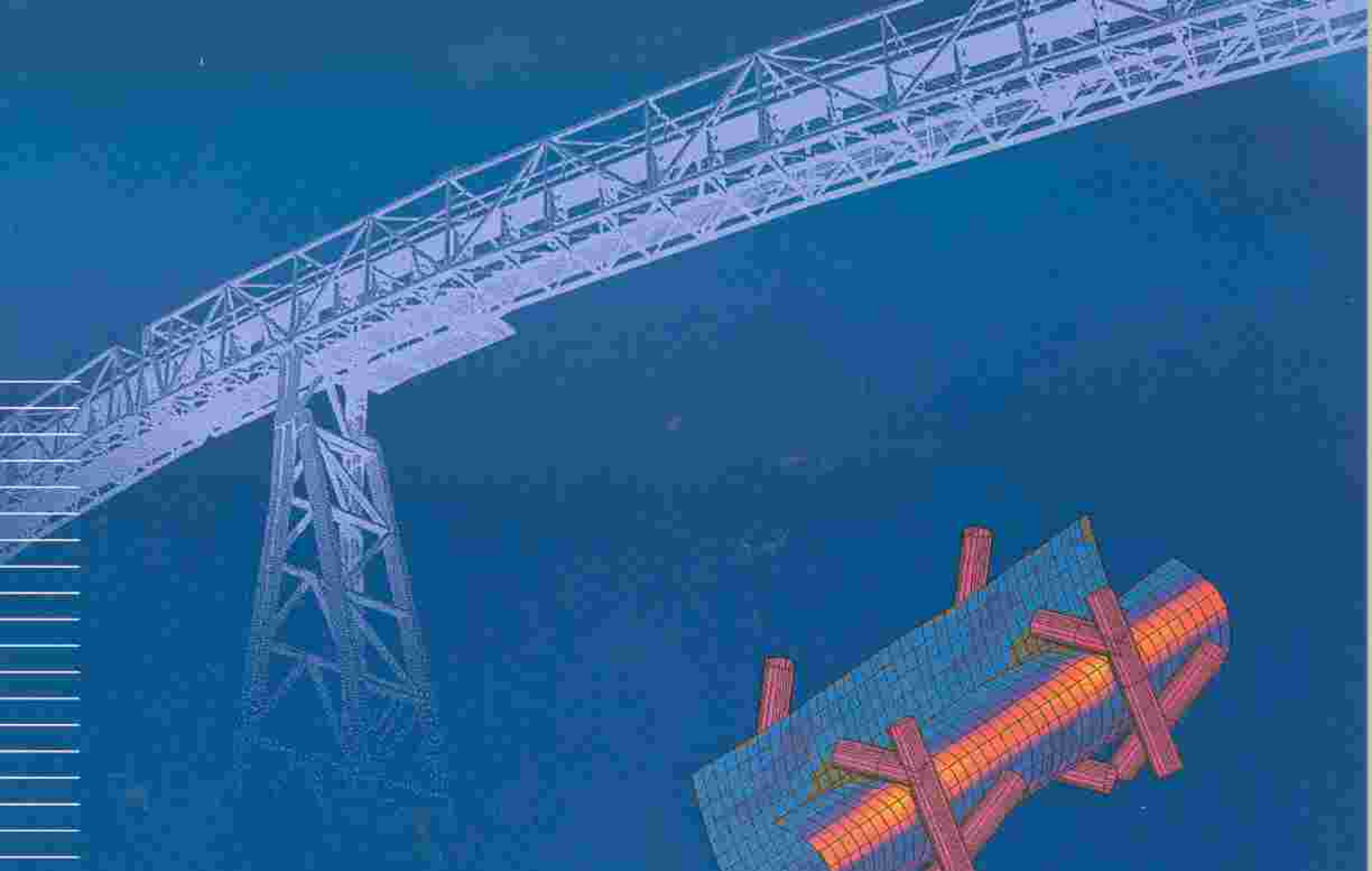
# PHOENOPIPE® Conveyor Belts



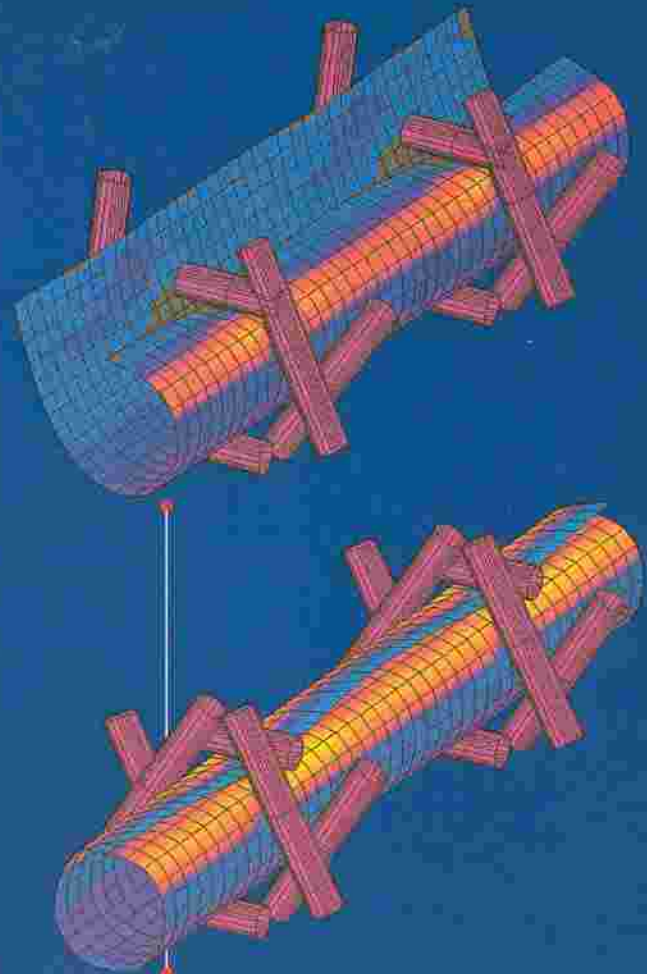
With greater regard to environmental aspects and the need of higher flexibility in routing, solving conveying problems employing enclosed conveyor belts is becoming increasingly apparent.

## The advantages of conveying with PHOENOPIPE belts are:

- Vertical, horizontal and three-dimensional curves of relatively sharp radii are possible.
- Steep angles of up to 35° can be negotiated.
- Reduction in costs by shortening conveyor routes and omitting transfer points in narrow terrain.
- No costly constructions needed to cover the belt.
- Preventing spillage of material from the loaded belt, which is specifically interesting for fine material like ash or gypsum.
- Preventing the loaded material from environmental influences like rain and snow.
- Smaller cross-section.
- Reduction in noise emissions.



PHOENOPIPE conveyor belts are carefully designed using the latest finite element analysis (FEA) systems, based on 100 years of conveyor belt construction and manufacture. Forces in all areas of a PHOENOPIPE conveyor belt in various configurations and positions are calculated and used for the final belt design. Extensive test series in the field and at the Institute of Conveying Technology of University of Hannover proved the excellent performance of PHOENOPIPE conveyor belts.



The working principle is that the belt is flat at the head and tail pulleys, and is formed into an enclosed shape whose edges overlap. The belt is guided and held by surrounding idlers.

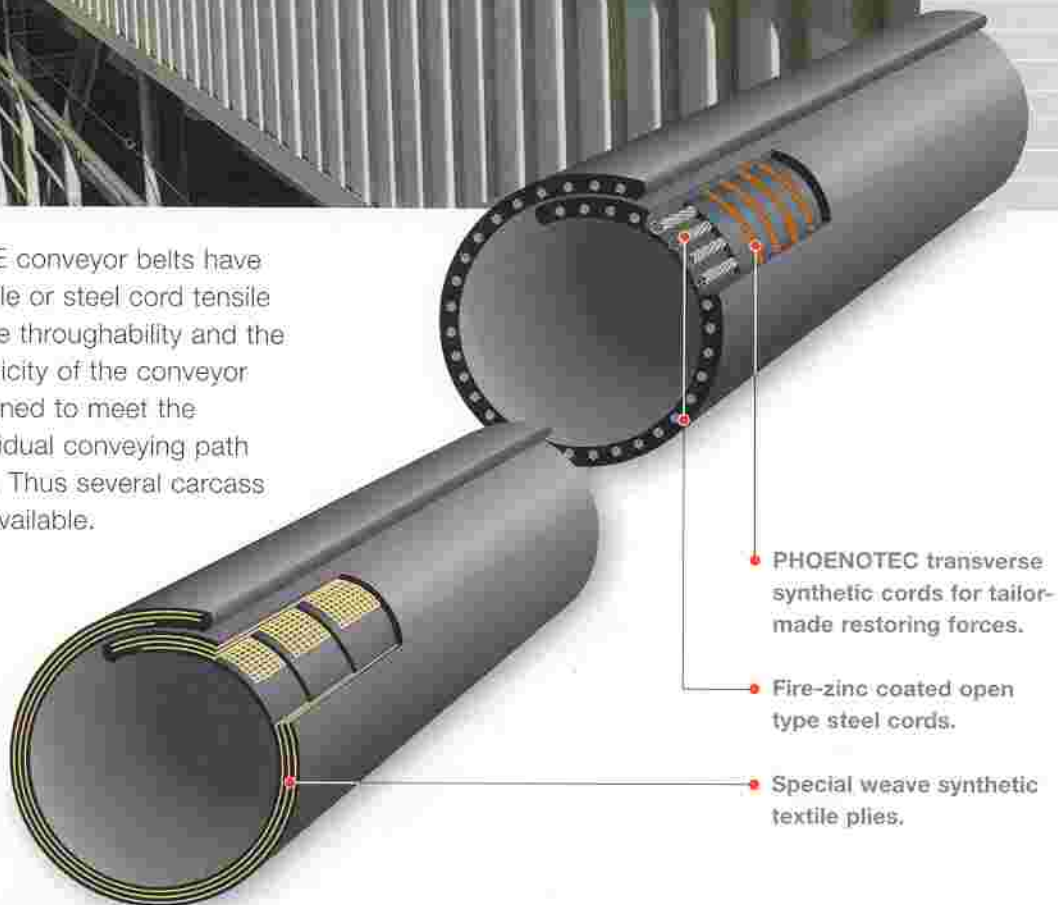


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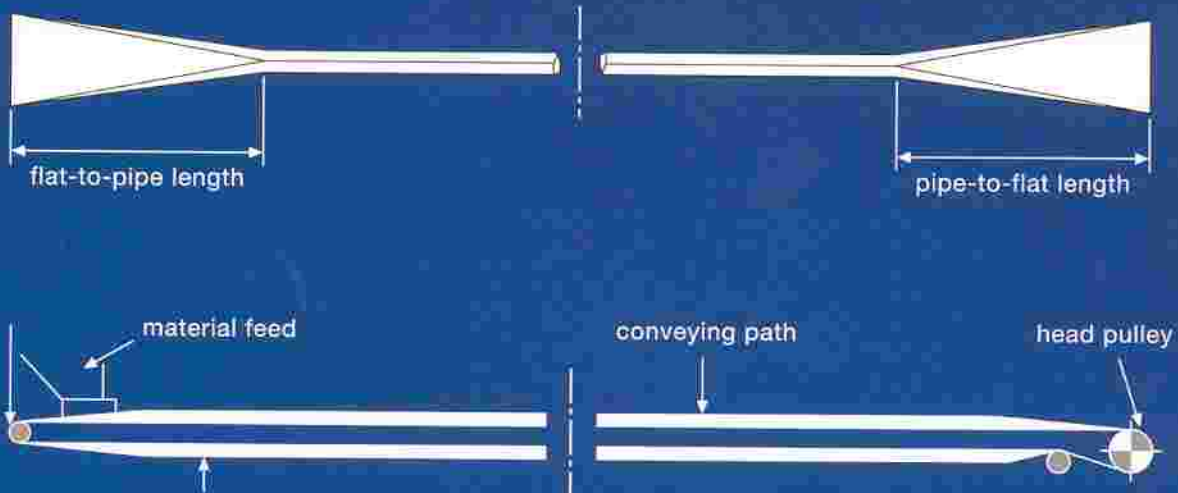
have successfully  
been in use in  
many applications  
worldwide.



PHOENOPIPE conveyor belts have patented textile or steel cord tensile members. The throughability and the rebound elasticity of the conveyor belt are designed to meet the required individual conveying path configuration. Thus several carcass designs are available.



- PHOENOTEK transverse synthetic cords for tailor-made restoring forces.
- Fire-zinc coated open type steel cords.
- Special weave synthetic textile plies.



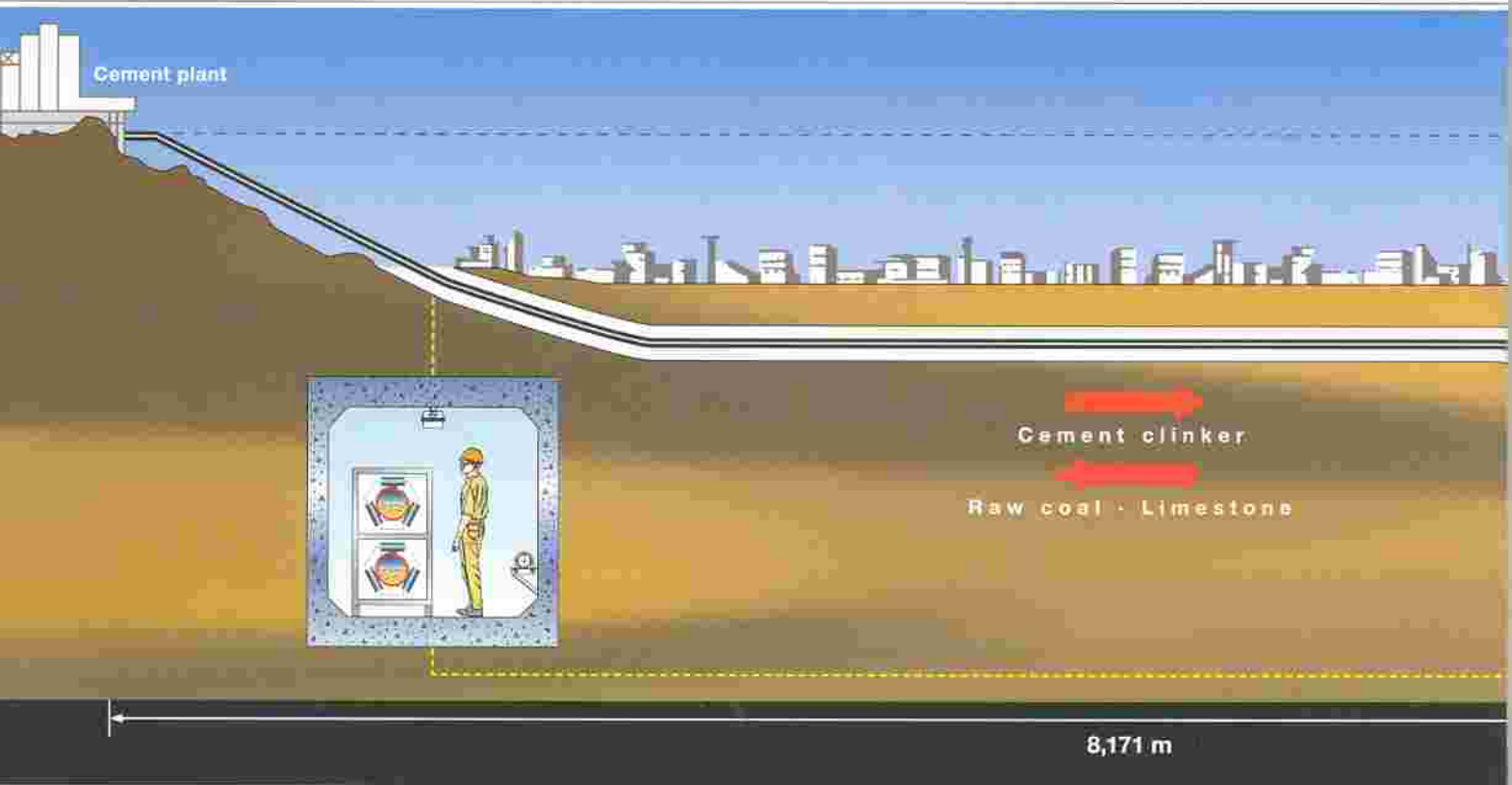
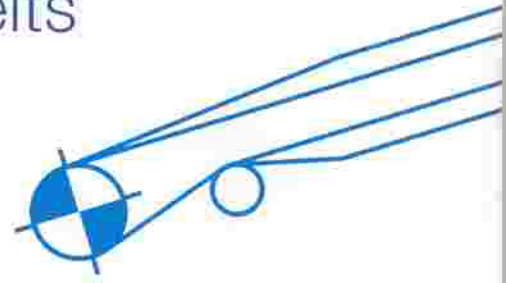
Cover grades are available for almost all applications, including resistances against cold, heat, oil and fire.

Pipe diameter in mm	Belt width in mm	Conveyed quantity in m <sup>3</sup> /h $v = 1 \text{ m/s}$ 75% utilization	Max. lump size in mm *
150	600	45	40
200	700	85	60
210	750	95	65
220	800	100	70
250	1000	130	80
450	1600	430	140
500	1850	530	160
850	3200	1500	250

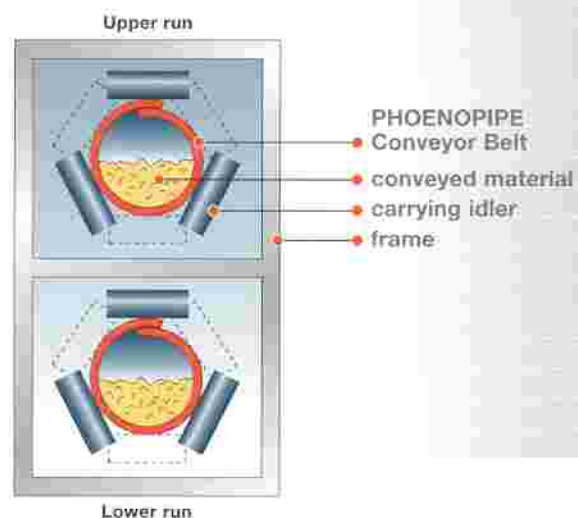
\* - these approximate figures apply to normal operating conditions.

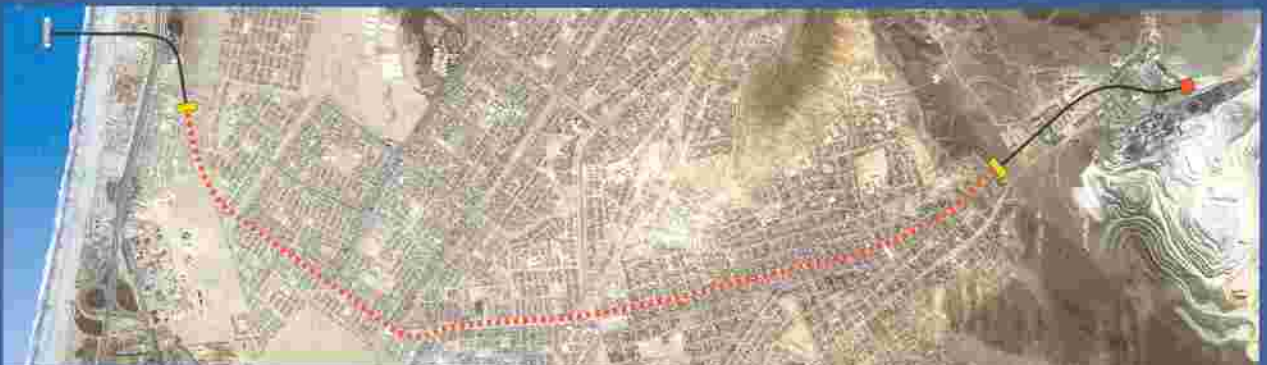
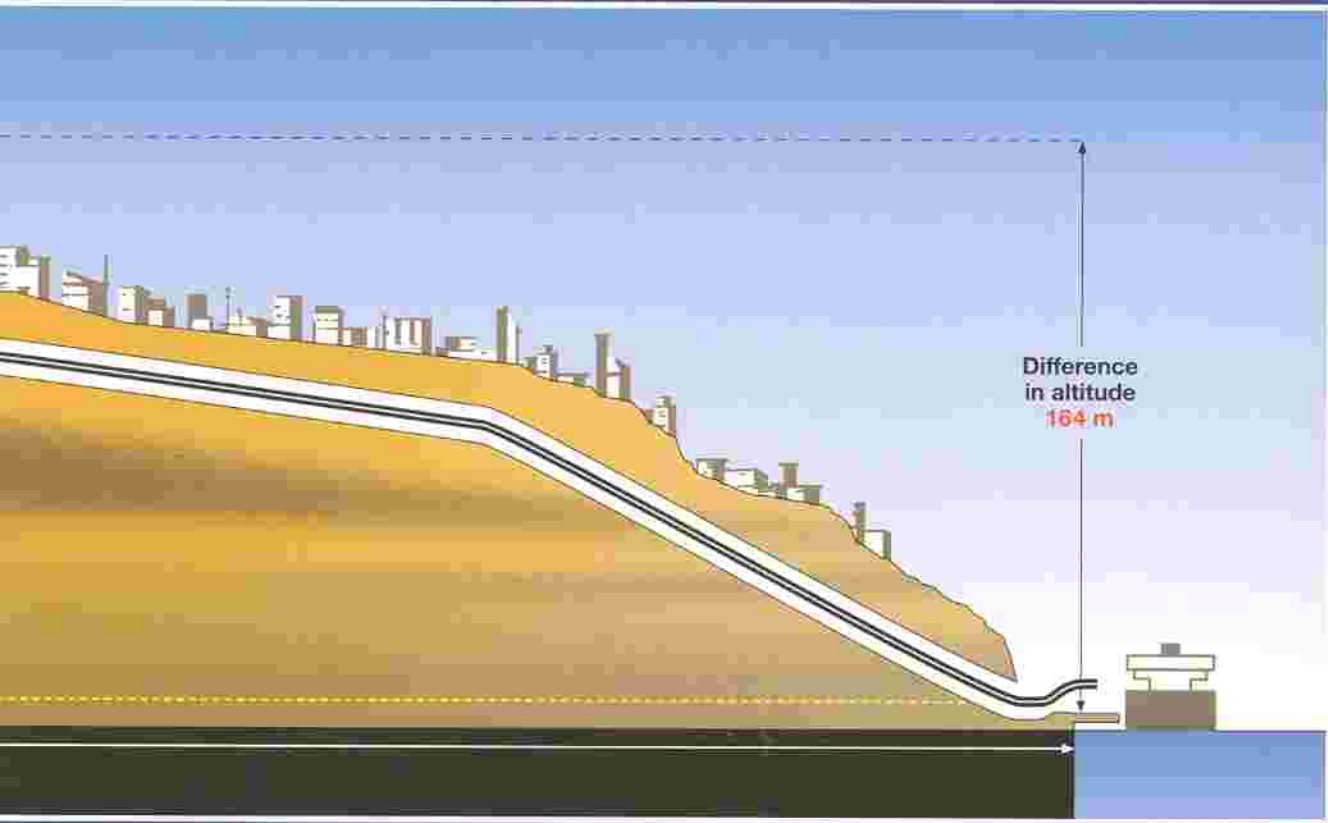
# PHOENOPIPE® Conveyor Belts

The longest  
Pipe Conveyor Belt  
worldwide.



A pathbreaking application is a 16.4 km long Phoenopipe conveyor belt for the downhill conveyance of hot clinker on the top run, and the uphill conveyance of coal and limestone on the bottom run. The diameter of the Phoenocord St 2500 belt is 300 mm. Both belt covers are equipped with Phoenotec cords to achieve the optimum restoring force. The smallest curve radius is 300 m. The path of the Phoenopipe conveyor belt is underneath streets and buildings.





## PHOENOPIPE® Conveyor Belts



PHOENOPIPE conveyor belts are the ideal method to convey material through narrow curves. Closed conveyor belts are gaining increasing importance because they meet the growing requirements for a clean environment to a high degree. It is also possible to shorten the conveyor route, too.

Phoenix conveyor belts for all kind of applications – up to the strongest and heaviest conveyor belts ever been built. Please contact us for any assistance regarding your conveyor belt requirements.

Phoenix Conveyor Belt Systems has the most modern testing centre worldwide for developing conveyor belts. Extensive quality tests ensure the technological lead of Phoenix conveyor belts.

Phoenix production locations meet the ISO 9001 quality standard. The certification according to ISO 9001 comprises quality assurance during development, production, assembly and distribution. It therefore completely covers all of the areas which lead to higher standards of products and services. Phoenix Conveyor Belt Systems GmbH fabricates according to all the nationally relevant quality standards like DIN, SABS, MSHA, RMA, BS, AS, CSA, etc.

### PHOENIX CONVEYOR BELT SYSTEMS GMBH

Hannöversche Strasse 88  
D-21079 Hamburg, Germany  
Phone: +49-40-7667-2205  
Fax: +49-40-7667-2773  
E-mail: [info@cbs@phoenix-ag.com](mailto:info@cbs@phoenix-ag.com)  
Internet: [www.phoenix-cbs.com](http://www.phoenix-cbs.com)