

Curvodic™



is producing **two 40 km lines**

Thanks to its longstanding experience, RBL-REI is a leading company in the handling industry. The French company has been producing handling installations for almost a century, including the unloading, transfer, storage, reclaiming and loading of all solid bulk products (cereals, cement, fertiliser, clinker, aggregate, coal, etc.).

For the last 50 years, RBL-REI has been continuing to expand with the development of modern, customised equipment, such as dust-free port hoppers, automatic train loading systems, mine conveyors and long-length conveyors : Curvodic™.

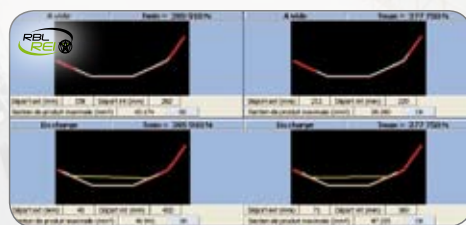
RBL-REI therefore has major benchmarks, in the field of overland curved conveyors : Curvodic™ (max. 17km), curves (min. radius: 250m) and rates of up to 20,000 t/hr.



Computing engineering

Curvodic™ overland conveyors are characterised by extremely complex sizing & calculation stages. The results obtained determine the correct operation of the equipment in all its operating stages encountered during its use.

60 years' worth of feedback has fine-tuned our software programs to ensure more realistic modelling. The renowned reliability of our Curvodic™ depends considerably on this feedback. From the results obtained, RBL-REI determines a risk-free belt alignment.



Regardless of the number of bends and the convex and concave shape of the conveyor belt, this calculation means that the very best design can be chosen ensuring a the stable performance of the belt in all operating stages, such as

for these 2 generating conveyor belts, 11 and 4km, with only a single kilometre in straight section.⁽¹⁾



⁽²⁾Commissioned in 1980, this 11.2km conveyor, including four radii ranging from 1,100m to 2,500m, supplies the port with nickel ore at 600 t/hr. This 11.2km Curvodic™ runs daily while ensuring total customer satisfaction.



Contact us :

Z.A Les Landes - BP 50 159 - 49481 St Sylvain d'Anjou - Tél.: + 33 (0)2 41 21 19 40 - Fax : + 33 (0)2 41 21 19 59
Head office : 11, boulevard Brune - 75682 PARIS Cedex 14 - Tél.: + 33 (0)1 53 90 22 40 - Fax : + 33 (0)1 53 90 22 24

Taming the hills



crossing and passing over hilly terrain, as well as roads, rivers and paddy fields.

The first line of this incomparable equipment was successfully commissioned in 4 weeks, once the finishing touches were put on the first 3 conveyors after a record assembly time of 8 months. Work on the second line has already got under way, since April, and is due to take even less time to complete than the first line.



RBL-REI is currently delivering two 40km lines of conveyor belt in FENG-KAI (China). These two parallel lines, each at 2,500 t/hr, will supply one of the world's largest cement works with 30,000 tons of cement a day. Each line includes 3 Curvoduc™ (11, 12 and 17km), powered in total by nineteen 750 kW driving units, with a belt speed of 5 m/s. Curved conveyors (Curvoduc™) are suitable for



Speed : 5 m/s
Tensile strength : 3,150 N/mm
Traction effort : 80 T
Belt width : 1,400 mm
Thickness : 24 mm

Model achievements

2 bearing strands

The Curvoduc™ range also incorporates highly economical technical solutions such as, for example, this 6.8 km Curvoduc™ connecting the port to the cement works. The Curvoduc™ supplies the port with clinker at 1,200 t/hr (top strand) and simultaneously supplies the cement works with coal at 400 t/hr (bottom strand). It is fitted with three 500 kW driving unit. Its line comprises two 1,000 m bends.



Very tight bends



Curvoduc™ can also achieve very tight bends, such as this conveyor which supplies a thermal power plant with coal at 600 t/hr from the barges from the Moselle river. Thanks to the 250 and 300 m radius bends, the S shape means that a single conveyor belt can be laid down instead of 3 straight conveyors. Fitted with 1,200 mm of belt, this Curvoduc™, over 1km long, crosses a canal and ash yard.