

# Transportation Systems

VAMH maintain a highly skilled projects division specialising in the design, manufacture, installation and commissioning of conveyor systems for use in mining, power generation, port systems, grain handling and the full range of conveyor applications.

With the pooling of expertise from all aspects of conveyor design, manufacture and operation VAMH deliver „Turnkey“ systems for:

- Overland conveyors with horizontal and vertical curves to follow the natural terrain and provide an alternative to truck haulage and a cost effective method of bulk materials handling over long distances,
- In-plant conveyors for general bulk materials handling,
- Underground conveyors for roof or wall mounting,
- Tunnel conveyors designed to remove spoil in processes of Tunnel Boring Machines or drill and blast method,
- Specialised conveyor systems such as regenerative conveyors, belt feeders and high angle conveyors,
- Pipe conveyors,
- Complete track shiftable / relocatable conveyor systems which assist in the process of overburden removal and stacking.



# Transportation Systems Inplant Conveyors

VAMH have a wide range of In-plant conveyors for bulk materials handling for quarrying, construction, chemical, food processing and power generation. In-plant conveyors range from a carrying capacity of 100 to 20,000 tph.

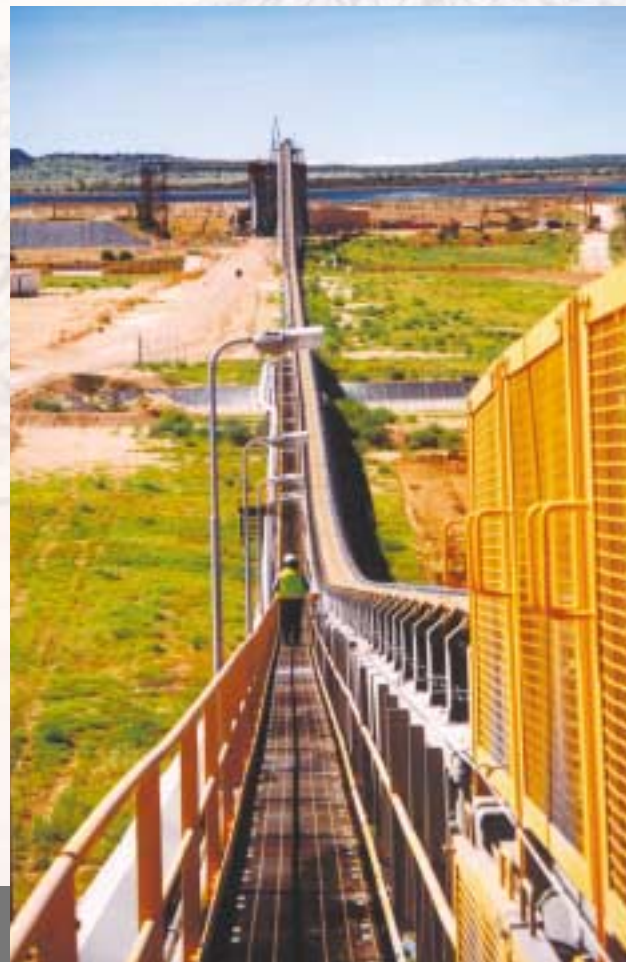
VAMH's range of In-plant conveyors vary from the light to heavy plant production rates. Optimised designs on ground and elevated module In-plant conveyor structure strikes a balance between supply and installation costs. Elevated structure can be offered with walk through, open or closed gantries.

The in-plant conveyors included specialised conveying methods such as belt feeders, high angle conveyors, enclosed conveyors etc. The in-plant conveyors range from 350 mm to 2400 mm wide conveyor belts operating at 0.2 to 6 m/s.

In addition to the design of new systems VAMH also undertake projects on existing plants for optimisation, capacity upgrade and or modernisation of conveyor systems.



Quarry 'D' Expansion, Limestone Conveyors  
Location: Indonesia



Sun Metals - Zinc Refinery, Zinc Concentrate Conveyors  
Location: QLD, Australia



Samarco - Ubu, Belt Conveyor System for Iron Ore  
Location: Espírito San, Brazil



Cosipa - Cubatao, Belt Conveyor System for Iron Ore  
Limestone and Magnesium, Location: São Paulo, Brazil



Sun Metals - Zinc Refinery, Zinc Concentrate Conveyors  
Location: QLD, Australia

# Transportation Systems Overland Conveyors

VAMH is recognised internationally for their developments in long overland conveyors with horizontal and vertical curves and regenerative systems.

These conveyors conform to the natural terrain and provide a cost-effective alternative method to truck haulage of bulk materials over long distances.

VAMH's range of Overland Conveyors vary from light to heavy production rates. Optimised designs on Overland conveyors have enabled VAMH to overcome environmental issue such as noise levels or dust emissions. Regenerative overland conveyors have been designed to save on power consumptions. Overland conveyors are designed with simple, modular structures for optimization of investment and operating costs.

The overland conveyors supplied in the past ranging from 1 km to 13 km as a single flight and operating at belt speeds of 2.5 to 7m/s.

Bengalla, Overland Belt Conveyor System  
Capacity: 2,000 tph, Length: 4,300 m, Location: NSW, Australia



Mt. Arthur North, Overland Conveyor  
Capacity: 2,500 tph, Length: 1,740 m, Location: NSW, Australia



Bengalla, Overland Belt Conveyor System  
Capacity: 2,000 tph, Length: 4,300 m, Location: NSW, Australia



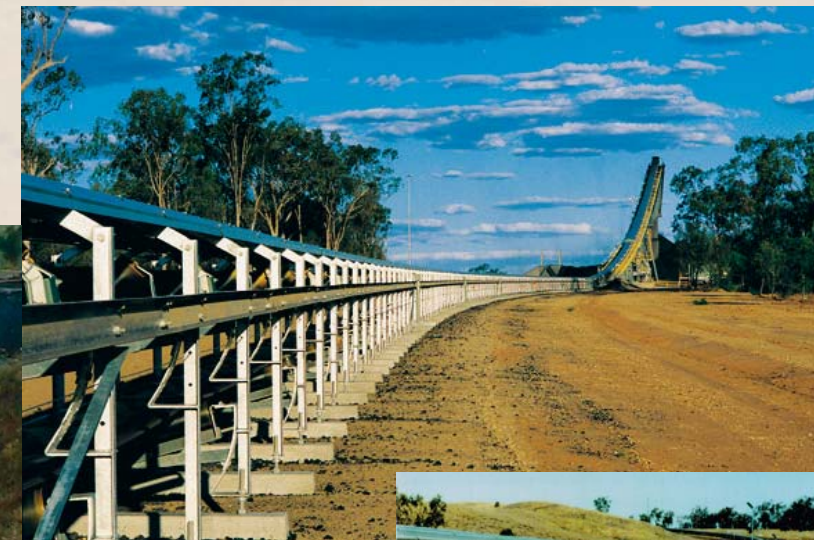
Bengalla, Overland Belt Conveyor System  
Capacity: 2,000 tph, Length: 4,300 m  
Location: NSW, Australia



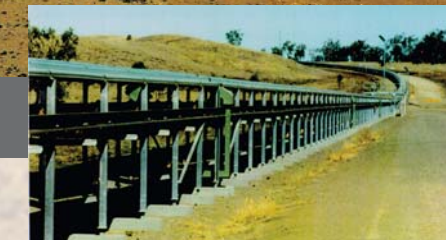
Normandy Golden Grove, Overland Conveyor System, Length: 2,590 m  
Location: Western Australia



Bengalla, Overland Belt Conveyor System  
Capacity: 2,000 tph, Length: 4,300 m, Location: NSW, Australia



Gregory, Overland Conveyor System  
Capacity: 1,100 tph, Length: 10,000 m  
Location: QLD, Australia



Gregory, Overland Conveyor System,  
Capacity: 1,100 tph, Length: 10,000 m  
Location: QLD, Australia

# Transportation Systems Underground Conveyors

For the extreme operating conditions and specific operational requirements of underground applications VAMH have developed a number of innovative technological features including:

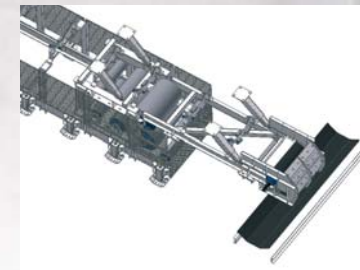
- Roof and floor mounting of conveyors
- Wall mounting of conveyors
- Expertise in fire retardant belting
- Belt storage systems
- Semi-mobile and mobile conveyor systems



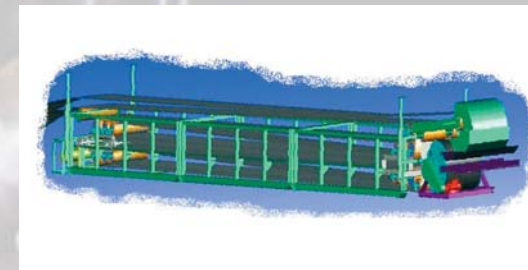
Blue Mountains Sewage Transfer Scheme  
Capacity: 240 tph, Length: 13,000 m, Location: NSW, Australia



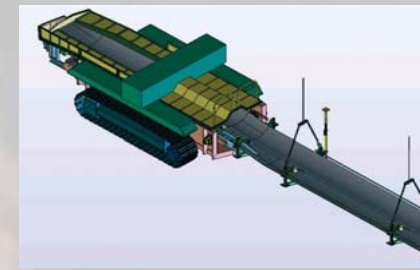
TBM, Spoil Removal Underground Conveyors  
Capacity: 600 tph, Length: 15,700 m, Location: NSW Australia



Head End Structure /  
Loop Storage System



Loop Storage Take Up

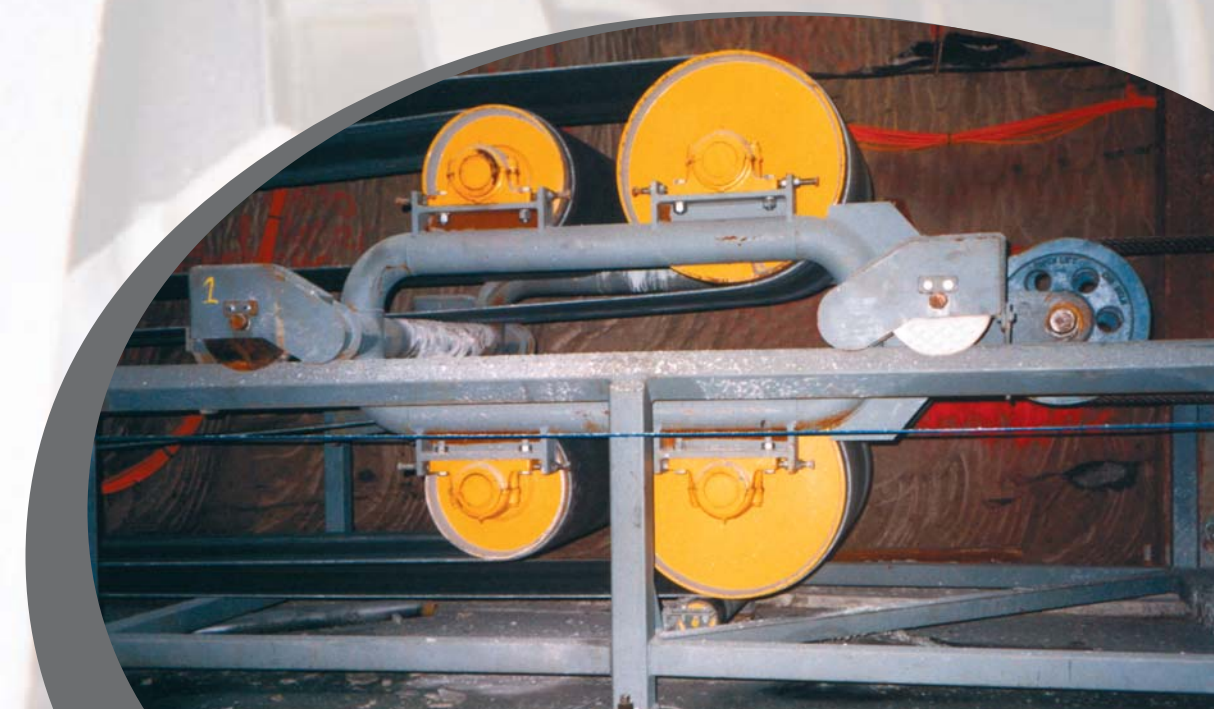


Track Driven Mobile Boot End



TBM, Spoil Removal Underground Conveyors  
Capacity: 600 tph, Length: 15,700 m, Location: NSW Australia

The design of these underground conveyors has been optimized using the comprehensive know-how within the Sandvik Mining and Construction Group for underground mining applications and equipment.



TBM, Spoil Removal Underground Conveyors  
Capacity: 600 tph, Length: 15,700 m, Location: NSW Australia

# Transportation Systems Special Conveyors

VAMH have a wide range of specialised conveyor systems including pipe conveyors, high angle conveyors, vertical lift conveyors, belt feeders and conveyors with other specialised loading features.

High angle conveyors and vertical lift conveyors are being used where large differences in elevations must be overcome in short distances. The correct technology will be selected by the VAMH engineers considering the dimensional requirements and the properties of the material to be transported.

For the application in open pit mines we have the selection of special mine conveyors which are semi-mobile, shiftable or completely mobile depending on the requirements of the mining operation. The mine conveyors will be designed using a modular concept that allows the relocation and expansion of the conveyors in accordance with the development of the mine.

Where environmental restrictions require the use of fully enclosed conveyors in combination with vertical and horizontal curves then the use of pipe conveyors can be beneficial. VAMH is offering special design for pipe conveyors which is superior to standard pipe conveyors due to lower investment and operating costs.



Plomin, Pipe Conveyor, Capacity: 1,250 tph  
Length: 1,700 m, Location: Plomin, Croatia



North Head Spoil Removal Project, Vertical Belt Wall  
Conveyor, Capacity: 650 tph, Location: NSW, Australia



Blue Mountains Sewage Transfer Scheme, Belt Conveyor  
System, Capacity: 240 tph, Length: 13,000 m  
Location: NSW, Australia



Sun Metals - Zinc Refinery, Belt Feeder Conveyor  
Capacity: 30 tph, Location: QLD, Australia

Our extensive know-how in bulk material handling enables us to design special belt feeders and material feeding and transfer solutions for applications where the material properties or environmental conditions require tailor-made solutions.



Mae Moh V, Mine Conveyors, Capacity: 2 x 11,000 tph  
Length: 13,800 m, Location: Lampang, Thailand

