

# ET

backbone of equipment industry  
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# TWIN INITIATIVES

Will the never-before biggest highway project and huge capital infusion for public sector banks script a new growth story?

## **MINING THE GROWTH PIE**

Off-Highway Reserch / Bevcon /  
Liugong / Sany / TATA Hitachi / VDMA / Volvo

• **Mining Trucks** • **Portable Power Solutions**

## 18 COVER STORY

### CHANGING MINESCAPES

The strong focus on maximizing cost-per-tonne of production and continuous focus on energy-efficient equipment in the mining sector coupled with increasing automation and use IoT are expected to bring a spectacular change in mining space. **Equipment Times** takes a peek into the trends in the mining sector.

## VIEWS

**24** "VDMA considers Industrie 4.0 of vital importance in the long term."

- **Rajesh Nath**  
Managing Director  
VDMA India



**26** "New projects being planned will up the demand for of larger mining equipment."

- **Samir Bansal**  
General Manager – India  
Off-Highway Research



**28** "There is very strong scope for automation in mining."

- **Dimitrov Krishnan**  
Vice President and Head  
Volvo CE India



**30** "We are ramping up our production to cater to the demand of large class machines."

- **BKR Prasad**  
Head – Marketing, Tata Hitachi



**32** "We are poised to address any increase in demand from the mining sector."

- **Dheeraj Panda-Director and BU Head Excavator and Mining SANY India**



**34** "Value innovation is life line for Bevcon."

- **Y Srinivas Reddy**  
Managing Director  
Bevcon Wayors



## 12 ET SPECIAL

### TWIN INITIATIVES



Will the never-before biggest highway project and huge capital infusion for public sector banks script a new growth story?

## 36 FOCUS

### TRUCKING MINESCAPES



The mining trucks industry is positive on demand uptick for premium trucks.



We at Bevcon, always strive to bring best technologies to India in most cost optimized manner giving our customers a winning edge in their processes and business.

**- Y SRINIVAS REDDY**  
*Managing Director*  
*Bevcon Wayors*

**Overland Pipe Conveyor for handling 3150TPH Limestone with 1.4KM Conveying length from Mine to Process Plant at Shree Cement.**



# “Value innovation is life line for Bevcon.”

## Currently, any expansion plans from PSU’s and private players have given a demand boost for BMH segment?

As per NTPC sources, there are about 57 power projects (Coal, Gas, Hydel, Wind and Solar) at various stages of implementation and the target of various state governments is to generate 53GW of power to tide over power crisis. For example Telangana state is planning to put up 6280 mw thermal based power projects. This augurs well for players like us as there are good opportunities for business.

## What has been the FDI inflow scenario in the mining sector?

FDI inflow at this moment on core sectors, specifically in mining, is not bright due to demand slump both in internal and export markets; and the overall growth progress is very slow. The government’s set target of 5% GDP from mining sector calls for huge infusion of investments in technology, infrastructure. Current scenario is still subdued due to various factors of policy challenges, bureaucracy and financial institutions support etc.

## Globally the focus is more on energy-efficient mining equipment. What is

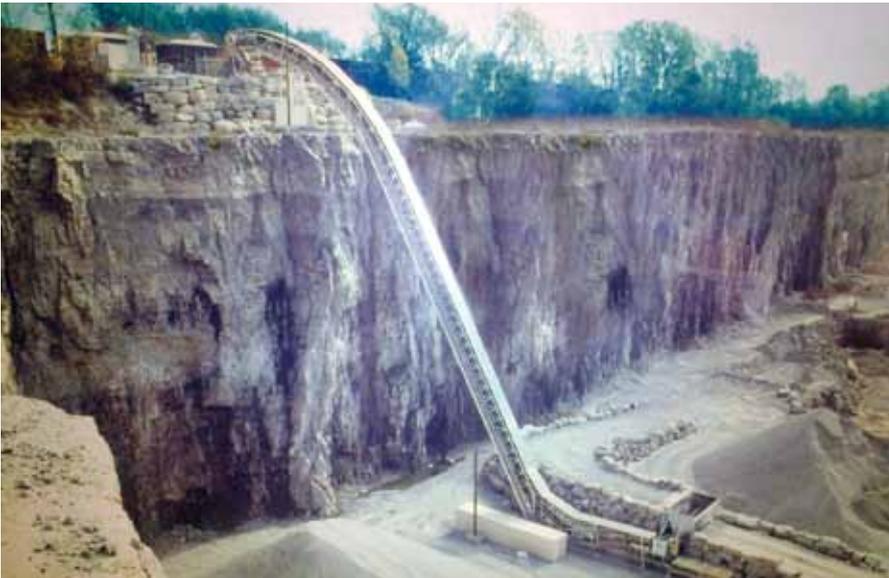
## Bevcon’s contribution here?

Energy efficiency is one of the critical design and performance parameter in the bulk material handling. To achieve energy efficiency focus starts from better lay outing of the project design and selection of equipment with optimum service factors.

- Use of energy efficiency drives and components in equipment engineering.
- Best use of gravitational energy for material flow.
- Use of imported energy efficiency components while engineering stage if need be.
- Adopting proper preventive maintenance practices.
- Effective utilization of machine avoiding idle times and un-even loading and over loading etc.
- Use of right fit electrical connectivity accessories to avoid power loss automation of equipment example: when not in use automatic switch off.
- Best use of green energy concepts.
- Developing friction free component to minimize energy absorption.
- Development of re-generation conveyors for energy generation etc. We have started up a totally automated idler and pulley manufacturing plant at Sricity in Andhra Pradesh, India to produce low resistance idlers which will bring down the overall power consumptions of the conveyors. All our solutions are to enhance operational and as well energy efficiency. On average 10-12 % enhanced energy efficiency can be achieved. In specific cases it can be to the extent of 30%.

## Brief us about Bevcon and its core competencies?

Bevcon executes project with blend of latest technology with conventional systems in most optimized manner which will enhance the operations reliability. Bevcon core strength lies in use of new generation / innovative conveying systems and equipment



▲  
**1400TPH limestone handling system with sandwich belt high angle conveyor for (in-pit crushing & conveying).**

“ We can provide best possible solutions in the areas of environmental, energy conservation, cost effective and reliable material handling solutions for mining sector. ”

for mining sector such as Our highly competent technical team supported by technology partners from US and Europe are in position of supplying innovative equipment/systems for the mining sector.

#### **What are the solutions provided for vertical conveying applications?**

For vertical conveying application, which is a revolutionary concept, Bevcon has tied-up with Dos Santos intl. USA, world's foremost authority on high angle conveyor applications. The design of sandwich belt type high angle conveyors for open pit mine (In-pit crushing conveying), is another breakthrough concept of conveying any mineral from pit bottom to the surface by totally eliminating use of conventional trucks. It also minimizes the environmental degradation. Flexibility of conveying profiles makes it one of the unique materials handling equipment of current generation and brings down the operational cost drastically and enhances productivity by retaining product quality. These high angle conveyors are not new at all, but have not

found wide use in IPCC systems where they can realize the greatest advantage.

#### **What are the latest solutions offered in screens?**

Introduction of high efficient 'Flip-Flow Screens' for screening of very high moisture materials more specifically coal has changed the philosophy of conventional screening methods in power and mining sectors. In India coal is the most sought after fuel for thermal power units and most of the time coal will be either imported or mined from open cast mines and stored in open areas leading to high moisture absorption. The high moisture levels in the coal will be crushed and screened before it goes for boiler firing. The challenge lies in screening high moisture coal. Conventional screening methods used will not able to meet the demands whereas flip flow screen has the ability to screen coal with moisture of 40% and efficient enough to the levels of 90% screening.

#### **What about overland pipe conveyor systems?**

Overland pipe conveyor is a modern and environmentally friendly transporting system for all kind of bulk materials as it overcomes many challenges associated with conventional conveyor systems. Pipe conveyors have best capabilities of transferring materials between two points, managing both horizontal and vertical curves as well as high inclinations which are difficult in case of trough conveyors. It eliminates multiple transfer points and exposure of material to atmosphere. Pipe conveyor not only protects the conveyed material against external influences such as climatic conditions, it also avoids material loss and spillage and thus, protects the environment.

#### **What are the other solutions offered for mining sector?**

**Overland Troughed Conveyor:** Overland troughed belt conveyors are designed to carry high tonnage loads over long distances. Bevcon's long distance conveyor design ensures lowest power consumption per ton of conveying. Overland belt conveyors have been proven to be an efficient method of transporting bulk material over long distances and costs are often lower than with truck transportation.

### **INNOVATIVE SYSTEMS**

- Sandwich belt high angle conveyors for open pit mining (IPCC - In-pit crushing and conveying)
- Overland pipe and troughed conveyor (for transporting material from mine to process plant and from mine to stockyard)
- Bulk receipt feeders to facilitate easy handling of bulk material unloading from trucks without civil works of ground hoppers.
- Stockyard system (Linear and circular stockyard with equipment like stacker, reclaimers, stacker cum reclaimers) for stacking / storing receive material either inside plant or terminal at port.
- Reclaim feeders for faster reclamation of minerals at mines and ports.