



News

Hot pellet conveyors commissioned in Oman

The first investment project outside Brazil for Vale, the Brazilian mining concern, is now being commissioned in Oman.

The iron-ore pellet factory in the port of Sohar, Oman has a capacity to produce 10Mt of iron-ore pellets annually to supply the steel industry in the Middle East.

Four Aumund deep-drawn pan conveyors, drag chain conveyors and bucket-elevators convey the pellets around the plant. These were designed and assembled by Aumund's Metallurgy Division for the specific requirements in Sohar and have now been successfully commissioned.

The deep-drawn pan conveyors have an axis distance of 64m and receive around 760t/h of hot pellets at up to 300°C from vibratory troughs. The conveyors are designed for a capacity of up to 1125t/h. At a conveyor speed of 0.24m/sec the pellets are conveyed to a grizzly feeder for further processing. Below the deep-drawn pan conveyors the drag chains run concurrently (axis distance 47m). They accept potential free-flowing material and thus permit almost maintenance-free operation.

In addition, two belt bucket-elevators or chain bucket-elevators with an axis distance of 23.5m and a conveying capacity of up to 800t/h are employed for iron ore transport. Both the chain bucket-elevators are employed for the transport of pellets with a size of up to 16mm and a temperature of up to 400°C. They have a conveying capacity of between 10 to 50t/h.

Similar recent projects were successfully commissioned in Bahrain (for the expansion of the GIIC pellet plant) and in Iran, at Ardakan Pelletizing.

Aumund hot-material transport solutions are employed particularly where special emphasis is put on continuously high quality of the conveyed material. The conveyors from Rheinberg can convey solid material at a temperature of up to 1100°C. For cooling of hot material the company supplies cooling belts with air or evaporative cooling or a combination of the two.

Also in Mauretania, Aumund are supplying two arched-plate apron feeders, each with a conveying capacity of 6000t/h. They will be employed there for bunker unloading of iron-sinter, crushed and ground iron-ore as well as iron-ore pellets. Delivery is planned for June this year.

With their arched-shaped plates the apron feeders form a surface which makes cleaning possible with a scraper. The task of regulating unloading capacity is performed by a speed-controlled drive. The lighter versions of these feeders can be equipped with a weighing rail and frequency-controlled drive so as to be employed as a weigh-feeder.