



## SteelNews.com Article

### AUMUND Commissions New Conveyor at Tata Steel IJmuiden

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The successful commissioning of an AUMUND metal plate conveyor type KZB-S 2400/250/6 has now been completed at Tata Steel's plant in IJmuiden in the Netherlands. The deep drawn pan conveyor KZB-S, specifically developed in Rheinberg for sinter transport, conveys iron sinter to the ring cooler at Tata Steel at a capacity of 250 t/h. Tata Steel IJmuiden annually produces around 7 million tons of high quality steel which is used in the automobile industry, the building sector and the packaging industry, among other sectors.

In 2008 AUMUND Fördertechnik received the initial inquiry from Tata Steel (then Corus). The vibration conveyors which convey the sinter from the sinter plant to the cooler were worn and, within the framework of a modernization program, the structural problems were scheduled to be solved. These laid largely in the high wear rate of the vibration conveyor which led to high levels of maintenance and frequent replacement of the troughs. As metal plate conveyors have no relative movement between material and conveying unit, in contrast to vibration conveyors, utilization of AUMUND conveyors was examined. A further criterion of the decision for awarding the contract was based on AUMUND's worldwide experience as a supplier of conveying installations for very hot and abrasive bulk materials.

After the change of ownership had taken place, the previous project to replace the vibration conveyor was once again put on the agenda.

Owing to the particular installation scenario on site and various conveyor configurations, AUMUND Fördertechnik GmbH was awarded the contract for the supply of a 2400-mm wide deep drawn pan conveyor. A constructional challenge existed in particular in the vicinity of the sinter conveyor where extremely high temperatures prevail which can have an effect both on the life-time of the components being used and on the drive unit.

In a departure from traditional solutions, AUMUND engineers selected a drive which was accommodated at the tension station. Through relocating the point of installation the drive is no longer compromised by the extremely high temperatures on the discharge side of the conveyor. Further optimization was undertaken on the deep drawn pan conveyor by installing a frequency converter which enables various conveyor speeds.

It was possible to preassemble the entire conveying equipment as a compact single unit, transport it to the site and, utilizing a crane, place it in the sinter production workshop. As a result both erection time and the directly related plant shutdown period were minimized.

Tata Steel is anticipating increased productivity of the sinter plant through the employment of the new conveyor. In addition, lower operating costs are expected through a reduction in maintenance requirements and energy consumption.

Comparable conveying systems have been installed by AUMUND's Division Metallurgy at, among others, ArcelorMittal Bremen and Voestalpine Linz. Further projects are currently under way.

*Pictured below: AUMUND deep drawn pan conveyor, Tata Steel, IJmuiden.*



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The **AUMUND Group** is active worldwide. The conveying and storage specialists have special expertise at their disposal when dealing with bulk materials. With their high degree of individuality, both its technically sophisticated as well as innovative products have contributed to the AUMUND Group today being a market leader in many areas of conveying and storage technology. The manufacturing companies AUMUND Förder-technik GmbH (Rheinberg, Germany), SCHADE Lagertechnik GmbH (Herne, Germany), SAMSON Materials Handling Ltd (Ely, Great Britain) as well as AUMUND Logistic GmbH (Rheinberg, Germany) are consolidated under the umbrella of the AUMUND Group. In conjunction with the headquarters of the manufacturing companies, the global conveying and storage technology business is spearheaded through a total of eight locations in Asia, Europe, North and South America.

The European operations of **Tata Steel** comprise Europe's second largest steel producer. With the main steelmaking operations in the UK and Netherlands, they supply steel and related services to the construction, automotive, packaging, lifting & excavating, energy & power, aerospace and other demanding markets worldwide. The combined Tata Steel group is one of the world's largest steel producers, with an aggregate crude steel capacity of more than 28 million tonnes and approximately 80,000 employees across four continents.