I helped Pesmel deliver a cutting edge CRM2 mill for JSW Steel. A strong client relationship and detailed 3D simulations minimise distribution errors, lower whole plant that can contain within the mill into 1 logistical entity. Now, the whole factory is accessible from a single screen, and all the functions within the yard are linked via an efficient high-speed system delivering the coils to the annealing and galvanising lines. This four-way coil car system minimises overhead crane usage, greatly reducing their time investment and crane usage, greatly reducing their time investment and enabling the cranes to focus on working efficiently in one area for mainly the "pick and place" task and also assured the least handling amount of damage to the coils. Similarly, the work in progress (WIP) coils are managed with a suitable automatic Yard Management System (YMS) for the finishing operations.

The data is fed into the control system, which processes all yarn movements and generates task lists for the overhead cranes. A simple push of a button calls a crane into position, which in turn moves the coils to the correct storage area. Besides the operator manually controlling the lifts in the Z axis, the process is highly automated. Coil cars also feed the PLTCM line coil saddles, which then distribute coils throughout the factory. Systematic and sequential loading of the PLTCM at its entry is carried out by the four-way coil car with suitable interfacing with the PLTCM Walking beam conveyor. A coil car system then picks up the cold rolled coils from the PLTCM exit for CR storage. After storage, the coil car system delivers the coils to the annealing and galvanising lines. This four-way coil car system minimises overhead crane usage, greatly reducing their time investment and enabling the cranes to focus on working efficiently in one area for mainly the "pick and place" task and also ensuring the least handling amount of damage to the coils. Similarly, the work in progress (WIP) coils are managed with a suitable automatic Yard Management System (YMS) for the finishing operations.

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smaller updates across the site in the near future. Pesmel’s Indian subsidiary also stations engineers on the factory floor to insure smooth performance, assuring local and dedicated support by Pesmel India. In addition, a 24/7 helpdesk comprising Service/WMS experts can have remote access to the factory logistics system from Finland and solve potential problems that may occur, enabling JSW Steel to keep the mill running with maximum efficiency at all times.

**Continued cooperation**

As a major player on the Indian steel market, JSW is in initial discussions to roll out similar solutions across its other factories. “Feedback from the customer has been very positive,” concludes Juha Suksi. “They now have plans to make investments in other JSW units as well, and we are discussing possible options for integrating our logistics system and high bay storage into their existing mill floor plan. They are extremely satisfied with our YMS and high bay storage concepts. After installing one of the most modern automated logistics systems, JSW Steel now understands how efficient this new technology is, and they will use similar solutions when building new factories and updating existing sites in the future.”

Ashish Chandra, Chief of JSW CRM2, reflected this sentiment when giving feedback during discussions with Jagannathan Rajagopalan and Pesmel’s Project team after their CRM2 mill had been in operation for two years. “Pesmel internal logistic solutions made material handling & storing at JSW highly effective. With the help of Pesmel solutions, we at JSW CRM2 could ramp up the production level from around 50% in the first year of operation to beyond 75% in less than 20 months of operation. Pesmel solutions not only became the backbone for processing of materials, but also strengthened the outbound deliveries in less stipulated time. Secondly, the customisation of solutions as per the requirement and support provided by Pesmel engineers to nurture & mature the solutions is appreciable. Having understood the benefits, JSW is keen to adapt modern logistics concept similar to CRM2 in other units and projects.”

It is a fact that modern technology has become a significant force of change in Logistics, which in turn can be the deciding success factor in any industrial operation. Efficiency is no longer an option in the steel industry. It is a necessity. Pesmel’s Material Flow How knowledge can help you find your path to success.