# Building Internal Logistics Process Capabilities

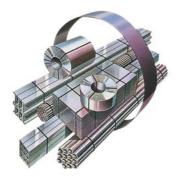


# Advantage India - an enabling framework for growth

For developing global advantage, Indian Steel Industry has identified several key issues. Of these, 'infrastructure' and 'environment' have been identified as important long term growth enablers.

### Signode - building internal logistics capabilities

Signode has been partnering the world's best metal companies for nearly 100 years. Going beyond just products and services, Signode takes a holistic view of the industry's competitive needs, delivering ideas and solutions that have earned recognition from many of the world's best companies.



Leveraging the understanding of finishing processes, Signode has been looking for ways to contribute to metals industry's business end to end. reduction of total cost of operations (TCO) is the expanded focus.



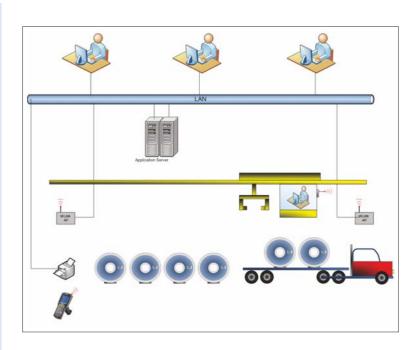
The focus is on internal logistics process efficiencies - to reduce cost/tonne by unraveling the hidden costs in logistics operations and implementing best practices with continuous process improvements. Project appraisals will quantify the impacts of improved throughput/productivity, supply chain visibility and commercial security features, truck/rail turnarounds and reduced transaction costs. The offering extends to post implementation operations also.

To provide these services, Signode has established relationship for marketing, implementation and operational services with global technology partners.

**Integrated Tracking and Logistics Management System - ITLMS** 

ITLMS is a client-server based system primarily developed for managing the slab, coil, longs yards of any metal industry. It is designed for tracking the movement of metal products through the value chain through real-time material tracking, regulation and reporting.

ITLMS' scope includes inward yard management, scheduling and tracking inventory through various processes, yard location/space management, dispatch planning including load building and material staging and logistics terminal management.



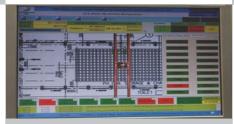




Menu driven, people friendly



Vehicle management



Work order management



Intelligent cranes

Yard location grid

The complete system is part of a supply chain process that plans and controls the efficient flow and storage of finished or semi-finished products and has a broad positive impact on the inventory balance and material transport with better customer delivery compliance.

This is just not a software package but encompasses all control functions related to crane, transfer cars, coil conveyors essentially required for material tracking functions. The main elements of ITLMS are Crane automation, Server, RF Network, Hand held terminal.

# **Slab Yard LMS**



## Advantages

- "System driven" separation of charging activity from unloading activity
- Real time availability of slab information
- Improved yield of plates; right slab for each plate
- Heat wise charging reducing plate sampling for quality assurance and clearance
- Increased crane availability for slab mutation
- WIP visibility
- Congestion free truck
  movement

# **Coil Yard LMS**



Input identification

Coil locator

Tracking through value chain



Load builder

#### Staging for dispatch

Loading



Coil Yard LMS in CRMs involves more complex optimizations, where material is exchanged across multiple process lines - sometimes as many as twelve. The LMS handles material flow across the process lines depending upon the size of the materials, product mix requirements, etc.

### Advantages

- Minimum coil handling from HR stock-in to CR dispatch
- Real time display of coil inventory throughout CRM
- Online stock reconciliation
- Just-in-time(JIT) coil supply and evacuation from process lines
- Optimized crane utilization
- Real time order progress reporting
- Zero mix-up at coil dispatch
- Reduction in transport turn-around time
- Increased safety through finger trip controls



# **Longs Yard LMS**



### Advantages

- De-bottlenecking bundling operation
- Branding and identification through the value chain
- Load building
- Staging for dispatch
- Automated loading

# **Downstream LMS Services**

Benefits of downstream logistics management system for steel service centres and distribution hubs are improvement of storage and retrieval efficiency, accurate storage information and minimization of product mix-ups, optimum usage of material handling equipment, accurate material tracking and optimum manpower utilization.

Downstream LMS Functionality Client Supply Chain Planning System Client ERP Systems		Downstream LMS Services A Cost/Ton Model • Inventory Management • Carrier Management • Transactions & Metrics • Document Management • Shipment Management
Downstream LMS functionality	In process tracking	Downstream LMS Services
	AND	
Dispatch management	RF network based	Tracking in transit

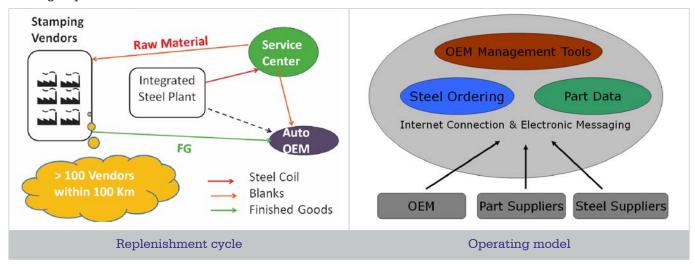
## **Advantages**

It is offered on an "ASP" (Applications Service Provider) basis. Customers access the system over the web. There is no capital investment for software and dedicated IT resources are not required.

- Inward coil positioning
- Inter/intra yard material flow scheduling
- Material flow tracking through processes, warehouses and all modes of transportation
- Real-time reporting of inventory transactions
- Increased inventory accuracy and control, with potential for substantial inventory reductions
- Automated reporting of receiving and shipping via variety of EDI protocols
- Automated load tenders, arranges truck schedules
- Single source for data
- Control of transportation costs "outside the gate"
- Reduced traffic management (exception based)
- Performance metrics and analysis

# Steel Replenishment Management System

The web based system is a comprehensive tool to manage steel resale programs. It provides visibility to parts, suppliers, ordering processes, and steel usage with minimal human resources; allowing companies to reduce staffing requirements and the related administrative cost burdens.



# The system provides:

- Index of all parts with current status
- Description of material used to produce a part and a list of all other parts stamped simultaneously from same blank
- Tier-1 parts suppliers can view their parts data
- Tier-1 suppliers are able to grant access plus material ordering capability to their Tier-2 parts supplieirs
- Finished coil information describes specification, shipping and packaging information
- OEM's gateway to update master parts list to accommodate platform and engineering changes
- Overview of all release / order / ship activity for all parts
- Parts suppliers ability to order steel from a system screen that brings together all necessary order detail
- Index of orders along with current status and order detail
- Information for stamped parts including OEM and part supplier identification numbers
- Parts' specific material requirements plus all packaging and shipping instruction on a part-by-part basis
- Coil detail information

## Serving metals industry, worldwide

With the experience of implementing best practices in packaging and identification, handling, storage and shipping practices, Signode is well placed to successfully marry finishing line automation with internal logistics process automation systems in a seamless and visible manner at optimum cost.

Signode India Limited is a company of Signode Industrial Group, USA, a global leader in the industrial bulk packaging industry with a heritage that goes back more than 100 years. SIG produce strap, stretch and protective packaging and also manufacture packaging tools and equipment that are used to apply the bulk packaging materials to contain, unitize, protect and secure goods during warehousing and shipment. With nearly seven thousand employees working in US, Europe and Asia, our company is a pioneer in the industrial packaging sector with a long history of customer-focused innovations in materials, processes and automation technology.



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The Company has a policy of continuous product development and reserves the right to alter specifications at any time without prior notice.