Torpedo Ladle Tracking System

TLTS

The tides are changing
You are now in an increasingly competitive world
The customers are ever so demanding
The strictest quality specifications are in place
You have to yield maximum production from optimum consumption of material and energy

Are you prepared for the future?

Smart Management of Iron Buffer in Steel Plants

Why Torpedo Ladle Tracking System?
The Torpedo Ladles Cars (TLCs) in steel plants serve as capacity buffers of hot metal to the blast furnaces and as feed buffers of hot metal to the steel making shops.

Efficient co-ordination of torpedo ladles is of paramount importance to any steel plant for minimizing hot metal dumping and ensuring optimum supply of hot metal to the steel making shops.

The online information system enables accurate & fast tracking of the TLCs, their status and weight enabling better flow management.
Key Features

- Online data of hot metal production
- Online tracking of TCLs' position & weight.
- System predicts the TLC re-lining schedule based on tare weight and TLC condition.
- Online consumption of hot metal at steel making shops.
- Breakdown & maintenance reports of TCLs.
- Online chemistry of hot metal to enable steel melting shops to achieve desired steel grades.

Interfacing between the Level2 systems of the blast furnaces and steelmaking shops enable information flow required for judicious scheduling of the TCLs and decisions related to hot metal quality.

Breakdown and planned maintenance data of TCLs enable buffer calculation.

How does it work?

The system provides online information about the position of the TLC and its status as “Empty” or “Full”, its weight and travel time between given points through a radio frequency identification system.

Online display of buffer status, caster rates and production levels of steelmaking shops reduce dumping of good quality hot metal by smart management of TCLs.

Benefits

- Information exchange between blast furnaces, steel making shops and logistics departments to enable decision making and improved coordination.
- Optimum buffer availability at blast furnaces and steel making shops.
- Online availability of hot metal chemistry to enable quality improvement and reduce dumping.
- Online reports of TLC maintenance schedules and prediction of relining schedule.