

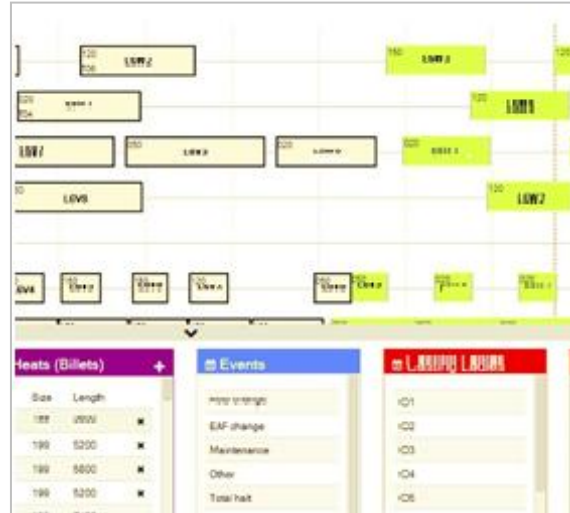
Melt Shop Pacing

Playground for planning and analyzing the Heat Schedule

Melt Shop Pacing is a **web-based** application that connects to the underlying Level 3, gets heat orders and arranges them on a **caster lineup** using grade and mold dimensions to calculate the standard cast time for each. At the same time it automatically generates tundish changes based on dimension, grade mixing rules or heat count.

Once the caster lineup is set the algorithm **back-calculates** the LF, Degasser, EAF and BOF schedules using calculated process times and standard ladle transport times.

After the initial import is finished the user can switch to manual mode and **drag and drop heats** in all the lines, create delays and planned shutdowns, add tundish changes and modify the duration of individual heats and events while the Gantt chart rearranges itself displaying the final schedule along with possible warnings.



The form includes buttons for 'Edit Route', 'New Route', 'Remove Route', 'Go', and 'Save'. It features a search field and a dropdown menu. A modal window is open for editing a heat, showing fields for Start (Date: 02/27/2014, Time: 7:08:22), End (Date: 02/27/2014, Time: 8:06:42), Duration (58.33), and a 'Standard (58.33 mins)' label. It also has fields for 'Prev Heat', 'Next Heat', and 'Comments', along with 'Remove all', 'Remove', 'Cancel', and 'Save' buttons.

The application provide **easy to use configuration screens** to define lines, routes, grades, dimensions and process times and a web based read-only report to **share the planned schedule** with the rest of the plant

It is important to notice that this is not a **coordination model** in itself but a playground where the scheduler can manipulate heats and events and the system analyze the final result against a list of predetermined rules.

AustralTek is indeed working on an optimization model (i.e. try all combinations and shows the optimal one) but we consider the pacing application the first step a plant needs to install in order to uncover all possible optimization vectors.

Promotional Price \$ 9,000 *

(*) Additional programming services might be required to hook up the system with existing Level 3 or MES in order to import the heat orders and create custom rules. The services are billed by our rate at \$ 75/hour