

Design of Continuous Caster Machinery Design Service

We offer a full machinery design service, which incorporates all mechanical, actuation and control software aspects of a particular project. Specifications are agreed with all clients to enable true client input in the design stage of the project at which point the majority of the costs are allocated. The company provided an innovative solution for the world's most advanced casting machine.

Continuous Caster

- Mould moves vertically with either an asymmetric sine wave or a saw tooth wave (both complex forms) at frequencies from 1 –4 Hz
- Rexroth servo valve technology used to generate accurate movement
- Innovative mould guidance system introduced to prevent any possibility of snagging
- Innovative interchangeable water jacket system gives rapid reduction in cassette change timings
- Quantum leap achieved in surface finish of slabs
- Highest casting rates of any caster in the world when introduced
- No prototype development performance – first unit was made to drawings and sold, without any modification.

The design project started as a development contract for Davy Distinguon, who had to enhance the principles of their existing short arm oscillating caster design in order to compete and leap frog the new range of casters produced by their competition. As an organisation they realised that to take a quantum leap forwards in this technology a fresh innovative approach would be required. Bennett Associates was commissioned to come up with the solution, which then developed into an actual contract for Posec in Korea. This gave Davy Distinguon the quantum leap they required together with a number of patented solutions to maintain their leading role in Continuous Casting Machines. The caster not only enabled mould changing in a short period of time but also water cassette changing with automatic slab width adjustment.

The innovative roller guide system developed for guiding the moulds resulted in a patented fail-safe guiding system.

