



**BAOSTEEL SPECIAL STEEL BRANCH,
CHINA**

1-STRAND VERTICAL SLAB CASTER

NEW SINGLE-STRAND VERTICAL SLAB CASTER

for the production of highest alloyed stainless and carbon steel grades

MAIN BENEFITS

- Increase of production and flexibility
- Optimum performance and availability
- Assurance of optimized solutions for unique and specialized requirements
- Maximum system and plant availability at low maintenance costs

On July 26, 2006 the Chinese steel producer Baosteel signed a contract with Siemens VAI Metals Technologies (now Primetals Technologies), for the relocation of Shanghai No. 3 works to Baosteel Special Steel Branch.

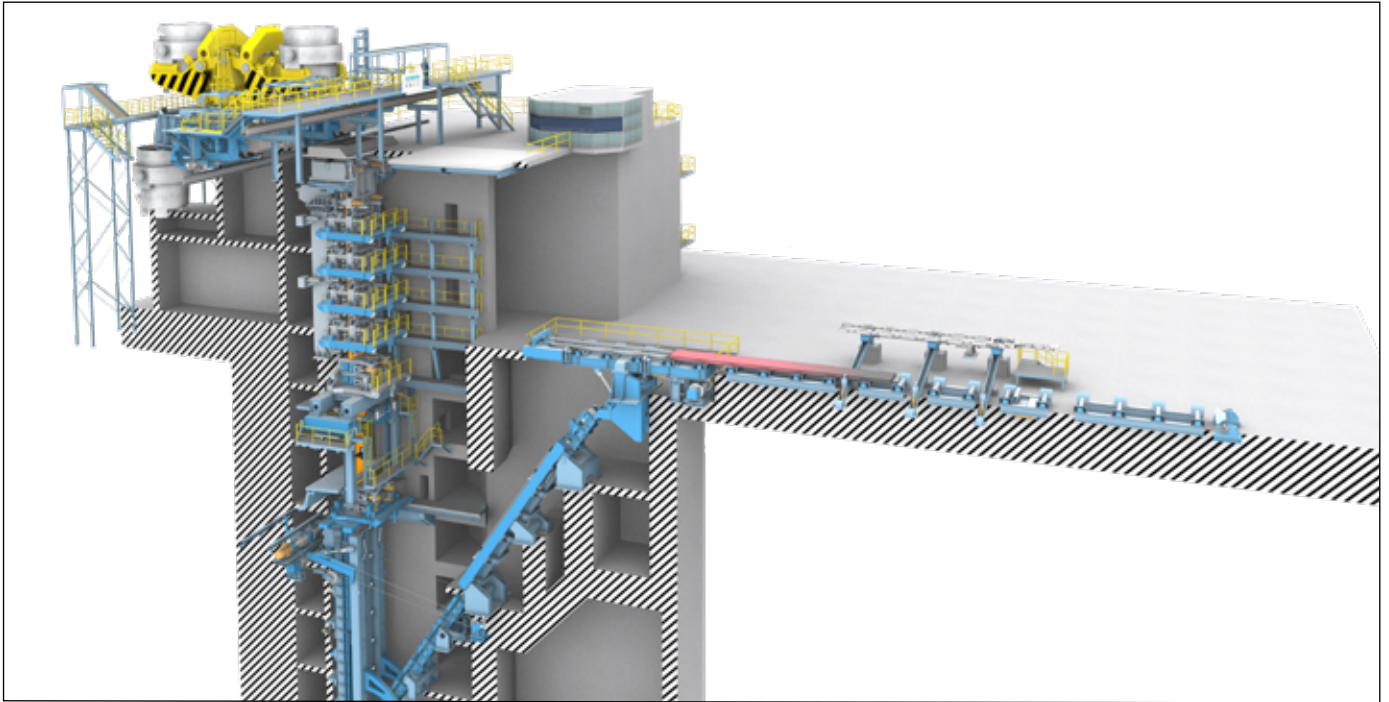
Start-up of the caster was on January 20, 2009.



SOLUTION

The project includes latest technological equipment and packages to enable high-quality slabs, such as

- Butterfly ladle turret with independently liftable arms and ladle weighing
- Semi-gantry type tundish car with trough type tundish and SEN stopper rod system
- Smart Mold with Mold Expert system, LevCon mold level control and soft clamping
- DynaFlex hydraulic oscillator with on-line stroke, frequency and wave pattern adjustment
- Strand guide consisting of:
1 vertical rack and 4 Smart Segments with DynaGap Soft Reduction, PDR rollers and DynaJet nozzles
- Rigid type dummy bar with bottom feeding system
- Dynacs dynamic secondary cooling model incl. center/margin mode
- Runout area equipped with torch cutting
- CC Control and CC Optimization, Quality Expert slab quality control system, breakout prediction, HydraulCon, LubriCon, DriveCon, and Yield Expert



3D view

SCOPE OF SUPPLY

- Basic and detail engineering for main caster components
- Mold
- EMS
- Assembly parts of main caster components
- Electrics and automation
- Advisory service for co-manufacturing
- Advisory service for erection, start-up and commissioning
- Training of personnel

PLANT DATA

Melting unit	4 EAF
Secondary metallurgy	AOD, VOD, VD, LF
Heat size	36 t
Caster capacity	267,000 tpy
Metallurgical length	13.6 m
Slab thicknesses	120, 200 mm
Slab width range	600 - 1,300 mm
Cut length	6 - 10 m
Max. casting speed	1.5 m/min
Steel grades	medium to high carbon grades, alloy and high alloy grades, stainless 300 and 400 series and Si grades



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A joint venture of Mitsubishi Heavy Industries and partners

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