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**NANJING IRON&STEEL UNITED CO. LTD.  
NANJING, JIANGSU, CHINA**

1-STRAND THICK AND WIDE SLAB  
CASTER CC3



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Nanjing Iron&Steel  
United C. Ltd. is located  
in Nanjing Jiangsu  
Province in the west of  
Shanghai

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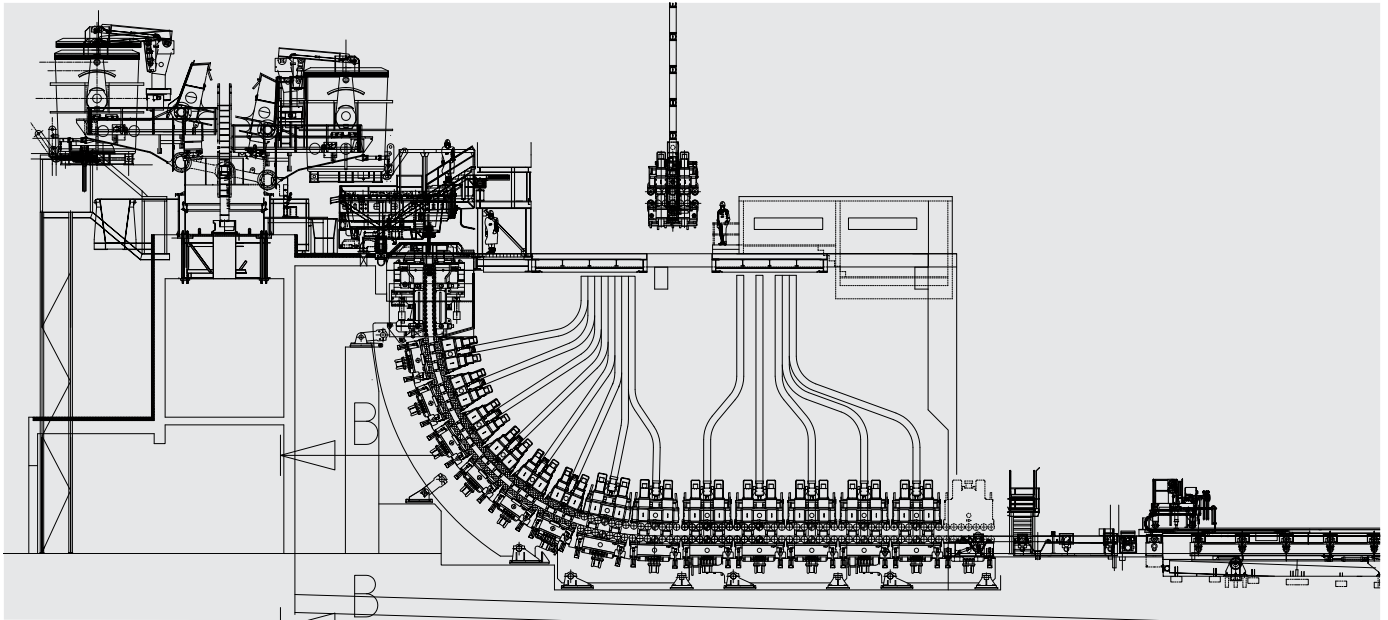
## 1-Strand Thick and Wide Slab Caster CC3

On January 30, 2009, Nanjing Iron and Steel United Co. Ltd. awarded Siemens VAI (now Primetals Technologies) a contract for the supply of a new single strand slab caster. The new caster followed on from the successful start up of two previous single strand wide slab casters started up in 2004 and 2006. The new single strand caster is designed to cast slab thicknesses of 220, 260 and 320 mm by a width of 1600–2800 mm. The caster was started up successfully at the end of October 2010.

Primetals Technologies also supplied the ultra-wide medium thick slab caster CC1 in 2004, the wide slab caster CC2 in 2006, as well as the bloom caster CC8 in 2008 and upgraded the Level 2 of the slab casters CC1 and CC3 in 2018 and extended the bloom caster CC8 with a fourth strand also in 2018.

### MAIN BENEFITS

- Advanced features with Connect & Cast to maximize product quality and production from the beginning
- Optimum performance and availability
- Latest hardware/software configuration which ensures compatibility for Industry 4.0
- Maximum system and plant availability at low maintenance costs



### SOLUTION

The caster is fully equipped with advanced technologies including DynaWith automatic mold-width adjustment, DynaGap Soft Reduction in all segments and Dynacs spray cooling. Latest design Mold Expert breakout prevention, LevCon mold level control, DynaFlex mold oscillation and Quality Expert for on-line slab quality assessment is all provided.

In 2018 Primetals Technologies upgraded the Level 2 with DynaPhase, Dynacs 3D, DynaGap Soft Reduction 3D, Quality Expert, CC Optimization, Yield Expert, Intermix Expert, Equipment Expert and Soft Clamping.

### SCOPE OF SUPPLY

Primetals Technologies' scope of work includes equipment design for mechanical, fluids, electrical and automation systems, training and advisory services for co-manufacture, erection, cold test and commissioning.

Assembly parts and spare parts for one year was also supplied.

### PLANT DATA

Steelmaking facilities	BOF, LF, VD, RH   6 Mtpy
Heat size	155 t
Caster capacity	1.66 Mtpy
Machine radius	10 m
Metallurgical length	32.1 m (34.5 m in future)
Slab thicknesses	220   260   320 mm
Slab width range	1,600 - 2,800 mm
Cut length	primary cutting 6.0 - 9.6 m secondary cutting 2.0 - 4.8 m
Max. casting speed	1.7 m/min
Steel grades	low to ultra-high carbon steels, microalloyed steels, peritectic steels for pipes and plates

**Primetals Technologies Austria GmbH**

A joint venture of Mitsubishi Heavy Industries and partners

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