

# JIANGYIN XING CHENG

Highly flexible plant for various steel grades



## PLANT INFORMATION

Products	Bloom sizes 370x490 mm
Capacity	870.000 t of good blooms per year
Key features	Stopper control, resonance mould, hydraulic oscillation, mould and strand stirrers, mechanical soft reduction
Steel grades	High quality carbon and alloy structural steel, ball bearing, alloy spring, tube shell and cold heading

## PROJECT INFORMATION

Customer	Jiangyin Xing Cheng
Location	Jiangyin, Jiangsu province, China
Commissioning	2007

# HIGH CAPACITY MEETS PARAMOUNT BLOOM QUALITY

Highest steel purity and internal quality



## EXPANSION OF A SUCCESSFUL PARTNERSHIP

The commissioning of the three-strand bloom caster in Jiangyin, China, followed the successful operation of the first bloom caster supplied to the Chinese company by SMS Schloemann-Siemag in 1996. SMS Concast experts completed the construction of the second plant three months before the date agreed for delivery. Jiangyin Xing Cheng was way ahead of the schedule and benefitted from a significantly faster return on investment.

## ALWAYS ONE STEP AHEAD OF COMPETITION

To assure the desired product quality, the casting machine is equipped with state-of-the-art technology such as submerged casting by stopper control, resonance mould and hydraulic oscillation as well as mould and strand stirrers. Mechanical soft reduction, applied in 9 modules per strand with 125 t force per module, guarantee flawless internal quality of each bloom cast. Combined with the high capacity, this guarantees the company's competitive edge: The caster extends Jiangyin Xing Cheng's leadership position in the production of high-quality steel grades for the Chinese automobile industry and pipe steel.



## CUTTING-EDGE EQUIPMENT FOR EACH STEEL GRADE

With the versatile caster, Jiangyin Xing Cheng produces a wide variety of different steel grades for different applications. A sophisticated process control system enables Jiangyin Xing Cheng to dynamically control the process parameters – each unique steel grade has its solidification pattern controlled from tundish to torch cut. From ball bearing to alloy spring to tube shell – the Chinese company supplies various markets. Jiangyin Xing Cheng's products meet the high demand of the dynamic Chinese economy.



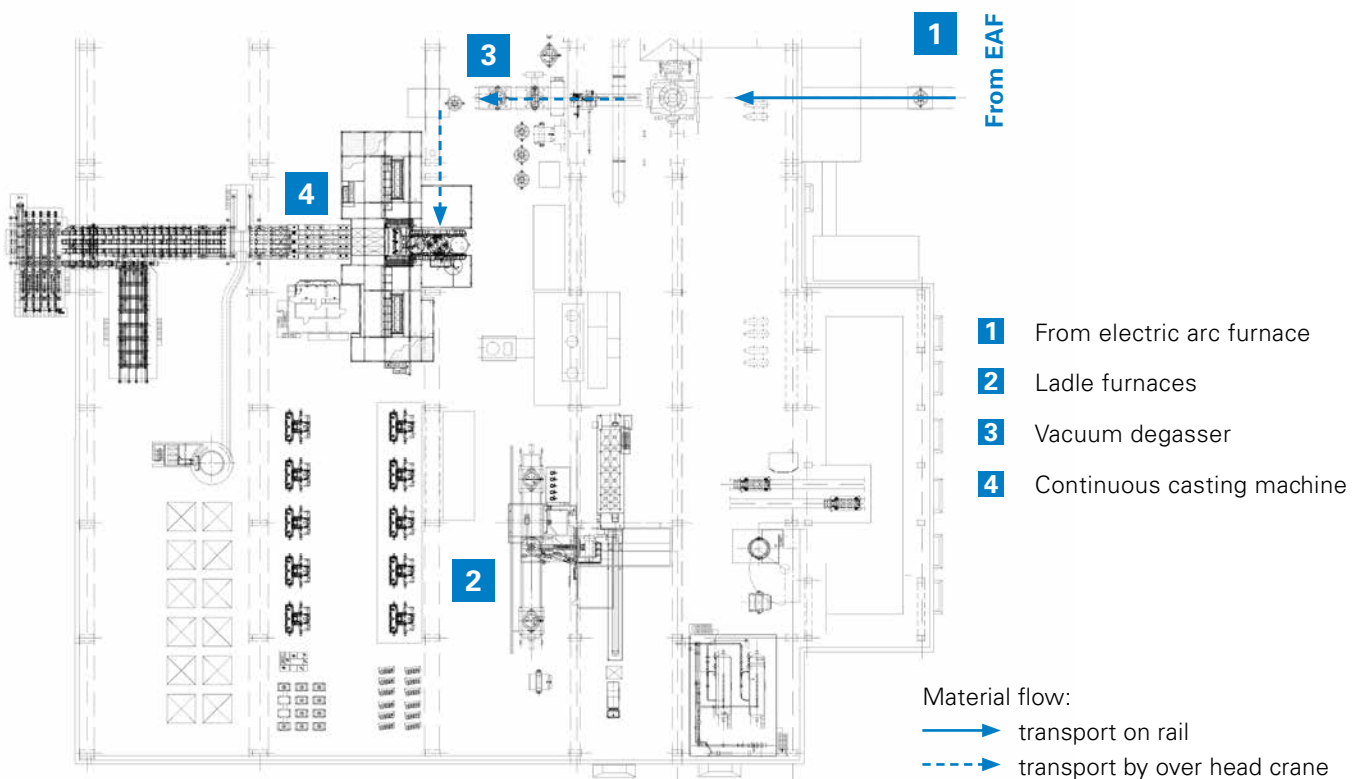


# CONTINUOUS CASTING MACHINE

Three-strand bloom caster for a wide variety of steel grades

<b>Type</b>	Bloom, Continuous unbending	<b>Electro Magnetic Stirring</b>	Mould-EMS
<b>Radius</b>	16.5/23/46m	<b>Mould oscillation</b>	Hydraulic tandem resonance oscillation (two cylinders per strand)
<b>Strand distance</b>	1,900mm	<b>Casting speed</b>	0.65 m/min
<b>Cast section range</b>	370x490mm (Dia. 500mm future)	<b>Dummy bar type</b>	Chain
<b>Cutting length</b>	4.5–6.8mm	<b>Strand guiding</b>	7 segments per strand
<b>Ladle support type</b>	Butterfly turret with lifting/ lowering and weighing system	<b>Withdrawal straightening unit</b>	Air mist cooling 9 mechanical soft reduction modules per strand 125t force per roller
<b>Tundish car type</b>	Portal car with lifting/ lowering system	<b>Surface quenching</b>	Inline for hot charging grades
<b>Tundish shape</b>	T-type	<b>Cutting device</b>	Torch cutting
<b>Tundish heating</b>	Electromagnetic induction	<b>Discharge</b>	Bloom hydraulically lowered onto transfer buggy
<b>Tundish flow regulation</b>	Mechanical stopper mechanism	<b>Hot charging</b>	Direct to rolling mill
<b>Casting practice</b>	Complete shrouding from ladle to mould	<b>Cooling bed type</b>	Hydraulic walking beam
<b>Mould type</b>	Plate	<b>Product identification</b>	Spray marking machine complete with sample cutter and sample collection
<b>Mould powder feeding</b>	Twin screw feeders per strand, automatic regulation and control		

## PLANT LAYOUT



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