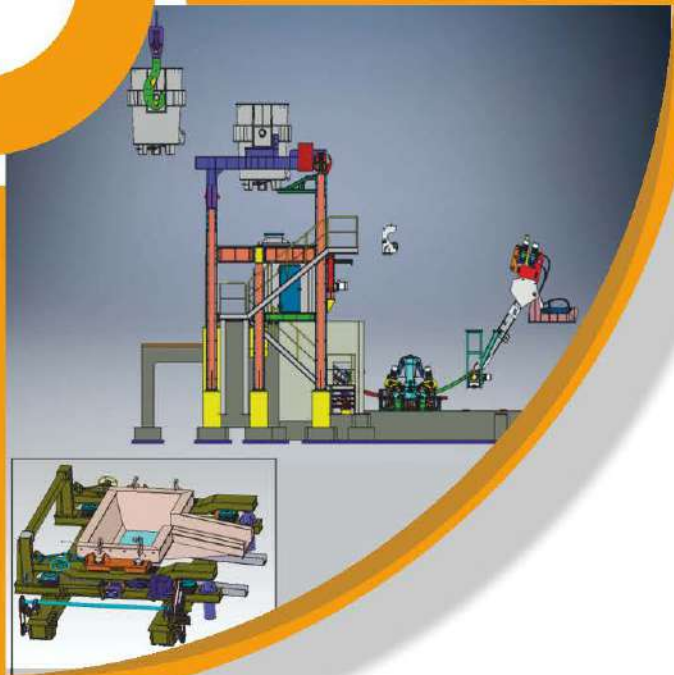
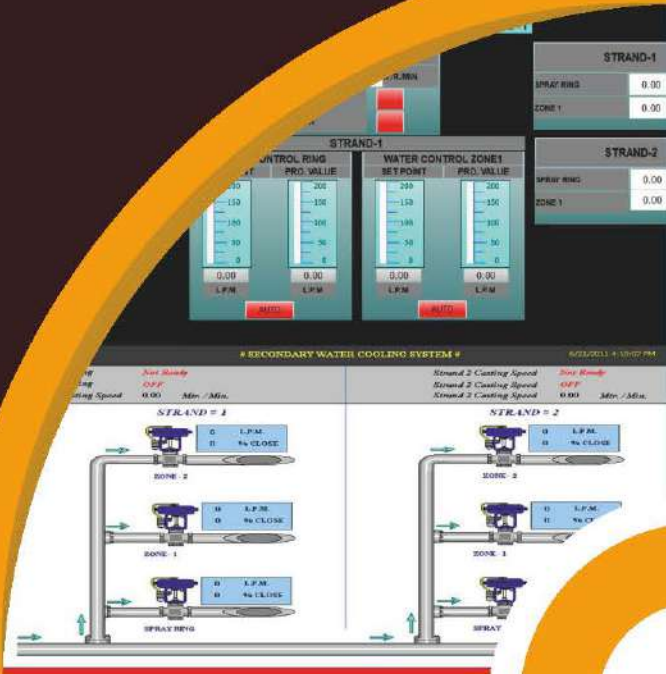


MEGACAST - Handle Without Care



Export Grade Caster

Heavy duty design and minimal spare part requirements

In House Precision Machine Shop

PLC based Auto Diagnostics and Reports with Remote Access

Cooling Water flow regulation based on billet temperature

Our Company

In 1989 we sparked off, banking on our team of Electro Thermal Processing experts and the capital of experience that we had gathered since 1970. We made our presence felt across Steel, Foundry, Forging and various other Metal Working Sectors, surging forward with spirits held high and the burning within.

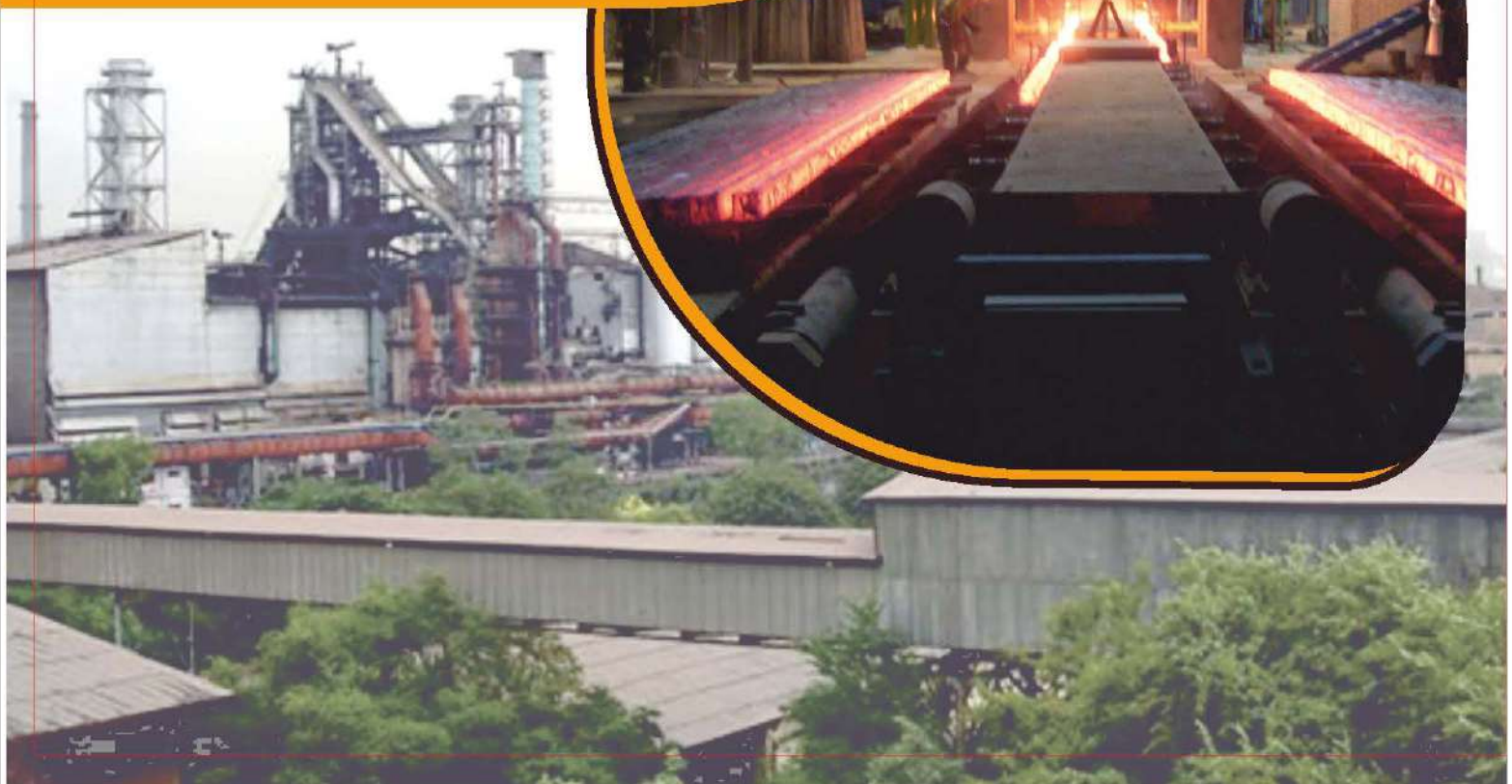
Today, Meghatherm is recognized and preferred by its ever - extending list of Domestic and International Clientele. Our installations are spread over 40 countries around the globe. Megatherm is committed to customer delight and performance excellence.

Megatherm is differentiated from other manufactures primarily due to its product innovation & continuous R&D. Over the years, Megatherm has led the way for most

We have invested in progressive in-house R & D which in turn has yielded both pro and praise for the company. On an aggregate we are nearing 3000 customers of Electro Heating Equipment till date.

major design changes and additions to SMS technologies which was later incorporated by the industry. Our research is focused and our systems are incorporated with the best contemporary technologies that ensure optimum utility and comprehensive productivity.

Being certified as an ISO 9001-2015 Company, the name Megatherm today is synonymous to quality.





Megacast: **Handle Without Care**

The bow type Continuous Casting Machine is an equipment to convert liquid steel into cast semis of the desired size i.e. 70 - 250 Sq. mm billet.

Molten Steel from the EAF shall be tapped into the pre heated Ladle and the Ladle shall be brought to the ladle refining furnace station. Liquid steel shall be carried out of refining, chemical composition adjustment and Superheating for smooth casting before send to continuous casting machine. After ascertaining the temperature of the liquid steel. Slide Gate Is opened so as to allow the liquid metal to flow into the Tundish which is placed on the Tundish Car. After metal reaches the Ferro-static height the refractory nozzle of the Tundish is opened to allow the metal to distribute in the mould assembly.

The mould box contains the copper mould. Primary water circulates around the periphery of the mould to form a shell around the molten core. The Strand is withdrawn with the help of the dummy bar. The surface of the mould is lubricated to minimize any sticking of the molten metal to the copper mould.

Mould Oscillation Mechanism is used for oscillating the mould so that the newly formed strand shell does not stick to the mould wall. Good oscillator mechanism provides good surface quality to the strand and minimises the transverse cracks and deep oscillation marks.

The newly formed strand leaves the mould and passes through the cooling chamber to complete the solidification process. Suitable Metallurgical length is provided for this purpose. Cooling water volume is adjusted to suit the steel grade and size of casting.

After passing through the cooling chamber the strand passes through the withdrawal and straightening unit. This unit provides the drive for withdrawal and straightening for each of the hot strand. It also provides the drive for the dummy bar for its insertion in Mould during start of the cast.

Cutting of the strand into billets is done with manual / auto gas cutting torches. Cutting of strands into Billet takes place between intermediate and cutting roller table. The cut Billets are then transported to discharge area until it comes in contact to the end buffer which in turn actuates the pusher to transfer the billet to Collecting Bed.

PLC Features

Hardware	SEIMENS PLC, Delta Make 10" HMI, Sensors
Diagnostics	Casting Speed
	Mould Oscillation Speed
	MO Water inlet and outlet temperature
	MO water inlet and outlet pressure
	Oil pressure
	Oil temperature
	Spray water pressure
Motor Winding health	
Billet Temperature	Billet Temperature (optional)
Analysis	Trends
Access	Remote access from anywhere in computer/laptop/mobile
Secondary Cooling Automation	Secondary Cooling Automation (Optional)
	Nozzle flow based on billet temperature

Main Components:

- **Ladle sequencing car**
- **Tundish**
- **Tundish Car**
- **Mould Jacket Assemblies**
- **Mould Oscillator**
- **Strand Guide Frames**
- **Withdrawal-cum-straightening machine**
- **Hydraulic pusher type skid bank.**
- **Electrical / Instrumentation etc.**
- **Secondary cooling (Optional)**
- **Automatic gas cutting machine**



Special Features of Megacast CCM

1. Handle without Care:

Heavy duty caster designed for export market. Robust & stable design. High thickness steel on all structural and machining components. Best quality bought out components used. Very limited servicing and spare requirements

2. In House Precision Machine Shop:

In house machine shop ensures high quality of critical components and quick after sales support

3. Integrated PLC: Exhaustive auto diagnostics.

Data logging and trends display. Ensure highest possible up-time of equipment and aids in preventive maintenance.

4. Billet temperature sensing:

Optional feature includes supply of pyrometer for live billet temperature sensing

5. Remote Access:

Entire real time data is available remotely to plant head/Megatherm HO for quick diagnostics and decision

6. Water flow control based on billet temperature:

Megacast eliminates speed based on thumb rule for water flow

7. Motor health monitoring:

Sensors in winding of motors to monitor overheating

Types of CCM manufactured by Megatherm:

3/6/7 single and double strand

4/7 single and double strand

5/9 single and double strand

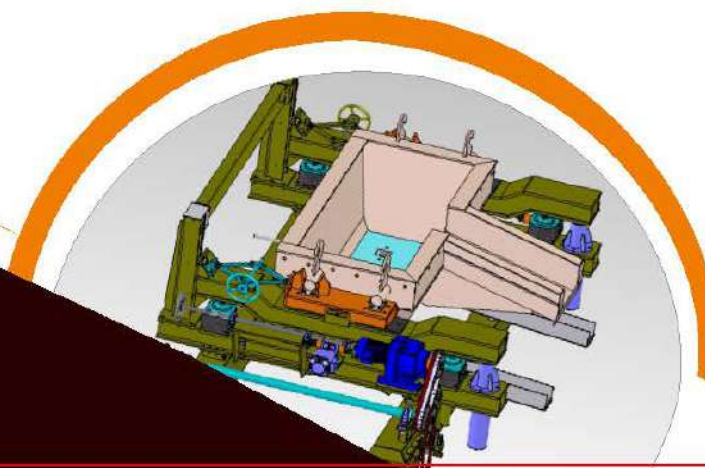
6/11 double and triple strand

6/9/15 single and double strand

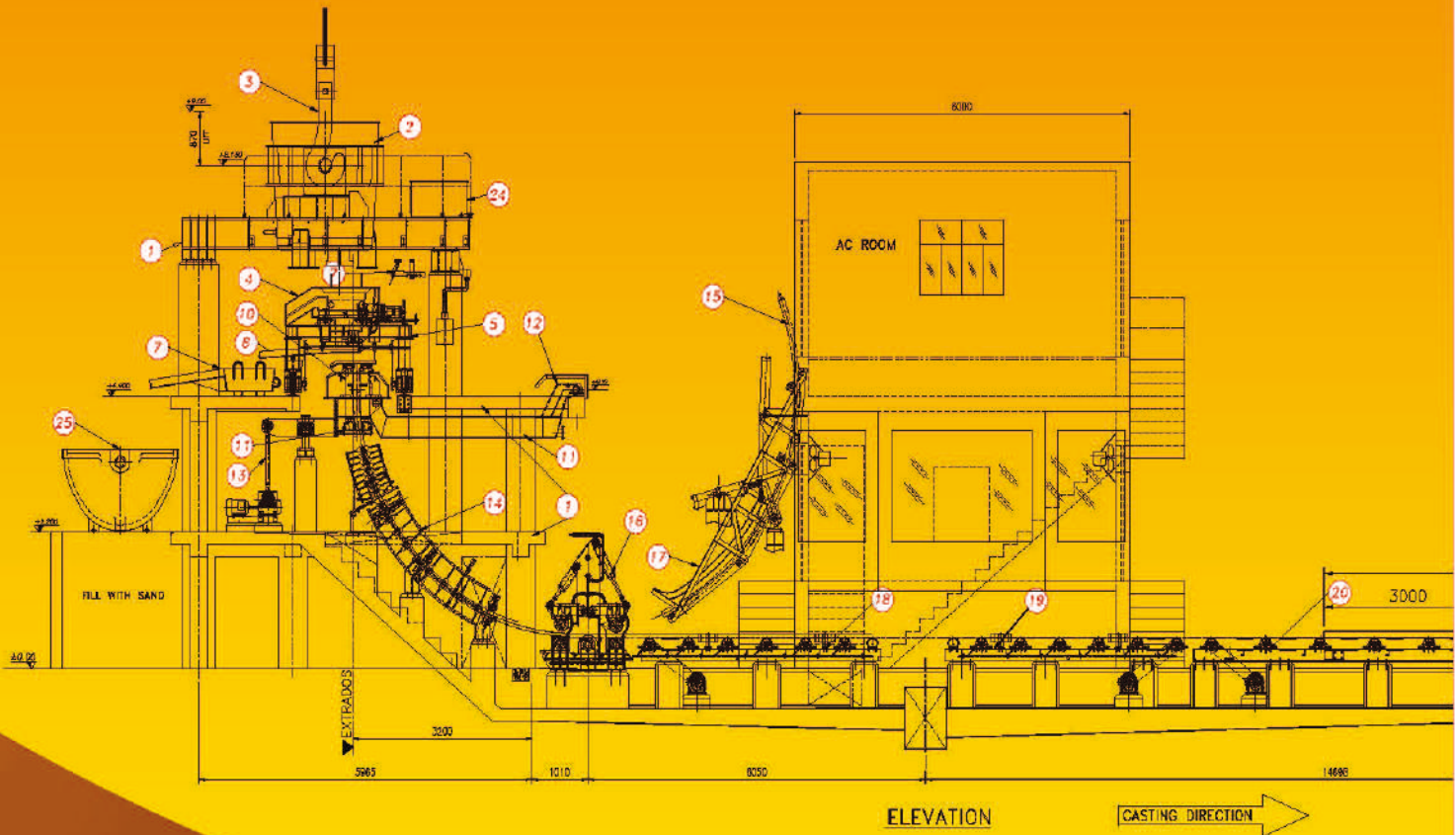
7 met. single and double strand

Casting Speed of Megacast Caster:

1.7 meters/min – 4.2 meters/min
depending on size of billet

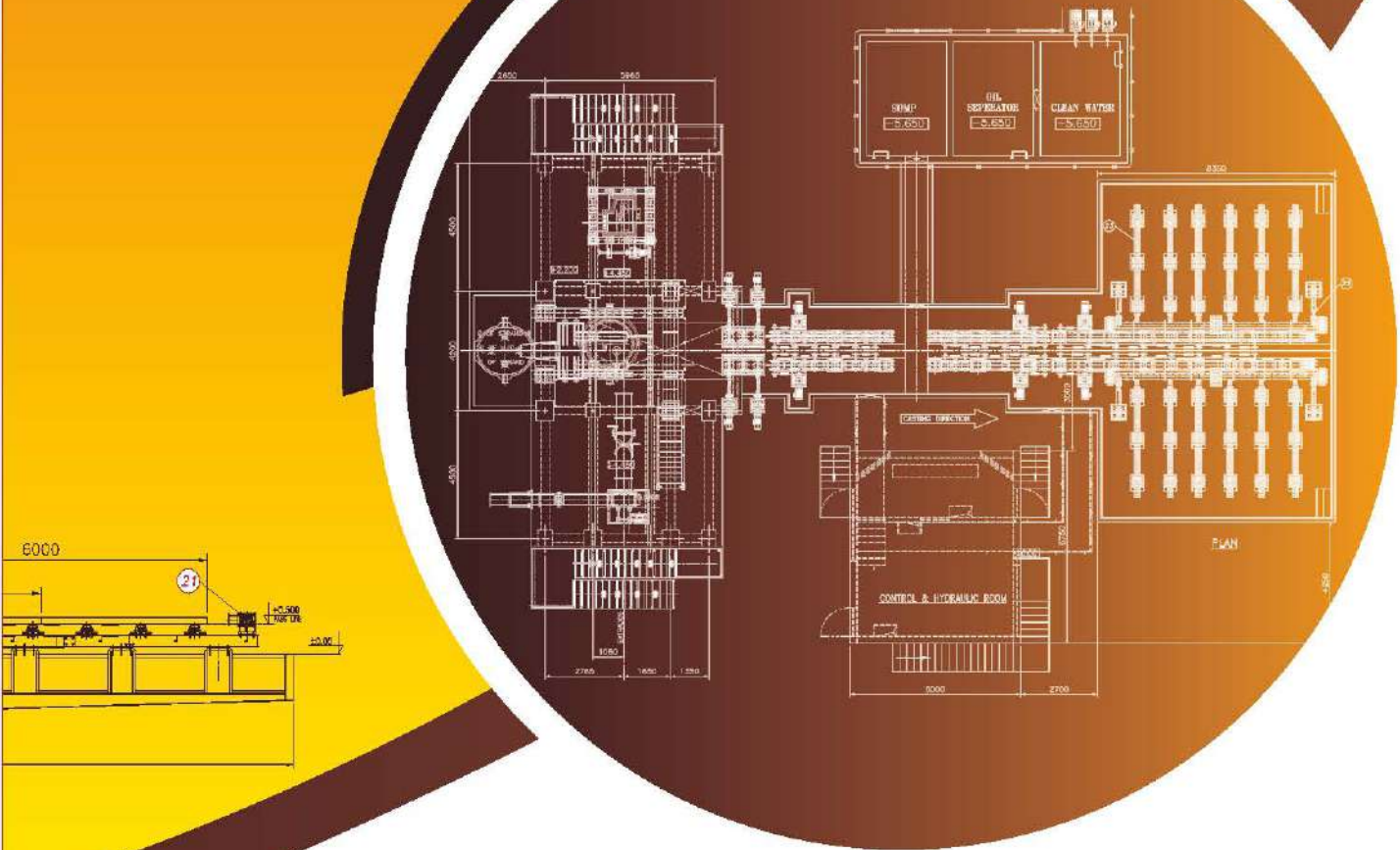


Generic Arrangement Drawing for 6 Metre Billet Casting



LEGEND

- | | |
|-------------------------------|-----------------------------------|
| 1. STEEL STRUCTURE | 13. ECCENTRIC MECHANISM |
| 2. LADLE | 14. ROLLER APRON |
| 3. BAIL ARM | 15. RIGI DUMMY BAR & HEAD |
| 4. TUNDISH | 16. WITHDRAWAL & STRAIGHTNER UNIT |
| 5. TUNDISH CAR | 17. DUMMY BAR PACKING |
| 6. LAUNDER | 18. INTERMEDIATE ROLLER TABLE |
| 7. SLAG BOX | 19. CUTTING ROLLER TABLE |
| 8. TUNDISH PREHEATER | 20. DISCHARGE ROLLER TABLE |
| 9. PENDENT ARM | 21. END BUFFER |
| 10. MOULD BOX 150x150 | 22. PUSHER |
| 11. FOOT ROLL WITH SPRAY CAGE | 23. COLLECTING BED |
| 12. MOULD OSCILLATOR | 24. LUBRICATING TANK |
| | 25. EMERGENCY LADLE |



OPTIONAL EQUIPMENT

- LADLE CAR
- LADLE TURRET
- LADLE WEIGHING SYSTEM
- TUNDISH CAR WITH LIFT LOWER MECHANISM
- CLOSE CASTING
- AUTO GAS-CUTTER
- SECONDARY SPRAY COOLING AUTOMATION
- PROVISION FOR AMLC
- ADDITIONAL STRAND
- TURN OVER COOLING BED
- PLC AUTOMATION WITH SCADA
- TUNDISH DRIER FOR HOT TUNDISH

1700+ Customers & 3000 installations in 40 countries worldwide

OUR CLIENTS..



....AND MANY MORE



An ISO 9001 : 2015 Company



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