

## About Us

In 1989 we sparked off, banking on our team of engineering experts and the capital of experience that we had gathered since the 1970. We made our presence felt across steel, foundry, forging and various other Metal Working Sectors, surging forward with spirits held high and the fire burning within.

Today, Megatherm has a diverse product portfolio is recognised and preferred by its ever-extending list of domestic and international clientele. Our 3000+ installations are spread over 51 countries around the globe.

Megatherm is committed to customer delight and performance excellence. We have invested in progressive in-house R&D which in turn has yielded both profit and praise for the company. Megatherm is differentiated from other manufacturers primarily due to product innovation & continuous R&D. Over the years Megatherm has led the way for most major design changes and additions to induction 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.

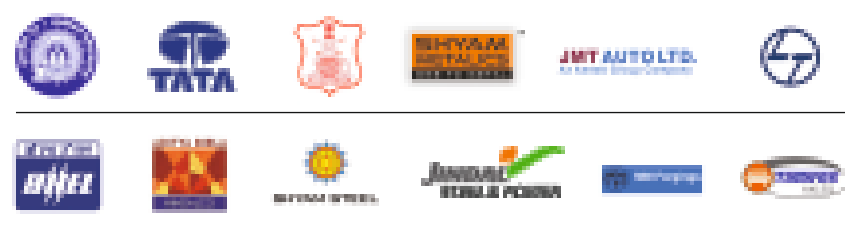
## Infrastructure

2 Manufacturing Units  
ISO:9001:2015 TUV NORD Certified  
Fully Integrated Manufacturing  
Extensive R&D Facility  
25 Branch Offices in India & Abroad  
Strong Service Network

## Markets Reserved

Steel Sector Melt-shops using sponge iron & steel scraps as feed stock.  
Foundry Sector Melt-shops producing Castings for Automobile & Engineering Sectors.  
Forging Sector producing rings for Bearing & Automobile.  
Industries besides various forged auto & engineering parts.  
Various Metal Working Sectors Covering Extrusion, Pipe drawing  
Section rolling, Annealing, Tempering & Hardening.  
Special Applications such as Pipe heating for Spin forming gas.  
Cylinders, Graphite Sintering for Graphite Electrodes etc.

## Some of our noted clients



# Global Presence

Nearing 3000 installations in 51 Countries

Argentina	Egypt	Kenya	Peru
Angola	Ecuador	Kuwait	Qatar
Afghanistan	Fiji	Madagascar	Saudi Arabia
Azerbaijan	France	Malaysia	South Africa
Bolivia	Ghana	Mali	Sudan
Botswana	Georgia	Mauritania	Tanzania
Bhutan	Iraq	Mexico	Tunisia
Bangladesh	Ivory Coast	Nigeria	UAE
Brazil	India	Nepal	Uganda
Cameroon	Indonesia	Oman	Uzbekistan
Chile	Jordan	Pakistan	United Kingdom
Ethiopia	Kazakhstan	Poland	Yemen



## Corporate Office

Megatherm Induction Limited  
Megatherm Tower  
Plot L1, Block GP, Sector V,  
Electronics Complex, Salt Lake City,  
Kolkata 700091, India  
Phone: +91 33 4088 6200

Email: [sales@megatherm.com](mailto:sales@megatherm.com)  
Website: [www.megatherm.com](http://www.megatherm.com)

## Works

Megatherm Induction Limited  
Plot No. H1/H2,  
Vidyasagar Industrial Park,  
Village: Rupnarayanpur, PO: Jakpur,  
Dist: Paschim Mednipur,  
Kharagpur 721301



# Meeting Thermal Challenges Through Induction

## Induction Online Billet Heaters

Hot charging of Square and Rectangular Billets directly from CCM and reheating them on line through Induction Route is becoming a necessity. Billet temperature can be increased by Induction Heating and Soaking and gives the following advantages:

- ♦ Temperature rise by 300-350°C generates ideal rolling temperature between 1150-1200°C
- ♦ Surface to core temperature goes almost uniform.
- ♦ Large space saving design as induction heater is placed near rolling Mill and coils are placed on line of Billet movement.
- ♦ Shop floor smoke and pollution is eliminated as large Oil Fired/ Coal Gas Reheating furnace is not required.
- ♦ Billet sections heated are square billets and rectangular slabs between length 1.8M to 12M
- ♦ Reduces wear and tear and breakdown of Rolling mills billets are constantly fed at uniform and correct temperature.
- ♦ Billet speed through coil and temperature are easily maintained through PLC Automation and VFD.



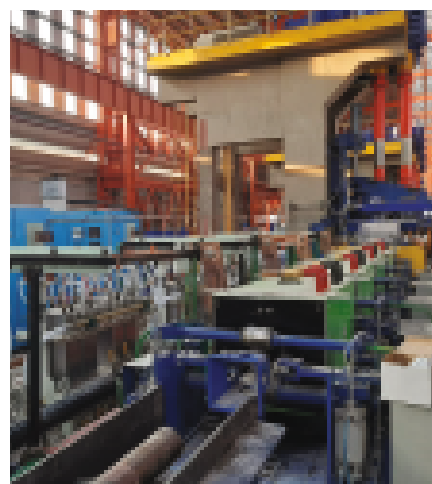
## Induction Hardening & Heat Treating Equipment

Our Induction Hardening Machines cover the following range:

Output Power-25KW through 500KW Frequency-

- ♦ 1 kHz-10 kHz-Medium Frequency
- ♦ 30 kHz-100 kHz-High Frequency
- ♦ 100 kHz-400 kHz-Radio Frequency

Machine types - Vertical Scan hardening, Horizontal scan hardening, Lift & Rotate, Rotary indexing with pick & place systems integrated Controls - Allen Bradley, Siemens, Mitsubishi CNC/PLC systems with energy monitoring, quench monitoring and temperature feedback systems Accessories De-Mineralized water recirculating type cooling systems, quench media re-cooling and recirculating systems, Inductors, Quench rings and various kinds of work holding fixtures.



## Induction Melting and Holding Furnaces (5 Kg to 80Ton)

Furnaces (5 Kg to 80Ton) Our Induction Melting and Holding Furnaces offer the following:

- ♦ Rugged construction
- ♦ Easy maintainability
- ♦ Most efficient energy consumption in its class
- ♦ High power factor
- ♦ Optional accessories such as Protective Net Guards, Closed Capture Fume Hoods, Stationary
- ♦ Fume Suctions Rings with Swiveling Lid, Quick Lining Removal Mechanism, pneumatically operand remote furnace change-over isolation switches, Load Cell Arrangement etc.



## Induction Billet Heater for Forging (100 KW - 8000 KW)

Induction Mass Heating technology is used in the following Metal Working Processes:

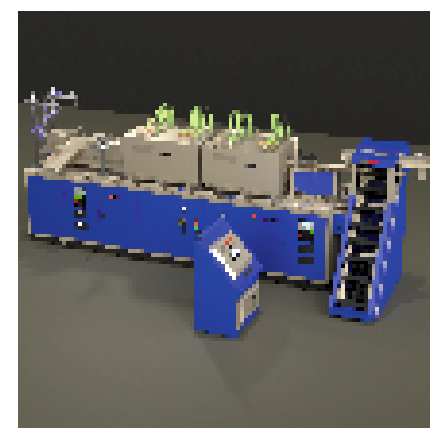
- ♦ Forging
- ♦ Extrusion
- ♦ Rolling
- ♦ Annealing
- ♦ Bar Heating
- ♦ On Line Heating
- ♦ Cathode Drying



## Ladle Refining Furnace (12 Ton to 100 Ton)

Objectives of LRF are:

- ♦ Removal of Oxygen (Deoxidation)
- ♦ Removal of Hydrogen (Degassing)
- ♦ Reducing sulfur concentrations as low as 0.002% (Desulfurization)
- ♦ Removal of undesirable non metallic elements (Micro-cleanliness)
- ♦ Changing the composition of remaining impurities to improve the micro structure (homogeneity) of the steel (Inclusion morphology)
- ♦ Increasing toughness, ductility, transverse properties, mechanical properties and also for temperature rise (Superheating)



## Arc Furnace (5 Ton to 30Ton)

- ♦ Used for Steelmaking.
- ♦ Used in Metallurgical Sector due to its diverse melting application which helps to produce Steel as desired chemical composition.
- ♦ The EAF effectively melts all type of Scrap irrespective of chemical composition or size and also melts Direct Reduced Iron (D.R.I) Sponge Iron.



## Transformers

- ♦ Power and Distribution transformers (3 MVA to 60 MVA up to 132 kV class)
- ♦ Inverter Duty Transformer (2.5 MVA to 20 MVA up to 33 kV class)
- ♦ Converter Duty Transformer (1 MVA to 30 MVA up to 33 kV)
- ♦ Electric Arc Furnace & LRF Transformers (1 MVA to 20 MVA up to 33 kV)

## Continuous Casting Machine

Product Range:

- ♦ 4/7 Meter Radius, 2 or 3 Strand
- ♦ 6/11 Meter Radius, 2 or 3 Strand
- ♦ Direct hot charging to rolling mill



## Static Frequency Convertor

Our Induction Melting and Holding Furnaces offer the following:

- ♦ 6/12/24/48 Pulse Options
- ♦ Power sharing options: twin/multiple
- ♦ Range available 5kW-20MW
- ♦ Frequency 0.2 kHz to 200kHz