

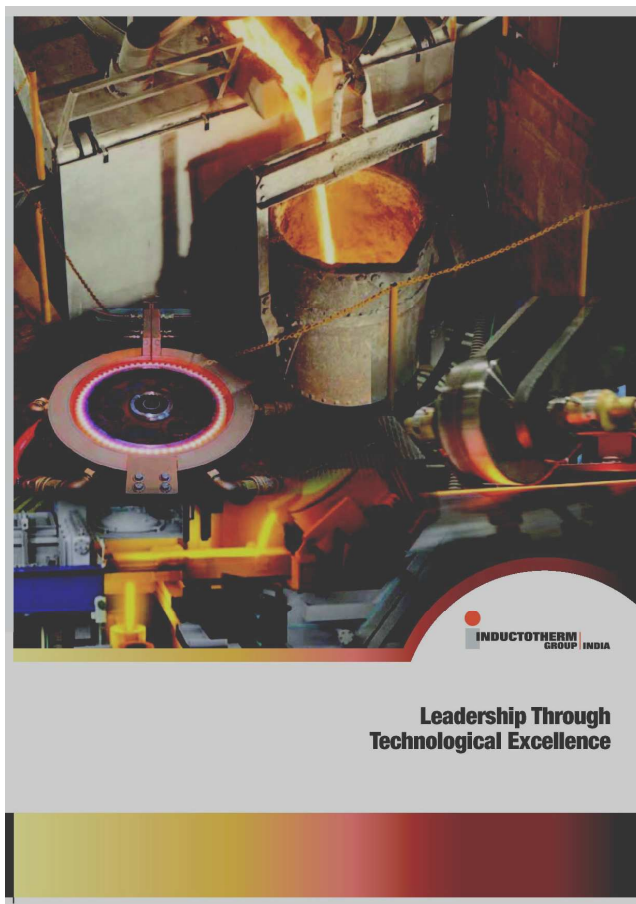
Presentation by M/s Inductotherm (India) Pvt. Ltd. on “Necessity of Induction Furnace for Investment Casting & Precious metal melting applications”

IIM Delhi Chapter organised a technical talk/presentation at its premises on 20th Dec. 2014 on a very interesting & innovative subject titled “Necessity of Induction Furnace for Investment Casting & Precious Metal Melting Applications”. This talk was delivered by its technology space setters, M/s Inductotherm (India) Pvt. Ltd., Ghaziabad’s senior representatives, (Mr. Ajit Chaturvedi, Regional Sales Head (Furnace) and Mr. B R Garg, Area Sales Head) who are Indian subsidiary of their 1 Billion parental Inductotherm Group of USA.

The talk was attended by 25 members of IIM Delhi Chapter. There was a lot of enthusiasm shown by the audience on this subject with a good interaction between the audience and the talk presenters.

A brief about the presenter company and its activities is as below:-

Inductotherm (India) Pvt. Ltd, an Inductotherm Group Company, an international Group of 60 Companies operating in 17 countries employing over 3200 people world-wide with an annual sales in excess of US. It 1 Billion, was established in India in the year 1982. It has since consolidated its position as the market leader in Induction technology for heating, melting, welding, vacuum melting and vacuum heating. Presently, the company employing 435 persons with its annual turnover in excess of 80 million US\$ has been a trend – setter in offering state-of-the widely and is regarded as the best choice for induction heating & melting. Their manufacturing plant in India is



spread across an area of 85,000 sq. mts and is fully equipped with the latest state-of-the-art machines to achieve global quality norms. The company provides the equipment and services for the metals & materials Industry services both in ferrous & non-ferrous metal producers, mining & smelting operations, diecasters, recycling companies, investment casters and precious metal manufacturers etc in following areas:

1. Melting, Holding & Pouring

Specially engineered fully automated induction melting systems, that include induction power supplies, coreless induction furnaces, charging & pre-heating and pouring systems. The power supplies are in medium frequency from 15 kw to 25,000 kw and furnaces from as low as 1.5 kg to massive 50,000 kg capacities. The company has installed more than 3500 induction melting systems throughout the country for various applications in steel & alloy steel melting, Grey & Ductile Iron Melting, Non-ferrous metals melting including Copper & Copper Alloys, Aluminium, Zinc etc; Precious Metals Melting (Gold, Silver, Platinum); metal powder manufacturing and Investment castings. It has supplied to MMTC for gold coins & souvenirs manufacturing and to steel grinding media balls manufacturing companies.

In investment casting technology, moulds made out of wax are used. After their first use, this wax can be re-used for subsequent moulds making. Further, these wax moulds provide smoother finish castings which are much superior to castings produced by conventional mould materials.



2. Heating & Heat Treating Technologies

Offering custom engineered automated induction heating system for heat treating for selective case hardening, forging, pipe heating, tempering, annealing, bonding & brazing, serving variety of industries including automotive, aerospace,



industrial, mining, oil & gas, marine, railways, power generation etc.

The company has installed more than 1500 induction heating systems throughout the country.

3. Induction welding systems

Supplying large solid-state HF wide range welders for most challenging and complex tube and pipe welding applications. The welders in power ratings from 50 KW to 2,000 KW in welding frequencies ranging from 120 KHZ to 800 KHZ. The company has installed more than 200 induction welding systems throughout the country, applications in manufacturers of low & medium carbon steel, alloy steel, stainless steel, aluminium, copper & brass tubing.



4. Vacuum & Controlled atmosphere induction melting furnaces(VCAP)

This innovated technology is from M/s Consare Engineering Ltd., UK. The VCAP furnace is designed for melting of a solid charge in an air atmosphere or vacuum, with final degassing stage under vacuum. The final pouring of the metal is performed in air or under protective atmosphere of inert gas. The company manufactures a wide range of furnaces (in capacities of 3 ton & above) for specialised engineering applications, such as:



- ❖ Vacuum Induction Melting
- ❖ Vacuum Degassing
- ❖ Vacuum Precision Investment Casting
- ❖ Electro Slag Remelt
- ❖ Vacuum Arc Remelt
- ❖ Vacuum Heat Treatment
- ❖ Vacuum Aluminium Brazing, etc.

At the end of session, vote of thanks was proposed by Mr. S C Suri, Chairman, IIM DC and mementos were also presented to both the speakers.

The talk ended with a lunch.