Overview

An Overview Of Indian Foundry Industry
S. P. Oudhia

India is the third largest casting manufacturer in the world; next only to China & USA. Installed Capacity of Indian Foundries is 15 Million Metric Tons/Annnum and Annual production is 9.3 Million Metric Tons (In 2012-13). Number of Foundries is 5000 (Approx.) out of which 85% are Small units; 10% are Medium Size Foundries and Only 5% are Large organised units.

Bulk Castings Produced in 2012-13 are:
- Grey Cast Iron - 6.25 Million M.T.
- Ductile Iron - 1.00 Million M.T.
- Steel - 1.16 Million M.T.
- Non-Ferrous - 0.90 Million M.T.

(All figures are as per survey of AFS-Modern Castings).

How authentic and reliable these figures are is a big question mark. This is because; India has a very large number of micro size foundries in un-organised sector. There appears to be a need of carefully planned census of Indian foundries and collection of data of installed & utilised capacities.

Indian Foundries employ about 5.0 lakh work force directly & about 15.0 lakh people indirectly. Most foundries are labour intensive where operations and handling are manual.

Capacity Utilization:
Against around 60% capacity utilisation in the Year 2012-13; the capacity utilisation has dropped to 40 to 45% in 2013-14 and this downwards movement continues due to slackness in demand and addition of large capacities by major players like Amtek, Ghatge & Patil, Menon & Menon and many more.

Financial Health of Foundries:
Due to under-utilisation of capacities on account of recession, there is a keen competition amongst foundries. This situation is being exploited by casting buyers. Survival & sustenance of foundries are tough & challenging. Many have to suspend operations. Where foundries are able to continue production; casting buyers are unable to pay for supplies in time. Thus foundries are forced to work for banks rather than their stake holders.

Steep drop in castings demand due to slow down in Farm equipment sector, steep increase in the cost of energy and in-puts and cost of finance has made life of foundries miserable. The situation is grim and needs careful study and evolution of workable solution.

Operating Problems faced by MSME Foundries:
1. Lack of Professional management.
2. Non-availability of quality In-Puts at affordable cost.
3. Ever escalating cost of energy.

Mr. S.P.Oudhia is a well-known foundryman with over 52 years of rich experience in Metal Casting Industry in India. He has served reputed foundries including Meehanite Foundry of The Premier Automobiles Ltd. Mumbai, CISCO Ltd. (Voltas Foundry), Mumbai Himmat Steel Ltd, Bhilai & SEP Ltd, Kolkata. After meritorious service, he retired in 1998 & since then he is serving Foundry Industry as Technical Consultant. He is credited with Design & commissioning of two major Ferrous Foundry Units as consultant. Mr. Oudhia is also an active Member of The Institute of Indian Foundrymen & has organised many conferences of Interest to Foundry Industry.
4. Poor Industrial growth in the country due to in-effective policies of State.

5. Cost of Finance.


7. Shortage of trained man-power.

8. Lack of Cohesion and Consolidation amongst competing foundries.

9. Poor record of SHE (Safety, Health & Environment) Concerns.

There is an urgent need to examine foregoing issues in detail:

**Professional Management:**

The entrepreneur has to transform himself into a professional manager and devise ways and means to take rational business decisions, based on facts, data and reliable information. There can be no room for decisions based on instinct and intuition. Such transformation calls for keeping eyes and ears open, study of internal and external factors affecting business prospects, on continuous basis and SWOT of self and competitor. The policy of state and expectations of stakeholders are to be kept in view and extreme alertness is needed in fast changing dynamic environment.

**Availability of Quality Inputs:**

For smooth operation and quality production of castings, supply of specified quality of inputs at affordable price is a MUST. In present scenario, in-put quality leaves much to be desired. Un-segregated scrap supply, un-graded foundry sand supply, sand binder quality, quality of various consumables; must be ensured by rigid BIS specifications and strict compliance. Such a situation has a great potential to stop wastages and improve product quality.

**Energy Cost:**

Energy is a major consumable in foundry operation. Energy conservation can be attained by:

i) Energy Audit.

ii) Monitoring Consumption on major energy consuming points like MELTING, HEAT- TREATMENT etc.

iii) Benchmarking of Energy Consumption in MELTING.

iv) Awareness Campaign.

**Industrial Growth:**

In developing economy like ours; State's policy plays major role in accelerating industrial growth. Growth friendly policies with minimum suspicion and maximum trust will accelerate activity in Power Generation, Mining, Transportation etc., which in turn will lead to increased demand of castings.

**Cost of Finance:**

A lot of capacity in Foundry Sector can be used for exporting castings. Apart from demand from overseas, if Finance is also available at internationally prevailing rates, our castings can stand better chance in export market.

**Productivity & Product Quality:**

Indian Foundries in all sectors MUST adapt to new emerging techniques in approach to QUALITY FIRST TIME and ALL TIME. Tooling Design and Manufacture, Methoding, Simulation, Use of Software and help of I.T. can lead to right Quality, enhanced productivity & reduced cost.

**Manpower:**

Although foundry business is expected to grow at a fast pace in the days ahead, there is going to be the serious shortage of trained man power at all levels. The reasons can be summarised as:

a) Inability of Foundry Industry to pay comparable attractive remuneration to employees.

b) Inability to provide Safe, Health, pleasant working environment.

c) Inability to appreciate need of training and Re-Training.

d) Poor Social Security

e) Foundries not preferring employing Educated Technocrats (Leading to discontinuation of several courses in Technical Institutions)

**Cohesion amongst Foundries:**

There is urgency for realisation that cohesive and collaborative approach only can help the situation & save from cut-throat competition induced by casting users. In the long run, foundry Clusters have to pool their strength to face the challenge. There can be careful SWOT analysis of foundries in the cluster and based on it there can be Target of specialisation like:

i) Exhaust Manifold Foundry

ii) Engine Block Foundry

iii) Railway Sleeper Inserts Foundry

iv) Ball Mill Liner Foundry

v) Municipal Castings Foundry

This approach can lead to specialisation, mass production & cost reduction.

**SHE:**

To make foundry an attractive proposition and attract talent to this vital profession, we need to address Safety, Health & Environment issues.

Today, Foundry is considered a risky and hazardous shop, where safety of work force is at a risk. This can change by using safety gears, creating safety awareness, curbing emissions and pollutants at the points of their origin.

Waste generated in foundry operations like burnt sand, slag etc., pose a problem of disposal. They can be processed and converted into usable products. One has to be innovative to tackle such issues.

Per capita consumption of Castings in India is only 25% to that of USA. There exists great scope for growth of Foundry business. We MUST address these burning Problems and arrive at Solutions.

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