Assofond

Friday 18th September 2009

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General Manager of FONDERIE GLISENTI SPA

IPIA CONGRESS

Westin Palace
Milan
18th September 2009

THE ITALIAN FOUNDRY INDUSTRY

Italian Foundry industry consists of :

- 1,100 companies,
- 32,000 direct workers
- 12,000 indirect workers

and has a turnover of approximately 11 billion EUR

In the European ranking, the Italian foundry is positioned at the forefront with regard to non-ferrous metals.
At second place, excluding the production of pipes, for ferrous metals after Germany.
In the international scene, Italy is placed at the eighth place.

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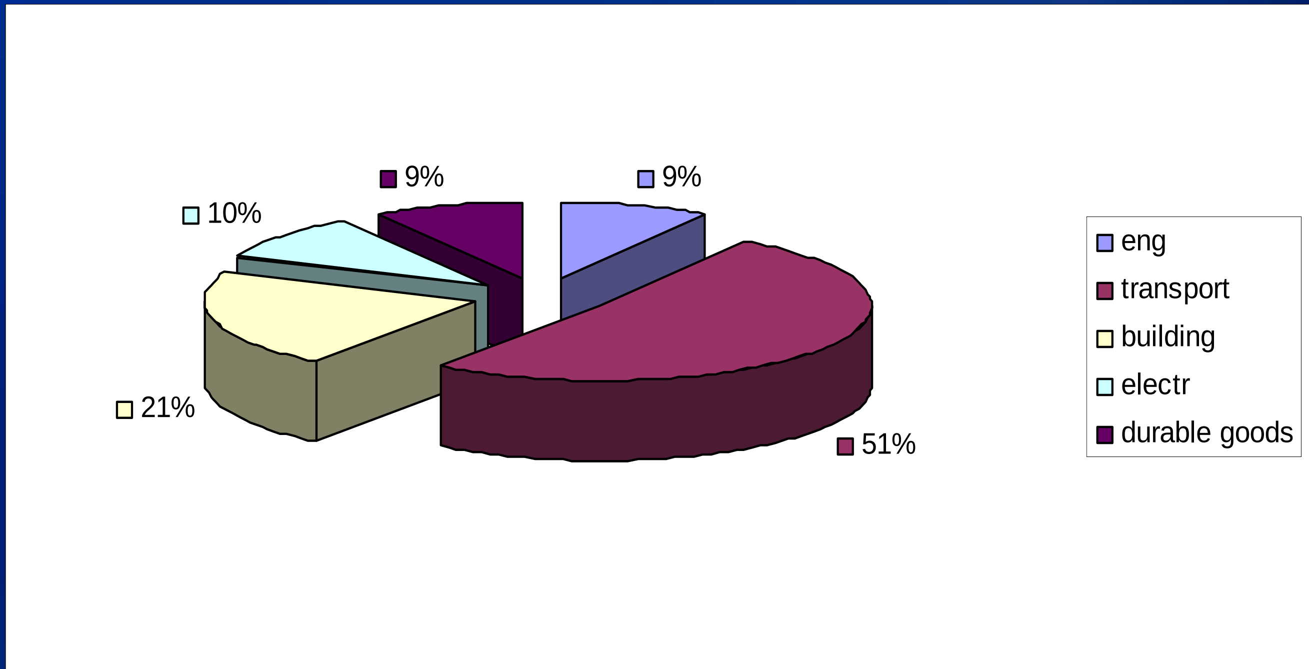
NON-FERROUS CASTINGS USE (ITALY):



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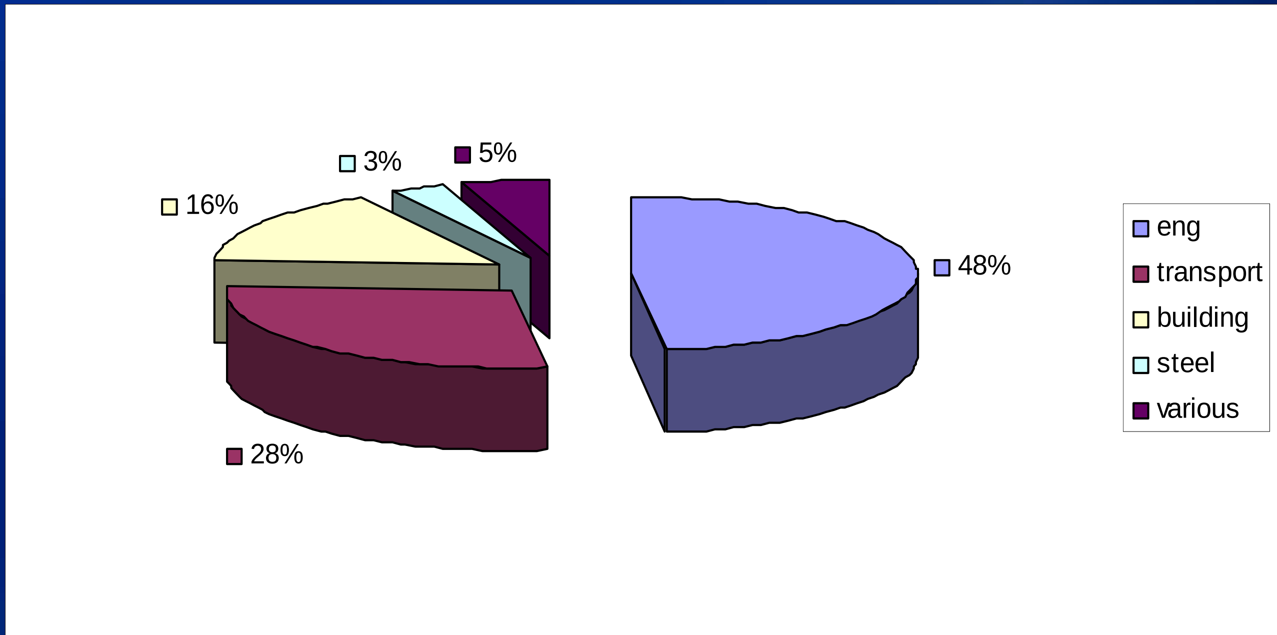
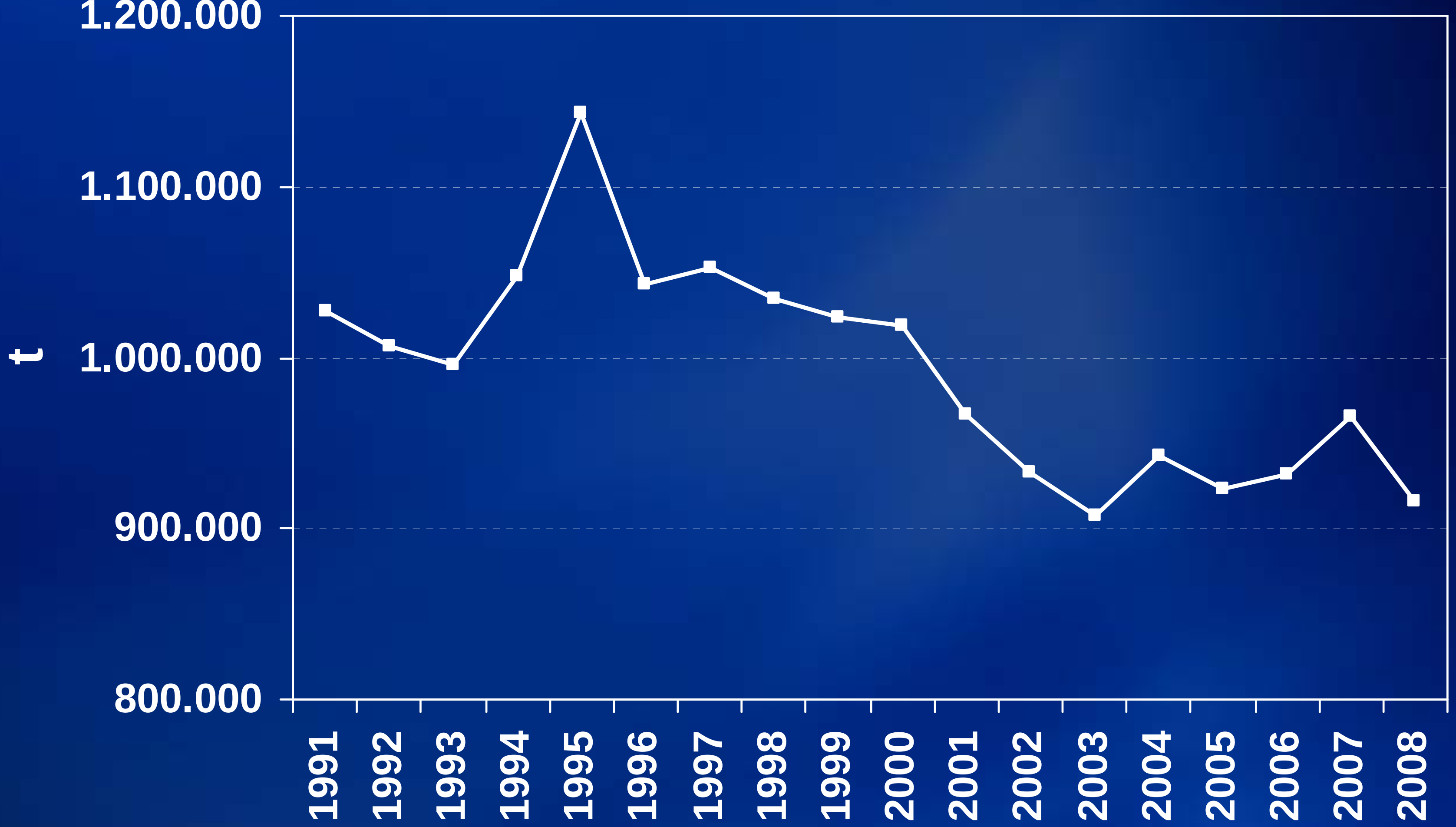
IRON CASTINGS USE (ITALY):



ITALIAN OUTPUT OF GREY IRON CASTINGS (Mt)



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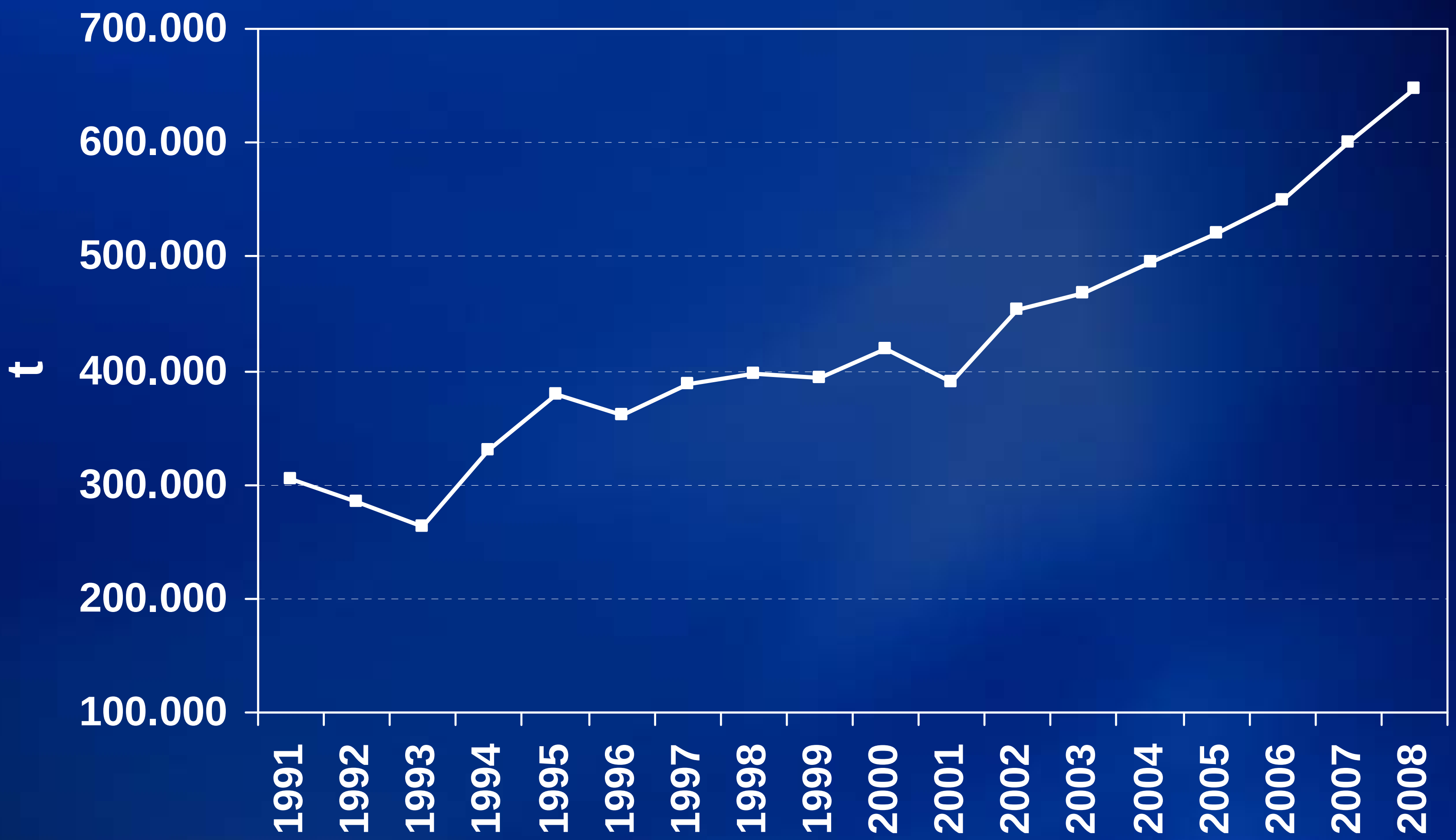
ITALIAN OUTPUT OF DUCTILE IRON CASTINGS (spheroidal + malleable) (Mt)



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IRON CASTINGS IMPORT- EXPORT

Imported iron castings: 500.000 MT
- 56% from EU – 27
- 44% mainly from China

Exported iron castings: 430.000 MT
- 72% to EU – 27
- 28% extra EU -27

The exchange balance in 2008 has presented a total positive surplus of 725 million EUR.

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THE ITALIAN FOUNDRIES FEDERATION - ASSOFOND

Assofond is the association linked to Confindustria, which represents the foundry industry. Has its headquarters in Trezzano sul Naviglio, close to Milan.

Assofond is split into four associations:

Assofond cast iron
Assofond steel
Assofond investment casting
Assofond non-ferrous

More over Assofond **Energy Consortium** (made to optimize the purchase of electrical power) and **Assofond Services Company** which has been delegated to assist businesses on specific issues

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THE ITALIAN FOUNDRIES FEDERATION - ASSOFOND

Assofond has 300 member associated:

- **114 iron foundries**
- **27 steel foundries**
- **12 investment foundries**
- **147 Non-ferrous metal foundries**

Companies that are part of Assofond realize, on average, 78% of Italian production castings.
Assofond member representation is more than 95% in the production of cast iron and around 62% in non-ferrous castings.
The different weight of the representation is given by the most recent classification of non-ferrous metal foundries, which arrived as members in year 2003.

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OUTPUT OVERVIEW

The production of castings in the last decade, even with the coming into our markets of emerging countries, has undergone a significant change i.e. productions of special alloys have grown:

• ductile (Spheroidal) iron ,

•iron with high silicon and manganese content

• ADI (Austempered Ductile Iron)

• iron used in the special crushing of building materials

• other types of cast irons resistant to high temperature and corrosive liquids

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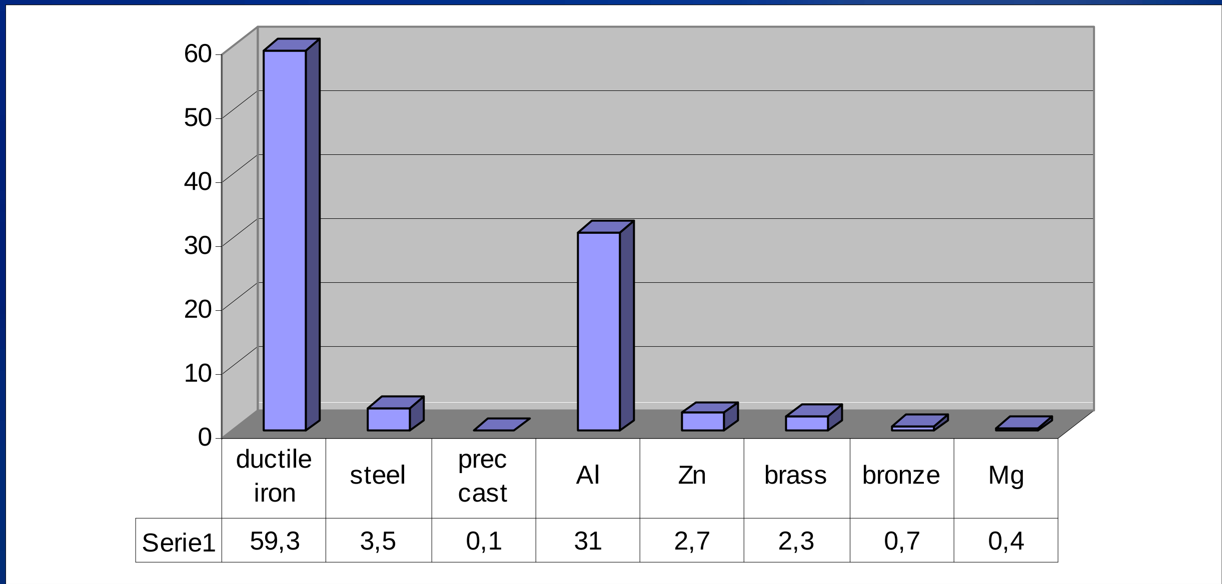
OUTPUT OVERVIEW

Ductile iron	1565000
Steel	93000
Precision Casting	1500
Aluminium	820000
Zinc	70000
Brass	61000
Bronze	19000
Magnesium	10000
Other Non Ferrous	1300



MELTING MEANS

Foundries in the past have made different choices concerning melting means:

- **small Foundries** have been geared primarily toward rotary furnace with a gas or liquid fuel,
- **middle sized foundries** have preferred furnaces despite the expensive energy,
- **large sized foundries** still prefer the cupolas at long-running campaign using coke and enriched with oxygen.

In general it is estimated that **45%** of the production of cast iron is obtained through the long campaign cupolas furnaces, 40% has complied with electric furnaces, **15%** is achieved with rotary furnaces and traditional cupolas.

The smelters often influence the choice of raw materials.

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RAW MATERIAL

The Italian steel industry, using mainly electrical power, requires significant quantities of scrap that must be imported.

Foundry scrap, which is made by a different quality than that the one for steel, is bought mainly on the Italian market and is formed by drops of new machining.

The limited market for scrap in particular high quality scrap, advises foundries the use of cast iron.
It is for this reason that the Italian foundry, compared with its European partners, uses larger quantities of pig iron in relation to the production of castings.

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THE USE OF PIG IRON

For the iron foundry pig iron is considered the raw material for excellence: meets the level of quality required by customers, facilitates the achievement of the mechanical characteristics of the products, may limit material to be scrapped.

Types actually in use are reduced to a little number and are mainly divided into 3 categories:

- hematite pig iron
- ductile or spheroidal pig iron
- low-manganese pig iron

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THE USE OF PIG IRON

Consumption is estimated at **680,000 Mt** per year, equivalent to 35% of the liquid metal product after the fall of the melting loss.

In general, the metal charge consists of:

- scrap
- pig iron
- gating (attacks casting, sprue, parts of it not sold to the customer).

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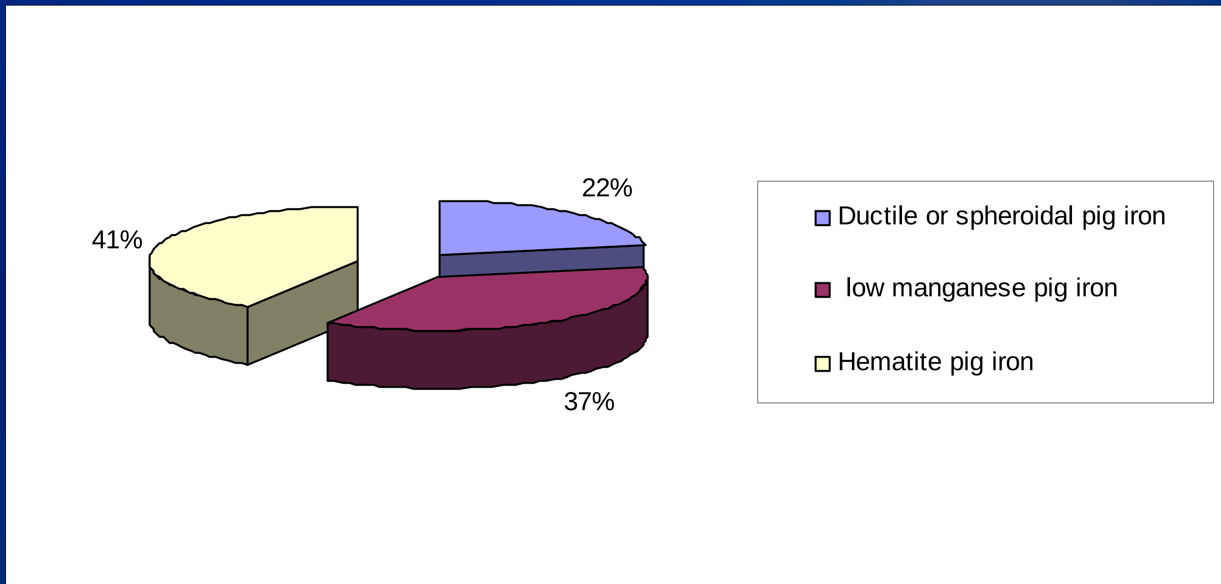
THE USE OF PIG IRON

Concerning the above mentioned (680,000 tons) we can estimate:

- ductile or spheroidal pig iron 150000 Mt
- low manganese pig iron 250000 Mt
- hematite pig iron 280000 Mt



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TRENDS

Probably there will be an increase in demand for ductile pig iron to the order of 10% in the 6 / 7 years.

The application of cast iron, now regarded as low-profile, within 6 / 7 years can increase by 12-15%, especially if producers will be able to provide materials with constant analysis and restricted variations (e.g.1.5-2 % and not 3-5%).

Over the next 6 / 7 years, demand for pig iron hematite could be set at 225,000 tonnes.

No change is envisaged in the overall demand on the planned 680,000 tonnes per year, provided that the sector will go down to the level of production of 2007/2008.

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PROCUREMENT MARKETS AND QUOTATIONS

An Italian manufacturer, based in North of Italy (Trieste), provides Italian foundries an average of about 390,000 Mt per year of pig iron in different types, including 100,000 Mt of liquid metal used directly in the production of pipes. 30/40000 Mt are imported from European countries, 40,000 Mt from Brazil, 60,000 tonnes from South Africa, 150,000 tonnes from the Russia

In Italy the prices of pig iron for foundry are checked by the Chamber of Commerce of Milan retroactively every 15 days and published on a specific list in items 310-320 of Chapter 430 Ferrous Metals.

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IRON FOUNDRIES ECONOMIC SITUATION

During the first six months of year 2009 foundry industry has started to be affected by a harder part of crisis in all assets and firms size, with different shades and degrees of intensity.

Assofond Research Dept, recorded in the first four months of 2009, a trend decline in production of -54% for the iron foundries of -22 % for steel, 49% for light metal foundries (aluminum and magnesium) and 40% for those of other non-ferrous metals (zinc, brass)

Turnover has been reduced for nearly all of the companies interviewed over the same period a year earlier, orders fell by a more marked downsizing of internal compliance foreign ones, will further reduce the consistency of the orders.

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IRON FOUNDRIES ECONOMIC SITUATION

On the employment front, the use of ordinary layoffs showed strong surge, although it is not possible to quantify the amount. The survey shows that Assofond members have used layoffs. In particular 85% in iron foundries, 60% in Steel foundries and 90% in non-ferrous metals foundries.
In addition to layoffs, the companies invested by the crisis have also used other forms for the reduction of employment.

Output capacity shows a decrease of 28 percentage points over the second half of 2008 and stands at 41% of the maximum potential, while stopped at 55% for steel foundry with a decrease of 26 percentage points over the second half of 2008.

Finally, for the foundries of Non-Ferrous Metals, the index of output capacity in the first half of 2009 stood at 47%, after a 61% of the previous six months.

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IRON FOUNDRIES ECONOMIC SITUATION

It is not easy to determine how much time this situation will last, nevertheless, we stress that the expectations of entrepreneurs for the current six months are resizing to the pessimism underlined in previous surveys

Among the iron foundries, 35% of interviewed promises stability in production for the half of the year and 23% expect an increase.

The climate of confidence, measured on the level of expectations of Foundries Non Ferrous Metals is a slight improvement over the previous survey. In addition to the economic survey, the information gathered by ASSOFOND from the enterprises, show in September, signs of recovery in activity levels especially in the iron foundries with significant reductions of layoffs.

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Thank you all for attention