

IRON

Features

- **Rather soft when pure, ductile and Malleable**
- **Subject to oxidation and corrosion (rust)**
- **Magnetises when exposed to a magnetic field**
- **Silvery white colour**

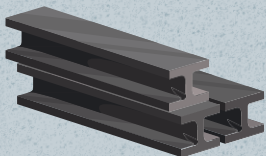
Fun fact

Much more than pure iron, cast iron and steel are used, alloys of iron with carbon and other elements that determine their characteristics and uses. Cast iron contains more than 2.06% carbon. It is hard, resists wear and corrosion but breaks easily. Steel, on the other hand, contains less than or equal to 2.06% carbon. There are different types suitable for a wide variety of uses, from cars to pots and pans to reinforced concrete.

Where

- **Iron alone accounts for 95 per cent of the world's metal production.**
- **Iron is mostly extracted from its ores, which are usually compounds of iron itself. Chief among these are haematite and magnetite.**
- **Main producing countries: China, Brazil, Australia, Russia and India**
- **In Italy, the main iron deposits (no longer exploited today) are located in Valle d'Aosta, Tuscany (Elba Island) and Sardinia**

Uses



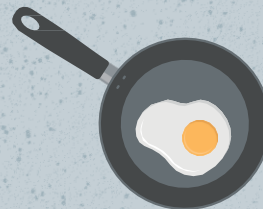
BUILDING
Load-bearing
elements of
buildings



**CONSTRUCTION
AND
MECHANICS**
Cars, ship hulls,
heavy vehicles,
industrial
machinery



**SECURITY
SYSTEMS**
safes, keys,
shutters



**HOUSEHOLD
ITEMS**
Pots,
cutlery...



**MEDICINE
AND
AGRICULTURE**
Supplements