

BLAST FURNACE

In order to separate the iron from the other elements of which the ore is composed, smelting is carried out in the blast furnace, which, thanks to the coal feed and regulation of the oxygen input, can reach a temperature of around 2000°C. In the blast furnace, the carbon released by combustion combines with iron to form pig iron, while the addition of limestone helps to melt impurities. At the end of the process, the slag, which floats on top of the cast iron, is ejected before the latter is taken out of the blast furnace.

THROAT

temperature between 300°C and 600°C, the ore heats up and dries.

BELLY

temperature above 1,000°C, the metal combines with carbon to form cast iron.

BUSTLE PIPES

machines that use the power of water to blow air into the blast furnace so that it can reach the temperature required to melt iron.

SLAG NOTCH

positioned at the highest part of the heart, it is opened to allow the slag to escape.

STACK

temperature up to 1,000°C, here the chemical reduction processes take place.

BOSH

temperature above 1,500°C, the cast iron becomes liquid and the lighter slag floats on it.

HEART

collects cast iron and liquefied slag (slag).

TAP HOLE

this nozzle is only opened when all the slag has escaped, so that the slag-free cast iron is poured out.

