



Unit 17 Blast furnace

Solution: see Audioscript

Task 06. Fill in the missing words from the box.

parts – pig iron – blast furnace – blanking plug – heating zones – steelmaking – products – chamber – chemical compound – pig iron tapping – bosh – height – cone-shaped – steel casing – iron ore – magnetic – reduction – hot air

Hello everybody! Welcome to our company Voestalpine Stahl Donawitz GmbH. Our famous “Linz Donawitz Verfahren” is the process by which most steel (60%) is produced worldwide. With the help of the LD process, it is possible to economically process large quantities of _____ and scrap and supply crude steel of special quality. Voestalpine Stahl Donawitz GmbH can look back upon more than 125 years of experience in _____ technology. Donawitz has always been and continues to be one of the major names in Austria’s Upper Styrian steelmaking tradition.

So, I’m going to tell you some technical facts about the _____, which you probably already know from school: its _____, the different _____ and its _____. Later, you’ll even experience a _____ process and you will get a sample of the tapping, a piece of pig iron, which you may keep.

The blast furnace consists of two _____ hollow blocks, one on top of the other, made of fireproof stonework held together by a _____. Its _____ can be about 30–80m and its diameter between 14–20m. It includes the following five parts:

- the blast furnace top with _____
- the _____
- the carbon-sack
- the _____ and ring line for hot air
- the frame

In the blast furnace, _____ is transformed into pig iron through _____. The starting product to produce pig iron is ore. This iron ore does not exist in its pure form in nature – it occurs always as a _____. The most important iron ore is _____ iron ore. In order to produce pig iron from iron ore, it is necessary to pre-process the iron ore by breaking up the rough pieces of ore into smaller pieces that fit into the blast furnace and by blasting with _____, a thermal pre-processing method that reduces or eliminates unwanted elements such as water, carbon dioxide and sulphur.