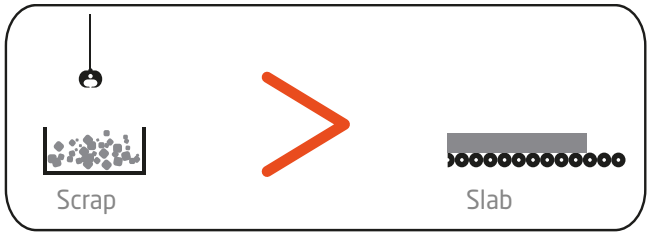
Manufacturing process

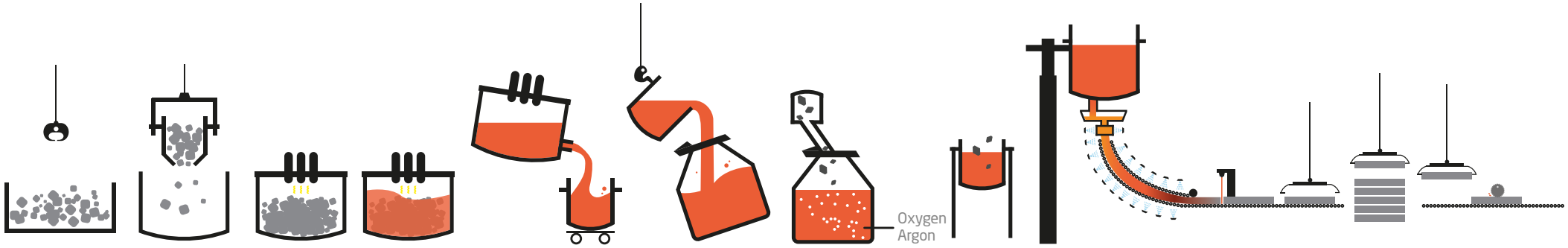
Stage 1 – the melt shop

Recognised as a reference for **sustainable development**, the production of steel starts with the **melting of scrap**.

At the **melt shop**, the chemical composition of the stainless steel grade is determined.

With a capacity of **2 million tonnes**, Stainless Europe's plants have a competitive advantage.





Using an electric arc furnace with a **melting capacity of up to 160 tonnes**, the **raw material** (recycled stainless and ferro alloys) is transformed into **molten metal**.

The molten metal is then transferred to the **converter**.

To obtain the correct chemical composition, alloying elements are added in the converter. **We can produce all of the standard grades**.

The ladle metallurgy process involves adding some alloying elements to obtain **the exact chemical composition** and the correct temperature before the continuous casting process.

The liquid steel is then cooled and solidified during the **continuous casting process**.

At this stage the maximum width is determined. Using an oxygen flame, the solid steel is cut into **slabs of up to 30 tonnes in weight, up to 12 m long, 200 mm thick and up to 2 m wide**.

Some slabs are then ground to remove surface defects before everything is shipped to the hot rolling mill.

Information

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