81.11 - Manganese and articles thereof, including waste and scrap.

Manganese is extracted by reduction of the oxide ores, pyrolusite, braunite and manganite. It is also obtained by electrolysis.

The metal itself, which is grey-pink, hard and brittle, is rarely used as such.

It is however a constituent of spiegeleisen, ferromanganese, silico-manganese and certain alloy cast irons and alloy steels; these products normally fall in Chapter 72, but ferro-manganese and silico-manganese may sometimes fall in this heading if the iron content is very low (see Note 1 (c) to Chapter 72). Manganese is also alloyed with copper, nickel, aluminium, etc.