

Development of China Vanadium Industry

Zhou Jiacong

Panzhuhua Iron and Steel (Group) Company

1 Brief introduction of China vanadium industry

China is one of the largest vanadium producing country in the world. Currently, there are seven countries in the world, which are South Africa, China, Russia, USA, Australia, New Zealand, and Japan, producing vanadium slag, vanadium oxide, and high ferro-vanadium. World vanadium production in 1999 is listed in Figure 1. Since 1980s,

South Africa, Russia and China are the three major vanadium-producing countries. With Australia Windimurra vanadium project being put into production, it may take 9% of the world vanadium shares, and become one of the major vanadium producers. Except that USA and Japan are extracting vanadium from petroleum residue and Orimulsion from power generation plant, other producers are recovering vanadium along with the ore melting process.

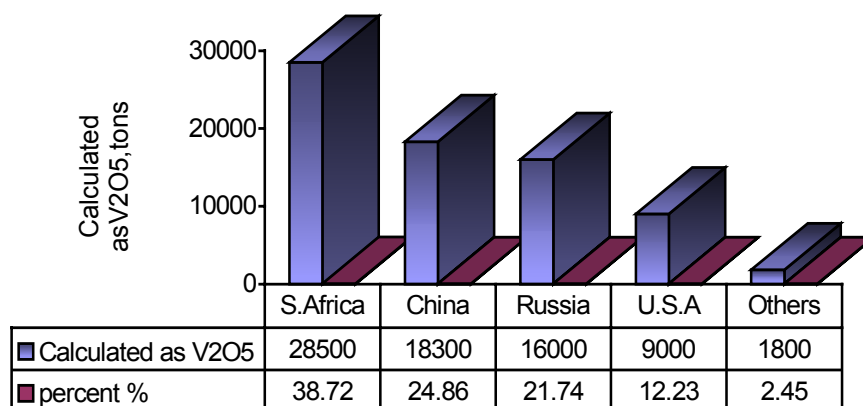


Figure 1 Vanadium production in the world (1999)

Notes: all data in the table except those for China are mainly referred to the USGS published statistics, and do not include V₂O₅ production of Australia Windimurra, which came onto stream in the end of 1999.

Panzhuhua Iron and Steel (Group) Company (hereinafter referred to as Pangang) is the largest vanadium producer in China. If calculated as capacity of V₂O₅, Pangang is producing 74% of vanadium raw materials of the whole country, which accounts for 18% of the world production. Figure 2 shows the vanadium productions status in China. Chengde iron and steel company is another

major vanadium producer in China, the production scale of this company is continuously increasing these years.

Development of China vanadium industry benefits mainly from the development and utilization of the vanadium and titanium magnetite ore in Panzhuhua. With the vanadium atomization process putting into