Lead ISASMELT™ at Huize Smelter, China

XT has commissioned the lead ISASMELT™ furnace for Chihong Zinc and Germanium Co. Ltd with first feed on occurring in December 2013. This is Chihong’s second ISASMELT™ furnace and was built at a greenfields site on the outskirts of the town of Huize, Yunnan province, in the People’s Republic of China. The plant was designed to treat 160,000 t/y of lead concentrates sourced from local mines.

The ISASMELT™ is the first of a series of stationary furnaces linked by launders to transfer the molten products. About 40% of the lead bullion is tapped directly from the ISASMELT™ furnace and cast in moulds on a casting wheel. A lead-rich slag is also transferred from the ISASMELT™ into a reduction furnace which produces the remainder of the lead bullion. Slag is cleaned in a settling furnace and zinc is recovered as an oxide fume from two slag fuming furnaces.

The ISASMELT™ furnace is very versatile, and has been readily adapted to work in this lead smelting flowsheet. The ISASMELT™ furnace accepts different feed types, such as the recycle of residues and dusts that are typical within an integrated metallurgical plant, and this enables Chihong to extract the greatest value from their available feed. Pulverised coal is the principal fuel for each of the furnaces at the Huize Lead Smelter.

_Huize Lead Smelter Flowsheet_