

**METHOD FOR PRODUCING MERCURY-FREE
ALKALINE-MANGANESE TYPE ELECTROLYZED MANGANESE DIOXIDE**

Disclosed is a method for grinding manganese dioxide ore. The method comprises: (1) feeding manganese dioxide ore into a hopper by a trolley, mixing the manganese dioxide ore with circulating water above a crusher, and evenly feeding the manganese dioxide ore into the crusher; (2) crushing the manganese dioxide ore into slurry by means of the crusher, and feeding the slurry into a tank of a spiral classifier for classification, so that small-particle ore in the slurry is suspended on the surface of the tank, and large-particle ore is deposited at the bottom; (3) discharging the large-particle ore out of a discharge port and feeding into a wet ball mill for milling, and feeding the milled slurry into a spiral classifier for further classification through the front side of the spiral classifier; (4) repeating Step; (3), feeding the resulting small-particle ore into a slurry tank from an overflow weir, fully stirring the slurry that enters the slurry tank using a stirrer, and then pumping the slurry by means of a mortar pump into a compression filter for solid-liquid separation. The method is capable of improving the grinding efficiency and metal recovery, and reducing the grinding cost of manganese dioxide.

Figure 1