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The Research Advance and Trend Analysis of the Crystallization Cleaning Technology of Salt Lake Brine Pump in China

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Salt Lake brine pump is one of the key equipment in salt lake brine extraction device. As the salt lake brine is a kind of high concentration solution with a variety of chemical constituents, the flow and agitation of saturated brine cause corrosion and salt deposition in the flow field of brine pump. Crystal attached to the inner surface of the flow channel accompanied by the phenomenon of crystal precipitation, the growing of crystal cause the blocking of flow channel, which seriously affect the mining and conveying process of salt lake brine. Therefore, as one of the main equipment protection technology in brine mining process of salt lake, the crystallization cleaning technology of salt lake brine pump has broad prospects for research and application. The crystallization cleaning technologies of salt lake brine pump which were widely used at home were summarized in this paper. The main advantages and disadvantages of the current crystallization cleaning technology of salt lake brine pump were analyzed; the development trend of the crystallization cleaning technology of salt lake brine pump was prospected based on the research progress of new technologies, new processes, and new materials of salt lake brine pump.

Key words: Salt Lake brine pump, the crystallization cleaning technology, the development trend, crystal precipitation.

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