

Anode	Carbon rod
Cathode	Carbon lining
Electrolyte	Molten cryolite and Alumina
Equation of the chemical reaction at anode	$2\text{O}^{2-} \rightarrow \text{O}_2 + 4\text{e}^-$ $\text{C} + \text{O}_2 \rightarrow \text{CO}_2$
Equation of the chemical reaction at cathode	$\text{Al}_2\text{O}_3 \rightarrow 2\text{Al}^{3+} + 3\text{O}^{2-}$ $\text{Al}^{3+} + 3\text{e}^- \rightarrow \text{Al}$