

The crucible furnaces are mainly used for melting metal or for keeping the metal in the liquid state. Among other things, an applicable mathematical optimization of the crucible parameters could contribute to reducing the high energy intensity of crucible furnaces. The component part of the considered mathematical model of the radiation heat transfer is the calculation of the view factors whose analytical solution is possible only in special cases. This article deals with the proposal to simplify the analytic calculation of the local view factors for the generally shaped crucible on standard conditions.