

A device for electrical preheating of a dry material for manufacture of green masses for electrodes comprising a silo housing, a core, a top and a bottom electrode, a concentric feed pipe, an eccentric feed pipe, and a rotating removal tool, said silo housing having a top end, a bottom end, a circumferentially extending wall, and a longitudinal axis, said core located substantially within said silo housing extending substantially along said longitudinal axis to define a hollow annular space, said top electrode provided between said wall of said silo housing and said core, located proximate said top end of said silo housing, and said bottom electrode provided between said wall of said silo housing and said core, located proximate said bottom end of said silo housing, said electrodes connected to a power source, said concentric feed pipe located proximate said top end for feeding said dry material into said annular space, said eccentric feed pipe located proximate said bottom end, said rotating removal tool located in a lower end of said annular space proximate said eccentric feed pipe, wherein said rotating removal tool provides a means to convey said material for manufacture from the annular space into said eccentric feed pipe.