

Burner assembly and method for combustion of gaseous or liquid fuel The invention relates to a burner assembly (1) and a method for combustion of gaseous or liquid fuel to heat an industrial furnace (9) having a combustion chamber (2), at least one main combustion air inlet (3) for the supply of preheat-ed combustion air (4) into the combustion chamber (2), a burner (5) with at least one fuel feed (7) and at least one air feed (8) for supply of fuel and primary air into a the combustion chamber (2), wherein the burner (5) is positioned adjacent to a combustion zone of the combustion chamber (2) such that the combustion air (4) flowing into the combustion chamber (2) through the main combustion air inlet (3) is passing the burner (5) in the combustion zone and is then deflected such that the flow of preheated combustion air and the smaller flows of fuel and primary air are flowing mainly in parallel from the burner (5) to the furnace (9), and a control unit for controlling the supply of fuel and maybe primary air into the combustion chamber (2). The control unit is adapted to supply the fuel and/or the primary air from the fuel and/or air feed (7, 8) into the combustion chamber (2) with an exit velocity higher than 150 m/s.