

Argon Plasma Torch (5kW-50kW)

A compact tungsten electrode argon plasma torch operating in the range of 5 kW-50 kW is developed by BARC for high temperature plasma processing and available for transfer of technology to industry. It takes commercially available argon and converts that into controlled well defined cylindrical jet of plasma with a maximum core temperature around 10000K to 20000K depending on operating conditions. It offers an electro-thermal efficiency of 50% or more. The device produces plasma in the form of an intensely luminous extremely hot radiating atmospheric pressure cylindrical plasma jet controlled in terms of its length, diameter, velocity and power content. The plasma jet facilitates a very high enthalpy inert environment to engineer variety of process chemistries, possible only at highly reactive extremely high temperature plasma environment offered by the jet.