



Mini-SPS designed for the desk type, especially for less diameter of workpiece.

Application:

SPS fast pressure sintering system is one of the most advanced fast hot press sintering systems in the world, characterized by the fast sintering speed and high density sintering. It is the most powerful tool used to sinter the nanophase material, gradient functional material, mesoporous nanoscale thermoelectric material, rare earth permanent magnetic material, alloy glass nonequilibrium material and biological material.

Main parameters:

Model	Rated power	Output current	Input voltage	Rated temperature	Max. pressure	Punch displacement	Final vacuum
SPS-2T-2-MIN(L)	20KW	0-2000A	0-10V	2300°C	2T	60mm	10 ⁻¹ Pa
SPS-2T-2-MIN(H)	20KW	0-2000A	0-10V	2300°C	2T	60mm	10 ⁻⁴ Pa
SPS-3T-3-MIN(L)	30KW	0-3000A	0-10V	2300°C	3T	60mm	10 ⁻¹ Pa
SPS-3T-3-MIN(H)	30KW	0-3000A	0-10V	2300°C	3T	60mm	10 ⁻⁴ Pa

2. 3rd generation spark plasma sintering furnace



Application:

SPS fast pressure sintering system is one of the most advanced fast hot press sintering systems in the world, characterized by the fast sintering speed and high density sintering. It is the most powerful tool used to sinter the nanophase material, gradient functional material, mesoporous nanoscale thermoelectric material, rare earth permanent magnetic material, alloy glass nonequilibrium material and biological material.

Features:

Fast sintering speed, better energy saving, high efficiency

Main parameters:

Model	Rated power	Output current	Input voltage	Rated temperature	Max. pressure	Sample size	Punch displacement	Final vacuum
SPS-10T-5-III	50KW	0-5000A	0-10V	2300℃	10T	Ø50mm	100mm	10Pa
SPS-20T-10-III	100KW	0-10000A	0-10V	2300℃	20T	Ø100mm	100mm	6.67X10 ⁻³ Pa
SPS-20T-20-III	200KW	0-20000A	0-10V	2300℃	20T	Ø120mm	100mm	6.67X10 ⁻³ Pa

4th generation spark plasma sintering furnace



Application:

SPS fast pressure sintering system is one of the most advanced fast hot press sintering systems in the world, characterized by the fast sintering speed and high density sintering. It is the most powerful tool used to sinter the nanophase material, gradient functional material, mesoporous nanoscale thermoelectric material, rare earth permanent magnetic material, alloy glass nonequilibrium material and biological material.

Features:

More accurate temperature measurement:

1.4th generation SPS furnace uses the imported double-color infrared thermometer used to directly gauge temperature of workpiece center, which gets more precise value of temperature so as to produce the satisfactory workpiece.

Lower energy consumption:

2.4th fourth generation SPS furnace takes advantage of high strength low resistance electrode material, non-water cooling mode to conduct the electricity, punch configuration to bring the energy inside the center, which gets faster speed of temperature rise under the condition of equal current.

Advanced integrated power supply:

3.4th fourth generation applies the complete digital pulse power supply that is controlled by mini computer, while using mini rectifier transformer made in Britain can gain the control of the idealized pulse parameters.

4. Control cabinet integrated with the furnace, top pressing mode, rational structure, simple operation.

Main parameters:

Model	Rated power	Output current	Input voltage	Rated temperature	Max. pressure	Sample size	Punch displacement	Final vacuum
SPS-5T-5-IV	50KW	0-5000A	0-10V	2300℃	10T	Ø30mm	100mm	10Pa
SPS-10T-6-IV	60KW	0-6000A	0-10V	2300℃	20T	Ø50mm	100mm	10Pa
SPS-20T-10-IV	100KW	0-10000A	0-10V	2300℃	20T	Ø100mm	100mm	10 ⁻³ Pa
SPS-50T-25-IV	300KW	0-30000A	0-10V	2500℃	50T	Ø200mm	200mm	10Pa