

Spark Plasma Sintering Sps Furnace

Item Number: KTSP



Introduction

Discover KINTEK's advanced Spark Plasma Sintering (SPS) Furnace for rapid, precise material processing. Customizable solutions for research and production.

[Learn More](#)

Configuration	<ul style="list-style-type: none"> Stainless Steel Chamber - Suitable for Controlled Inert Gas or Vacuum Condition Sintering Press Unit Sintering DC Pulse Generator Vacuum Unit Sintering Control Unit
---------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Temperature controller	<ul style="list-style-type: none"> Precision Eurotherm temperature controller built-in Overshoot temperature is less than 5°C at the fastest heating rate Temperature accuracy:
------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Hydraulic Press	<ul style="list-style-type: none"> Manually operated hydraulic press to apply pressure (Automated options available). Max pressure: Standard models up to 20 T (Customizable to higher pressures). Digital Pressure gauge built-in with over-pressure alarm.
-----------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Vacuum Chamber	<ul style="list-style-type: none"> Vertical vacuum Chamber design. Inner Double Layers Stainless Steel Reflectors for thermal efficiency. Rotary Pump included (options for higher vacuum levels available).
----------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Dimension (Typical for a standard model)	<ul style="list-style-type: none"> Power Supply: 760 L X 460 W X 1820 H, mm Furnace: 970 L X 720 W X 1400 H, mm
------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------

Model	KTSP-10T-5	KTSP-20T-6	KTSP-20T-10	KTSP-50T-30
Rated power	50Kw	60Kw	100Kw	300Kw
Output current	0-5000A	0-6000A	0-10000A	0-30000A
Input voltage (Control Signal)	0-10V	0-10V	0-10V	0-10V
Rated temperature	Standard up to 1600°C (Customizable up to 2300°C or higher based on requirements)			
Rated pressure	100KN (10 Ton)	200KN (20 Ton)	200KN (20 Ton)	500KN (50 Ton)
Sample size (Max. Die Diameter)	Ø30mm	Ø50mm	Ø100mm	Ø200mm
Ram stroke	100mm	100mm	100mm	200mm
Ultimate vacuum	Standard 1Pa (Higher vacuum levels achievable with upgraded pump systems)			