DR. FRITSCH

SONDERMASCHINEN

Single-Segment Sintering Press

SSP 104 E

Dr. Fritsch Sondermaschinen GmbH, 70736 Fellbach, Germany

Technical Specification

SSP 104 E

ESSENTIAL CHARACTERISTICS

- new method for fast and efficient sintering of segments without graphite moulds and without graphite mould assembly
- high productivity (e.g. four segments 40 x 10 mm per minute, depending on powder bond)
- energy-saving (up to 70 % lower expenditure on energy)
- exact temperature and pressure control for every segment
- high degree of flexibility in segment shapes
- even distribution of temperature within the die thanks to resistance heating
- Option: electronic stroke control system in order to display the stroke
- Option: extraction fan (to be connected to the customer's extraction system)

DESIGN AND FUNCTION

- robust welded frame
- two press systems laid out for one cavity each
- integrated hydraulic unit, range of adjustment 30 - 300 bar
- belt magazine for feeding the segment
- positioning of segments in two centric feed gripper
- possibility of three different press positions within the mould
- discharge of ready sintered segments by means of two centric grippers
- touch screen, swing suspension

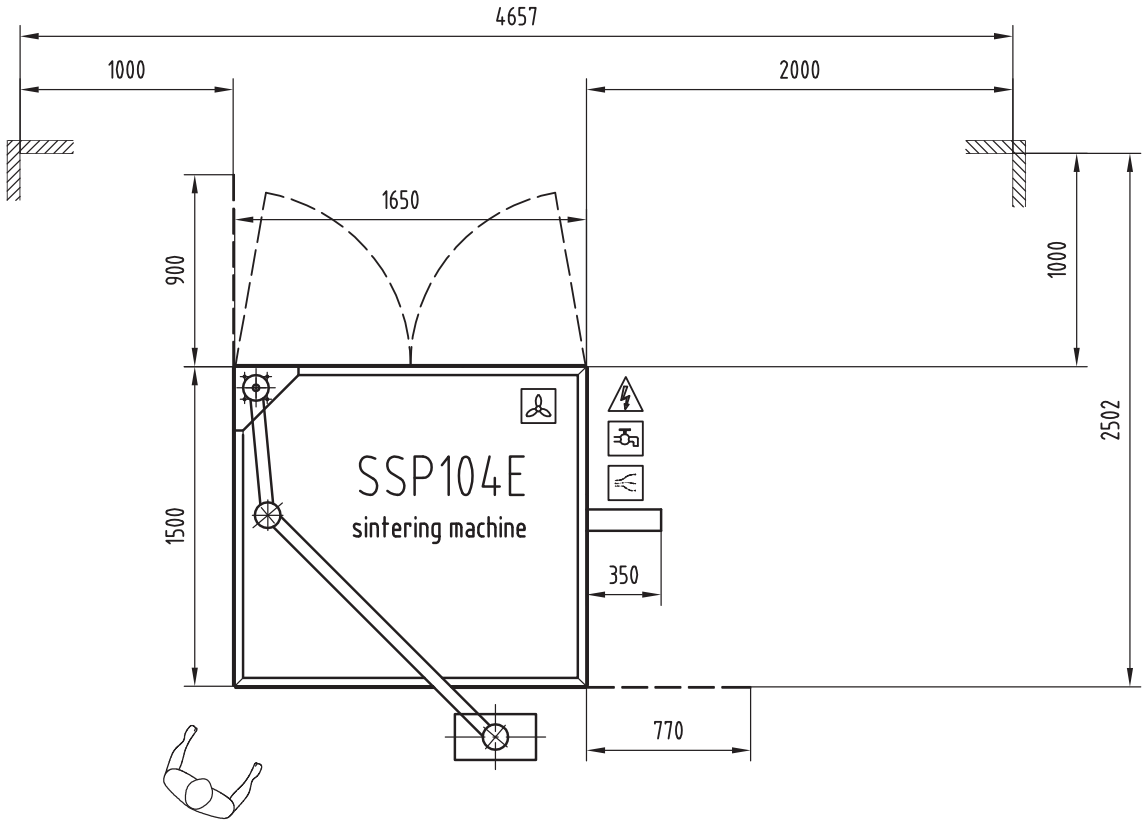
The cold pressed segments are fed by a belt magazine. From here, they are pushed on a supply belt that brings them to the two press systems. There, a centric gripper takes them and puts them in the hot press dies where they are pressed to their final density.
After sintering, the segments are taken away by two centric discharge grippers and transported via a discharge channel in two separate containers.

During the process, the process data of time, temperature and pressure are exactly measured and controlled.

TECHNICAL DATA

Total electric power:	approx. 18 kVA
Supply voltage:	3 x 400 V, 50/60 cycles
Nominal current:	3 x 26 A
Fuses (to be provided by the customer):	3 x 32 A
Cooling water:	
- consumption:	approx. 15 l/min.
- temperature:	15 – 25 °C
- pressure:	4 – 6 bar
- connection	Ø 12 mm
Compressed air:	
- consumption:	depending on process
- pressure:	4 – 6 bar
- connection:	Ø 9 mm
Extraction (standard):	integrated connecting piece Ø 150 mm
Sintering temperature:	max. 950 °C
- measurement of temperature:	thermocouple Ni-Cr-Ni
Pressure force:	approx. 93,5 kN per pressing system
Dimensions of the machine:	Length: approx. 1.650 mm (2,000 mm) Depth: approx. 1.500 mm Height: approx. 2.320 mm
Weight:	approx. 1600 kg

- Technical data and design are subject to modifications -



Absaugung : ø 100mm

Wasseranschluß : ø13mm

Druckluftanschluß : ø 9

Bodenfreiheit (ground clearance)	120 mm
max. Maschinenhöhe (max. machine height)	2320 mm
erforderliche Raumhöhe (ground clearance)	2500 mm

Symbol	Bedeutung	(meaning)
	Elektrik	(electricity)
	Pneumatik	(pneumatic)
	Kuehlwasser	(cooling water)
	Absaugung	(suction)

Symbol	Bedeutung	(meaning)
	Gas	(gas)
	Wand	(wall)
	Arbeiter	(operator)

37.5 cm

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	Datum	Name
Bearb.	05.08.2005	IDLER
Gepr.		
Norm		

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AUFSTELLPLAN
layout plan

Maschinen Typ : / machine type : Aufstellplan SSP104E

Zeichnungs Nr.: 3V APL 003 01