

DR. FRITSCH

SONDERMASCHINEN

Sintering Press

DSP 507



Dr. Fritsch Sondermaschinen GmbH, 70736 Fellbach, Germany

Technical Specification

DSP 507

ESSENTIAL CHARACTERISTICS

- ▷ high output:
transformer output 75 kVA
graphit electrodes with large surface and opening height
- ▷ highest segment quality thanks to the precise control of the sintering parameters
temperature, pressure / time
- ▷ sintering stroke indicator with dial gauge
- ▷ lowest graphite costs due to closed vacuum/inert gas equipment
- ▷ low energy costs due to a heating system with water-cooled high-current transformer
and fully electronic power controller
- ▷ easy access of main components (for easy maintenance)
- ▷ specific dewaxing via the central suction system by means of a programme-controlled
dewaxing phase
- ▷ easy handling via touch-screen with the possibility of storing complete sinter programmes
- ▷ automatic conversion of the sinter programmes depending on the sintering surface

OPTIONS

- electronic stroke sensor
- quality control and quality documentation by connecting to PC control system IPA NT:
Monitor for recording and display of process curves and data, Organizer, Analyzer,
Messenger
- pyrometer for temperature measuring and control
- reduced pressing force (differential switching)
- enlargerd range for the pressure force (small power cylinder)
- energy saving system *power +* with AC-transformer 82 kVA
- oversized grafite electrodes 200x200x40 mm or Ø200x40 mm

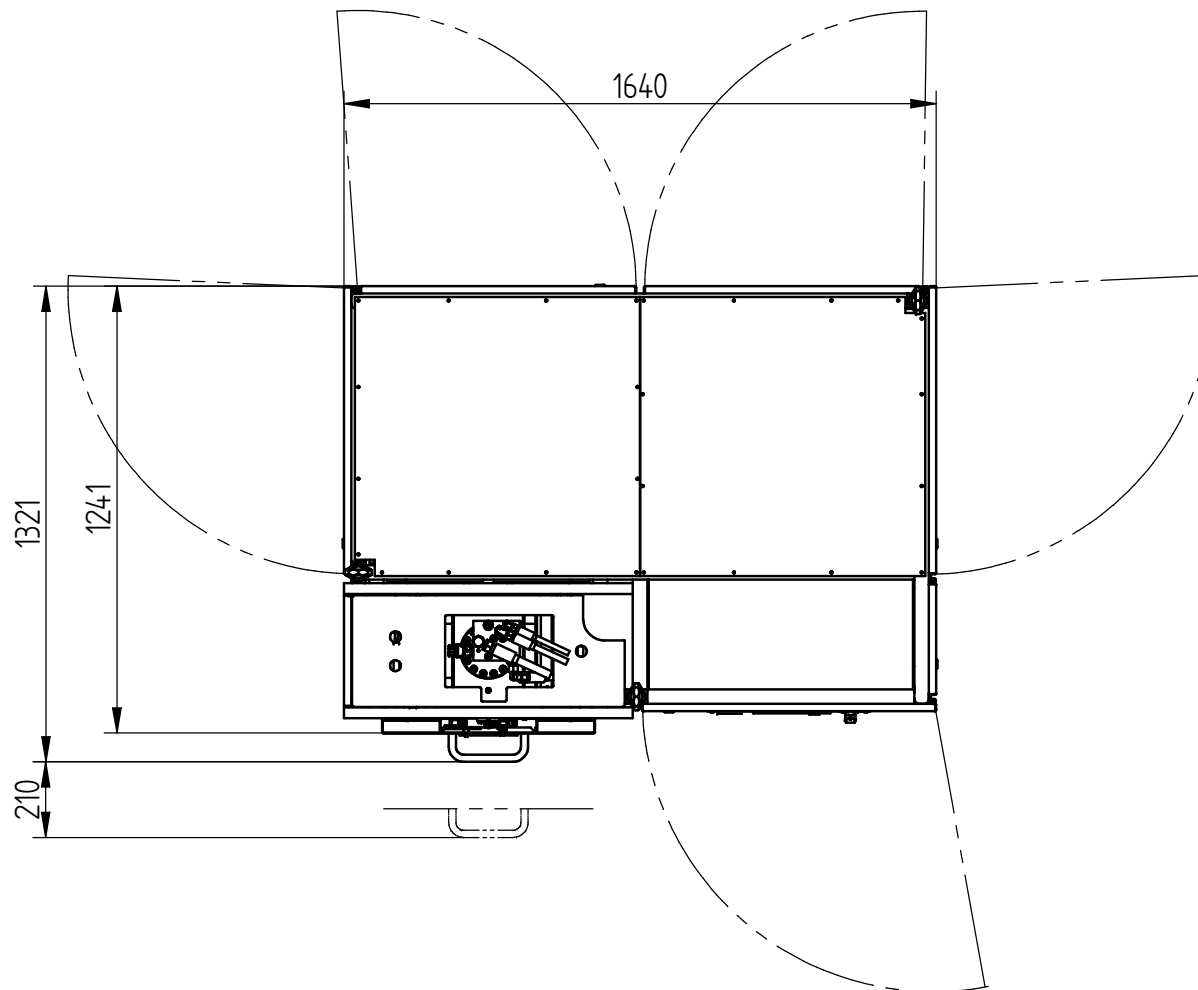
DESIGN AND FUNCTIONING

- robust, welded frame
- water-cooled high-current transformer
- integrated hydraulic unit
- fully electronic powder control
- thermocouple for temperature measuring and regulation
- programmable control with the possibility of memorising sintering programmes
(up to 20 P-sets)
- operating panel with operator guidance for programme input and error display
- vacuum/inert gas system, complete with fittings and vacuum pump
- sintering stroke indicator with dial gauge

TECHNICAL DATA

	Standard	Option
Total electric power:	81 kVA	other voltages upon request
Supply voltage:	3 x 400 V, 50/60 cps	
Nominal current:	3 x 117 A	
Fuse protection (provided by customer):	3 x 125 A	
Cooling water:		
- pressure:	2 – 4 bar	
- consumption:	approx. 70 - 80 l/min.	approx. 70 - 80 l/min. with AC-Transformer 82 kVA
- temperature:	15 – 25 °C	
- connections:	supply: G 1" inside thread discharge: G1 1/2" inside thread	
Compressed Air:		
- consumption:	depending on process (approx. 5 l/min.)	
- pressure:	4 - 6 bar	
Inert Gas:		
- type:	nitrogen, forming gas, noble gas	
- consumption:	depending on process (approx. 300 ... 1000 l/h)	
- pressure:	1 – 5 bar	
Suction system:	provided by the customer air flow approx. 800 m ³ /h	
- connection:	connecting piece ø 100 mm	
Temperature control (single-channel):		
- thermocouple:		
Ni-Cr-Ni	up to 1200 °C (suitable for use up to 1100 °C)	- Pyrometer: 250 - 1400 °C - Pt-Rh-Pt up to 1400 °C
Pressure force:		
- nominal switching:	max. 259/min. 22 kN	- small power cylinder: max. 259/min. 2,9 kN
Graphite electrodes:		
- dimensions (WxLxH):	165 x 145 x 40 mm	- 200 x 200 x 40 mm - Ø200 x 40 mm
- max./min. opening:	180 / 30 mm	
- specific resistance:	12 – 14 µΩm	
Sintering mould:		
- specific resistance:	21 – 24 µΩm (provided by the customer)	
Control unit:	compatible with SIEMENS S7-300 Memory for 20 parameter sets	
Pressure control:	Software controller	
Temperature control:	Software controller	
Dimensions of the machine:	width: approx. 1.650 mm depth: approx. 1.300 mm height: approx. 2.200 mm	
Weight:	approx. 2.000 kg	

- Technical data and design are subject to modifications -



max. Maschinenhöhe: 2200 mm
(max. machine height)
erforderliche Raumhöhe: 3000 mm
(required clear height)

Symbol	Bedeutung (meaning)	Symbol	Bedeutung (meaning)	XX cm —	DFT023348.dft ASM022095.asm	<h3>Aufstellplan</h3> <p>floor plan</p>											
 	Elektrik (electrics) Pneumatik (pneumatics) Kuehlwasser (cooling water) Absaugung (suction)	 	Gas (gas) Wand (wall) Arbeiter (operator)		<table border="1"> <tr> <td></td> <td>Datum</td> <td>Name</td> </tr> <tr> <td>Bearb.</td> <td>15.06.2010</td> <td>e_freitag</td> </tr> <tr> <td>Gepr.</td> <td></td> <td></td> </tr> <tr> <td>Norm</td> <td></td> <td></td> </tr> </table>				Datum	Name	Bearb.	15.06.2010	e_freitag	Gepr.			Norm
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