Hinged Tube Furnaces for Horizontal or Vertical Operation up to 1300 °C Gas Atmosphere or Vacuum





RS 80/500/11 with gas supply system 1



RS 80/300/11 - RS 170/1000/13

The tube furnaces of the product line RS can be used for horizontal as well as for vertical operation. The hinged design makes it easy to change the working tube. It allows the different working tubes (e.g. working tubes made of different materials) to be comfortably taken out and put in.

Using the wide range of accessories these profi tube furnaces can be optimally configured for your process. By upgrading the furnaces with different gas supply systems the operation in a protective gas atmosphere, under vacuum or under flammable protective or reactive gases is possible. Besides convenient standard controllers for process control modern PLC control systems are also available.

- Tmax 1100 °C or 1300 °C
- Housing made of sheets of textured stainless steel
- Tmax 1100 °C: Type K thermocouple
- Tmax 1300 °C: Type S thermocouple
- Frame for vertical operation, which can also be retrofitted as additional equipment
- Hinged design for simple insertion of the working tube

Model	Tmax	Outer dimensions ³ in mm			Max. outer	Heated	Length constant	Tube length	Connected	Electrical	Weight
					tube Ø		temperature Δ T 10 K				
	°C₅	W ²	D	Н	/mm	length mm	in mm	in mm	load kW	connection*	in kg
RS 80/300/11	1100	555	475	390	80	300	100	650	1.8	1-phase	80
RS 80/500/11	1100	755	475	390	80	500	170	850	3.4	1-phase	90
RS 80/750/11	1100	1005	475	390	80	750	250	1100	4.6	3-phase⁴	105
RS 120/500/11	1100	755	525	440	120	500	170	850	4.8	3-phase⁴	95
RS 120/750/11	1100	1005	525	440	120	750	250	1100	6.3	3-phase ¹	110
RS 120/1000/11	1100	1255	525	440	120	1000	330	1350	9.0	3-phase ¹	125
RS 170/750/11	1100	1005	575	490	170	750	250	1100	7.0 7	3-phase ¹	115
RS 170/1000/11	1100	1255	575	490	170	1000	330	1350	9.0 7	3-phase ¹	130
RS 80/300/13	1300	555	475	390	80	300	100	650	3.6	1-phase	80
RS 80/500/13	1300	755	475	390	80	500	170	850	6.0	3-phase ¹	90
RS 80/750/13	1300	1005	475	390	80	750	250	1100	9.3	3-phase ¹	105
RS 120/500/13	1300	755	525	440	120	500	170	850	7.8	3-phase ¹	95
RS 120/750/13	1300	1005	525	440	120	750	250	1100	12.6	3-phase ¹	110
RS 120/1000/13	1300	1255	525	440	120	1000	330	1350	12.6	3-phase ¹	125
RS 170/750/13	1300	1005	575	490	170	750	250	1100	12.6	3-phase ¹	115
RS 170/1000/13	1300	1255	575	490	170	1000	330	1350	12.6	3-phase ¹	130

¹Heating only between two phases

²Without tube

³Outer dimensions for vertical operation upon request 36

⁵Tmax. is reached outside the tube. Realistic working temperature inside the tube is approx. 50 °C lower. ⁷Only valid for single-zone version

⁴Heating only between phase 1 and neutral

*Please see page 60 for more information about supply voltage

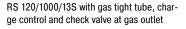
Gas supply system for non-flammable protective or reactive gas with shutoff valve and flow meter with regulator valve, piped and ready to connect



- Working tube made of ceramic C 530 for operation in air included in scope of delivery
- Switchgear and control unit separate from furnace in own wall or standing cabinet
- Standard working tube see chart on page 43
- Controls description see page 60

Additional equipment

- Charge control with temperature measurement in the working tube and in the furnace chamber outside the tube see page 46
- Display of inner tube temperature with additional thermocouple
- Different gas supply systems (page 44) for non-flammable or flammable protective or reactive gases and vacuum operation
- Three-zone control for optimization of temperature uniformity
- Check valve at gas outlet avoids intrusion of false air
- Ceramic half pipe for heating elements and/or as support surface for the load
- Optical temperature measurement for the use as continuously working furnace
- Stand for vertical operation
- Base frame with integrated switchgear and controller
- Alternative working tubes designed for process requirements see chart on page 43
- Please see page 44 for more additional equipment





Quartz glass and flanges for protective gas

operation as optional equipment

Optical temperature measurement for the use as continuously working furnace

RS 120/750/13 with gas supply system 4, hydrogen applications