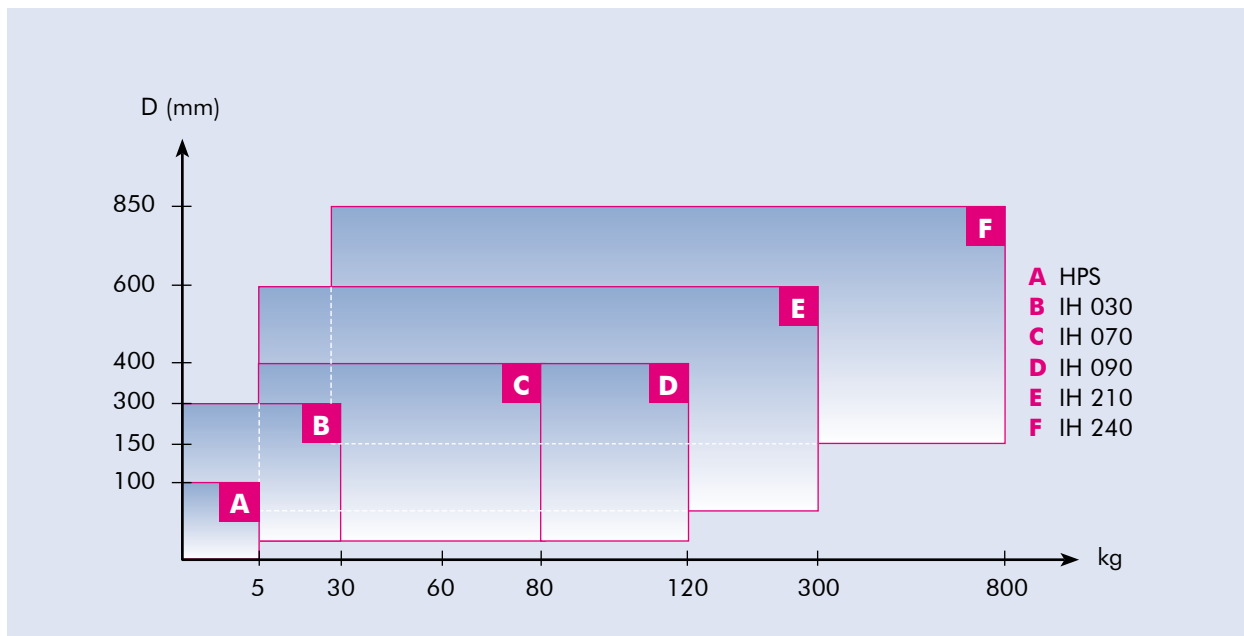


10. Induction Heaters

10.3 Selection and overview

The right heater for your application

The choice of a simatherm Induction Heater depends generally on the dimensions and the weight of workpieces. The chart below assists making the right choice.



Examples of choices

No.	Bearing	d / inner diameter	D / outer diameter	width	weight	correct heater
2316	Spherical roller bearing	80 mm	170 mm	58 mm	6.1 kg	IH 030 
22330	Spherical roller bearing	150 mm	320 mm	108 mm	43.5 kg	IH 070 
24148	Spherical roller bearing	240 mm	400 mm	160 mm	83 kg	IH 090 
23260	Spherical roller bearing	300 mm	540 mm	192 mm	190 kg	IH 210 
24192	Spherical roller bearing	460 mm	760 mm	300 mm	560 kg	IH 240 

10. Induction Heaters

10.3 Selection and overview

simatherm IH 030

Efficient heater for workpieces up to max. 30kg and a max. inner diameter of 300mm.



IH 030 with yoke
55 x 55 x 240mm, without workpiece.



IH 030 with yoke
55 x 55 x 240mm, with bearing, in
temperature mode.

Designation	Voltage	Frequency	Amperage	Power
IH 030/230V	220 - 230V	50Hz	16A	3.7 kVA
IH 030/115V	110 - 115V	60Hz	19A	2.2 kVA
IH 030/100V	100V	50-60Hz	15A	1.5 kVA

Type	IH 030
Description	Heater for small and medium sized workpieces
Max. weight of workpiece	30 kg
Bore diameter	20 - 400mm
Temperature range	0 - 250°C
Magnetic probe	yes, Typ J
Accuracy	± 3°C
Range of time control	0 - 60 minutes
accuracy	± 0.01 seconds
Maximum temperature (approx.)	400°C (only possible in the time mode)
Thermometer mode	yes
Bearing temperature mode	yes
Power reduction	no
Automatic demagnetisation	yes
residual magnetism	< 2A/cm
Can heat sealed bearings	yes
Can heat pre-greased bearings	yes
Error guiding codes	yes
Thermal overload protection	yes
Max. magnetic flux	1.5 T
Control panel	Keyboard with LED-display
Size of operating area (WxH)	130 x 95mm
Coil diameter	-
Dimensions (WxDxH)	290 x 255 x 255mm
Overall weight including yokes	27 kg
Standard yokes	55 x 55 x 240mm for bearings with bore diameters of 78mm 28 x 28 x 240mm for bearings with bore diameters of 40mm 14 x 14 x 240mm for bearings with bore diameters of 20mm
Core cross section	55 x 55mm
Yoke storage	yes
Swivel arm	optional
Cooling fan	-
Housing material	Glass-fibre reinforced polyester
Included in delivery	Induction heater, yoke storage, 3 standard yokes, magnetic probe, gloves, instruction manual

10. Induction Heaters

10.3 Selection and overview

simatherm IH 070

Efficient heater for workpieces up to max. 80kg and a max. inner diameter of 400mm.



IH 070 with yoke 55 x 55 x 275mm, without workpiece.



IH 070 with yoke 55 x 55 x 275mm, with bearing, in temperature mode.



IH 070 with yoke 55 x 55 x 275mm, with bearing, in temperature mode.

Designation	Voltage	Frequency	Amperage	Power
IH 070/230V	220 - 230V	50Hz	16A	3.7 kVA
IH 070/115V	110 - 115V	60Hz	19A	2.2 kVA
IH 070/100V	100V	50-60Hz	20A	2.0 kVA

Type	IH 070
Description	Heater for small and medium sized workpieces
Max. weight of workpiece	80 kg
Bore diameter	20 - 400mm
Temperature range	0 - 250°C
Magnetic probe	yes, Typ K
Accuracy	± 3°C
Range of time control	0 - 60 minutes
accuracy	± 0.01 seconds
Maximum temperature (approx.)	400°C (only possible in the time mode)
Thermometer mode	yes
Bearing temperature mode	yes
Power reduction	yes / 20-40-60-80 %
Automatic demagnetisation	yes
residual magnetism	< 2A/cm
Can heat sealed bearings	yes
Can heat pre-greased bearings	yes
Error guiding codes	yes
Thermal overload protection	yes
Max. magnetic flux	1.5 T
Control panel	Keyboard with LED-display
Size of operating area (WxH)	145 x 205 mm
Coil diameter	115 mm
Dimensions (WxDxH)	420 x 280 x 345 mm
Overall weight including yokes	35 kg
Standard yokes	55 x 55 x 275mm for bearings with bore diameters of 78mm 28 x 28 x 275mm for bearings with bore diameters of 40mm 14 x 14 x 275mm for bearings with bore diameters of 20mm
Core cross section	55 x 55 mm
Yoke storage	yes, internal
Swivel arm	optional
Cooling fan	-
Housing material	Aluminium
Included in delivery	Induction heater, yoke storage, 3 standard yokes, magnetic probe, gloves, instruction manual

10. Induction Heaters

10.3 Selection and overview

simatherm IH 090

Efficient heater for workpieces up to max. 120kg and a max. inner diameter of 400mm.



IH 090 with swivel arm and 55 x 55 x 275 mm top yoke.



IH 090 with swivel arm and 28 x 28 x 275 mm top yoke.



Designation	Voltage	Frequency	Amperage	Power
IH 090/400V	400 - 460V	50-60Hz	16A	6.4 - 7.4 kVA
IH 090/200V	200V	50-60Hz	25A	5.0 kVA

Type	IH 090
Description	Heater with fan cooling for permanent operation and small and medium sized workpieces
Max. weight of workpiece	120 kg
Bore diameter	20 - 400 mm
Temperature range	0 - 250°C
Magnetic probe	Yes, Typ K
Accuracy	± 3°C
Range of time control accuracy	0 - 60 minutes ± 0.01 seconds
Maximum temperature (approx.)	400°C (only possible in the time mode)
Thermometer mode	yes
Bearing temperature mode	yes
Power reduction	yes / 20-40-60-80 %
Automatic demagnetisation residual magnetism	yes < 2A/cm
Can heat sealed bearings	yes
Can heat pre-greased bearings	yes
Error guiding codes	yes
Thermal overload protection	yes
Max. magnetic flux	1.5 T
Control panel	Keyboard with LED-display
Size of operating area (WxH)	145 x 205 mm
Coil diameter	115 mm
Dimensions (WxDxH)	420 x 280 x 420 mm
Overall weight including yokes	37 kg
Standard yokes	55 x 55 x 275mm for bearings with bore diameters of 78mm 28 x 28 x 275mm for bearings with bore diameters of 40mm 14 x 14 x 275mm for bearings with bore diameters of 20mm
Core cross section	55 x 55 mm
Yoke storage	yes, internal
Swivel arm	yes
Cooling fan	yes
Housing material	Aluminium
Included in delivery	Induction heater, yoke storage, 3 standard yokes, swivel arm, magnetic probe, gloves, instruction manual

10. Induction Heaters

10.3 Selection and overview

simatherm IH 210

Efficient heater for workpieces up to max. 300kg and a max. inner diameter of 600mm.



IH 210 with sliding yoke 70 x 70 x 420 mm. Bearing is heated in temperature mode on horizontal yoke.



IH 210 mit yoke 40 x 40 x 420 mm. If the sliding yoke is removed, smaller yokes can be used.



IH 210 with bearing around coil. This position of the bearing guarantees the best efficiency of the heater.

Designation	Voltage	Frequency	Amperage	Power
IH 210/400V	400 - 460V	50-60Hz	25A	10 - 11.5kVA
IH 210/200V	200V	50-60Hz	40A	8.0 kVA

Type	IH 210
Description	Heater for big workpieces
Max. weight of workpiece	300 kg
Bore diameter	60 - 600 mm
Temperature range	0 - 250°C
Magnetic probe	Ja, Typ K
Accuracy	± 3°C
Range of time control	0 - 60 minutes
accuracy	± 0.01 seconds
Maximum temperature (approx.)	400°C (only possible in the time mode)
Thermometer mode	yes
Bearing temperature mode	yes
Power reduction	yes / 20-40-60-80 %
Automatic demagnetisation	yes
residual magnetism	< 2A/cm
Can heat sealed bearings	yes
Can heat pre-greased bearings	yes
Error guiding codes	yes
Thermal overload protection	yes
Max. magnetic flux	1.5 T
Control panel	Keyboard with LED-display
Size of operating area (WxH)	250 x 250 mm
Coil diameter	135 mm
Dimensions (WxDxH)	650 x 350 x 420 mm
Overall weight including yokes	75 kg
Standard yokes	70 x 70 x 420 mm sliding yoke for bearings with bore diameters of 100mm 40 x 40 x 420 mm for bearings with bore diameters of 60mm
Core cross section	70 x 70 mm
Yoke storage	yes, internal
Swivel arm	-
Sliding yoke	yes
Cooling fan	optional
Housing material	Aluminium
Included in delivery	Induction Heater, sliding yoke 70 x 70 x 420 mm, 40 x 40 x 420 mm top yoke, magnetic probe, gloves, instruction manual
Special executions:	
IH 210F/400V	execution with fan
IH 210-XL/400V	execution XL with operating area 250 x 320mm
IH 210F-XL/400V	execution XL with fan and operating area 250 x 320mm

10. Induction Heaters

10.3 Selection and overview



IH 240 with sliding yoke 100 x 100 x 570mm, without workpiece.



IH 240 with sliding yoke, bearing placed around the coil.



The IH 240 heater can easily be moved with a forklift.

simatherm IH 240

Efficient heater for very big workpieces up to max. 800kg and a max. inner diameter of 850mm.

Designation	Voltage	Frequency	Amperage	Power
IH 240/400V	400 - 460V	50-60Hz	60A	24 kVA
IH 240/575V	575V	60Hz	42A	24 kVA

Type	IH 210
Description	Heater for big and very big workpieces
Max. weight of workpiece	800 kg
Bore diameter	142 - 850 mm
Temperature range	0 - 250°C
Magnetic probe	Ja, Typ J
Accuracy	± 3°C
Range of time control	0 - 60 minutes
accuracy	± 0.01 seconds
Maximum temperature (approx.)	400°C (only possible in the time mode)
Thermometer mode	yes
Bearing temperature mode	yes
Power reduction	yes / 50%
Automatic demagnetisation	yes
residual magnetism	< 2A/cm
Can heat sealed bearings	yes
Can heat pre-greased bearings	yes
Error guiding codes	yes
Thermal overload protection	yes
Max. magnetic flux	1.5 T
Control panel	Keyboard with LED-display
Size of operating area (WxH)	330 x 355 mm
Coil diameter	186 mm
Dimensions (WxDxH)	750 x 400 x 935 mm
Overall weight including yokes	300 kg
Standard yokes	100 x 100 x 570 mm sliding yoke for bearings with bore diameters of 142mm
Core cross section	100 x 100 mm
Yoke storage	-
Swivel arm	-
Sliding yoke	yes
Cooling fan	optional
Housing material	steel
Included in delivery	Induction Heater, sliding yoke 100 x 100 x 570 mm, magnetic probe, gloves, instruction manual
Special executions:	
IH 240F/400V	execution with fan
Special sizes available on request	