

Inductive shrinking machine

21590

Inductive shrinking machine

diebold

21590 101
HS 1100-P

Type

- Horizontal, parameter and/or manually controlled inductive shrink device, high power rating
- Flexible and replaceable tool supports
- Worn or broken tools can be ejected using a press-off fixture

Advantage:

- Exact positioning of tools through horizontal design
- Optional digital length measuring unit

21590 102
ISG 2400 TLK

Type

- Shrink device with integrated air cooling
- Simple menu guide for parameter and/or manually controlled shrink-fit process
- Coil and cooling manually guided

Advantage:

- No contact with hot shrink-fit collets
- No overheating of collets achieved by fixed set of preprogrammed parameters

21590 103
FKS 04

Type

- Device for contour-independent cooling of shrink-fit collets
- Automatically controlled cooling and drying cycle

Advantage:

- Cooling, drying and preserving in a single operation

NEW

21590 101

21590 102

21590 103



Technical data	21590 101	21590 102	21590 103
Type	HS 1100-P	ISG 2400 TLK	FKS 04
HM shrink range	Ø 3 - 32 mm	Ø 3 - 20 mm	Ø all
HSS shrink range	Ø 6 - 32 mm	Ø 6 - 20 mm	Ø all
Tool length max.	350 mm	350 mm	-
Cooling type	No cooling	Air cooling with adapter	Water cooling
Tank contents	-	-	14 l
Cooling length, max.	-	350 mm	400 mm
Cooling time	300 s	90 s	25 s max.
Machine interface	SK 30 - 50 HSK 40 - 100	SK 30 - 50 HSK 32 - 100	all commonly used tool supports see above
Connection	400 V / 16 A	400 V / 16 A	220 V / compressed air 4-6 bar
Power	11 kW	8 kW	-
Dimension (WxDxH)	600 x 451 x 357	780 x 535 x 950	412 x 462 x 700
Scope of supply	Device with inductive coil, 5 ferrite discs, Protective gloves	Shrink device with integrated cooling station, 3 ferrite discs Protective gloves	device with 1 litre coolant concentrate, Protective gloves
Required accessories	Tool support 21591	Cooling adapter 21592 Tool support 21593	- -
Optional accessories	Digital length setting 21591 201 Water cooler FKS 04 21590 103	Water cooler FKS 04 21590 103	Coolant additive 21589 204 -

Type	21590	...	21590	...	21590	...
HS 1100-P		101				
ISG 2400 TLK				102		
FKS 04						103

Clamping Technology

diebold21590 104
ISG 2400 WK**Type**

- Shrink device with automatic coil guide and water cooling
- Collets are cooled automatically in shrink position
- Intelligent, programmable parameter control with simple menu navigation

Advantage:

- No contact with hot shrink-fit collets
- No damage to tools from cooling adapter
- No overheating of collets caused by fixed pre-programmed parameters

21590 105
ISG 3400 WK**Type**

- Shrink device with automatic coil guide and water cooling
- Collets are cooled automatically in shrink position
- Intelligent, programmable parameter control with simple menu navigation

Advantage:

- No contact with hot shrink-fit collets
- No damage to tools caused by cooling adapter
- No overheating of collets by fixed pre-programmed parameters

NEW

21590 104



21590 105

Technical data	21590 104	21590 105
Type	ISG 2400 WK	ISG 3400 WK
HM shrink range	Ø 3 - 20 mm	Ø 3 - 32 mm
HSS shrink range	Ø 6 - 20 mm	Ø 6 - 32 mm
Tool length max.	400 mm	400 mm
Type of cooling	Automatic water cooling	Automatic water cooling
Tank contents	40 l	40 l
Cooling length, max.	200 mm	200 mm
Cooling time	20 s	20 s
Machine interface	SK 30 - 50 HSK 32 - 100	SK 30 - 50 HSK 32 - 100
Connection	400 V / 16 A	400 V / 16 A
Power	8 kW	11 kW
Dimensions (WxDxH)	800 x 560 x 1720	800 x 560 x 1720
Scope of supply	Shrink device with 3 ferrite discs 1 l coolant concentrate, Protective gloves	Shrink device with 4 ferrite discs, 1 l coolant concentrate, Protective gloves
Required accessories	Tool support 21594	Tool support 21594
Optional accessories	-	-

Type	21590	...	21590	...
ISG 2400 WK			104	
ISG 3400 WK				105

Continuation ►

21591 Accessories for HS 1100-P

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21591 101-104




Tool holders

Type

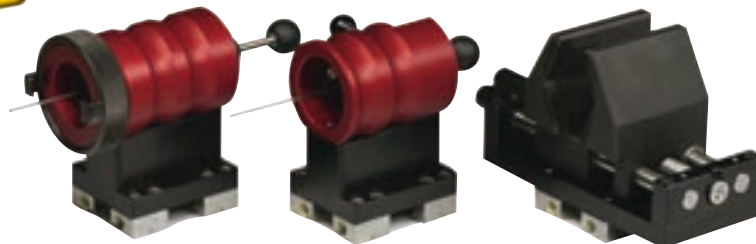
- For clamping the different taper shanks in the shrink device

Note:

Other taper sizes can be supplied on request.

Size	Shape	21591	...
HSK 63	A / E		101
SK 40	SK / BT		102
SK 50	SK / BT		103
Universal	∅ 12-100 mm		104

NEW



21591 101-104

21591 201


Digital length setting

Type

- Retrofittable
- Precision 0.01 mm

Advantage:

- For shrink-fitting to precise tool lengths

Type	21591	...
Digital length setting		201



21591 201

21592 - 21593 Accessories for ISG 2400 TLK

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21592

Cooling adapter

Use

In order to minimise the cooling-down time, the cooling adapters are made of aluminium, they completely enclose the hot chucking area and are equipped with cooling fins. The chuck's temperature has decreased enough after only 60 seconds that the chuck can be touched by hand.

21593

Toolholders










21592

21593



Cooling adapter

Toolholder

∅ mm	ST	HSK-A	21592	...	21593	...
3 - 5 slim	-	-		101		
3 - 5	-	-		102		
6 - 9	-	-		103		
9.1 - 12	-	-		104		
12.1 - 16	-	-		105		
16.1 - 22	-	-		106		
-	40	-				103
-	50	-				104
-	-	63				108

21589 Accessories for FKS 04

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21589 204

Coolant concentrate 1 litre

Type	21589	...
Coolant concentrate 1L		204

NEW

21589 204



21589 301





21589 303



21589 301+303

Tool supports for FKS 04

Size	Shape	21589	...
SK 30 / 40	SK / BT		301
HSK 40 / 50 / 63	-		303

21594

Accessories for ISG 2400 / 3400 WK

diebold**Type**

- Tool supports for clamping of tool shanks in shrink-fit process

NEW

21594



Size	Shape	21594	...
HSK 63	A / E		101
SK 40	SK / BT		102
SK 50	SK / BT		103

21598

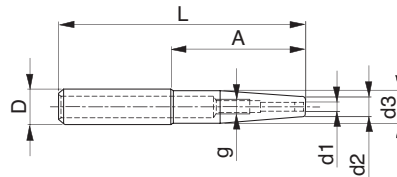
Shrink-fit collet extension/reduction

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For lengthening and reducing to smaller shank diameters.

Note:

Further sizes available on request.



21598



D mm	d1 mm	d2 mm	d3 mm	A mm	L mm	g	21598	...
12	3	9	11.8	63	110	-		101
12	4	10	11.8	63	110	-		102
12	5	11	11.8	63	110	-		103
12	6	12	17	63	110	M 5		104
12	8	14	19	63	110	M 6		105
16	3	9	13	60	110	M 6		201
16	4	10	14	60	110	M 6		202
16	5	11	15	58	110	M 6		203
16	6	12	15.8	60	110	M 5		204
16	8	14	19	60	110	M 6		205
20	3	9	13	58	110	M 6		301
20	4	10	14	58	110	M 6		302
20	5	11	15	58	110	M 6		303

D mm	d1 mm	d2 mm	d3 mm	A mm	L mm	g	21598	...
20	6	12	16	58	110	M 5		304
20	8	14	19	58	110	M 6		305
20	10	16	19.8	58	110	M 8 x 1		306
20	12	18	19.8	58	110	M 10 x 1		307
16	3	9	16	150	200	-		405
16	4	10	16	150	200	-		406
16	5	11	16	150	200	-		407
16	6	12	16	150	200	M 5		408
20	6	12	20	198	250	M 5		501
20	8	14	20	198	250	M 6		502
20	10	16	20	198	250	M 8 x 1		503
25	12	18	25	193	250	M 10 x 1		601
25	16	22	25	193	250	M 12 x 1		602

21595

Length-setting sleeves and press-off fixtures

diebold

21595 201-207

Length adjustment sleeve

Type

Length adjustment with 0.01 mm increments.

Use

Length adjustment sleeve for determining the overhang.

Note:

Adjust the push rod to the desired length, insert the cutting tool into the borehole and clamp it against the plastic stop. Insert the tool into the warmed-up chuck.

for Ø mm	Protruded length mm	21595	...
3	5 - 25		201
4	5 - 25		202
5	5 - 25		203
6	10 - 35		204

for Ø mm	Protruded length mm	21595	...
8	10 - 35		205
10	15 - 50		206
12	15 - 50		207



21595 201-207

21595 301-303

Release device

Type

Basic support with cap nut, hex wrench and adjustable compression pin.

Use

For removal of broken tool shanks from shrink-fit collets. Place fixture on shrink device, remove tool during the heating process using the eccentric rotary handle and the compression pin pre-set to length.

for taper	21595	...
HSK 40		301
HSK 63		302
BT/SK 40		303



21595 301-303