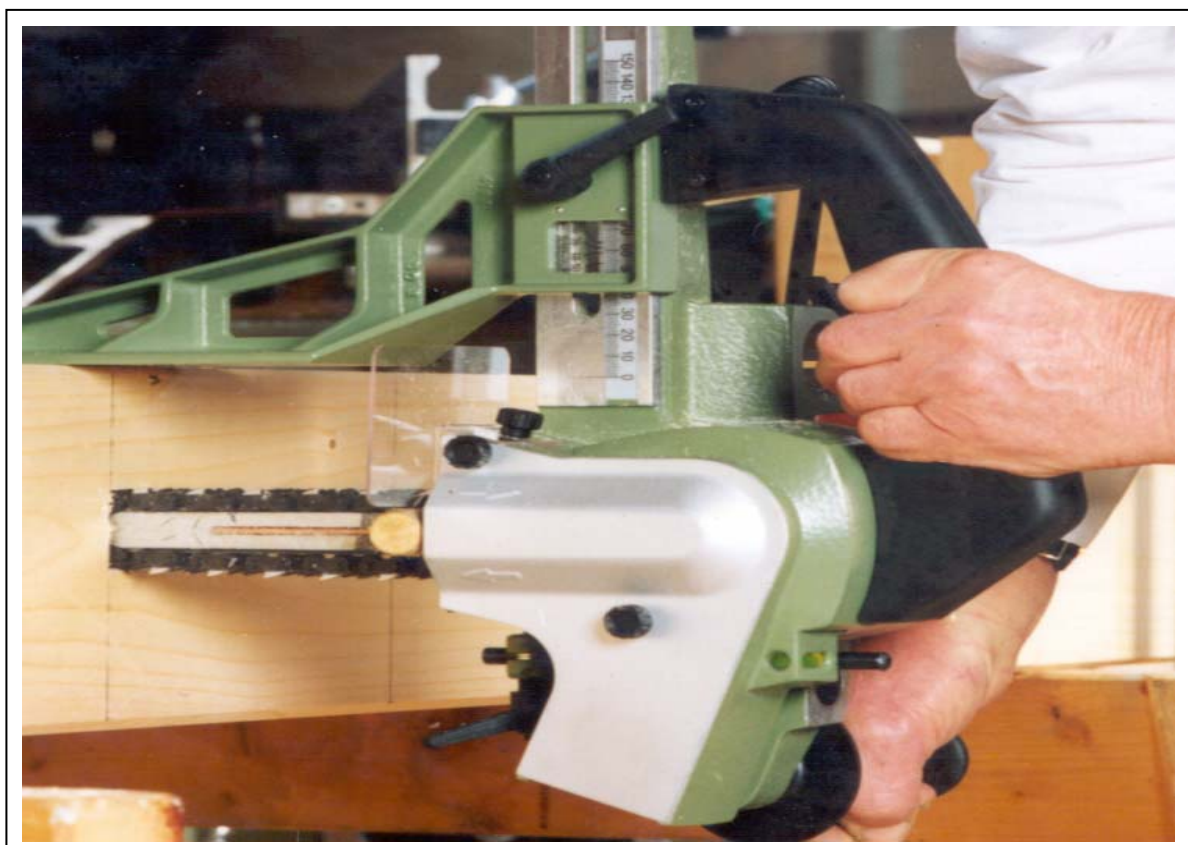


chains for portable mortising machines



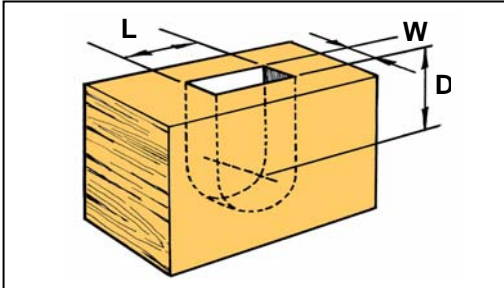
1.1.02-K - INTERNATIONAL STANDARD PRICELIST


Utensilegno

Presentation

Utensilegno, founded in 1945, is mainly equipped for series production of high performance mortise chains. The Utensilegno chains are built according to using modern automatic systems and are subject to rigorous checks during manufacturing, followed by final testing before being put on the market.

The term “mortise chains” is often used as a synonym for set, the complete tool made up of a chain, guide bar and sprocket for the production of rectangular, square and trapezoid slots in medium hardness wood. For the production of slots in hard or abrasive wood, chrome-plated chains are available for greater cutting performance and longer duration.

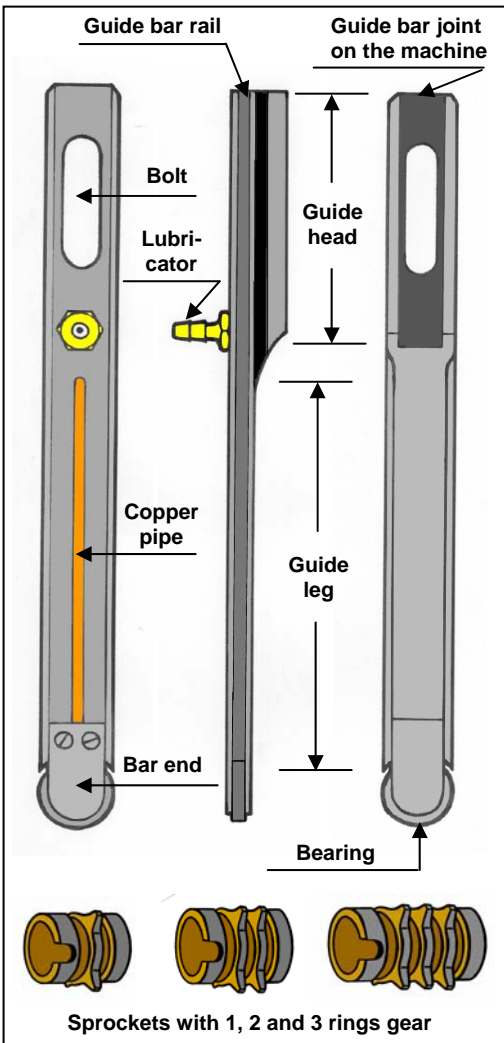


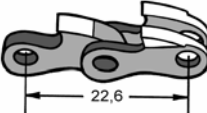
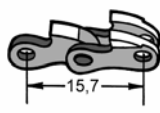
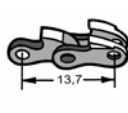
The mortise

The mortise is identified by three dimensions as shown in the figure to the side: width (**W**), length (**L**) and depth (**D**). These dimensions should always be indicated when ordering.

The chain pitches

The pitch is the distance between the one pin in a link and the third successive one, as shown in the figure. Utensilegno chains are produced in the following three pitches:



CHAIN PITCHES			
			
	22,6	15,7	13,7
	“A” Pitch, 22,6 mm	“B” Pitch, 15,7 mm	“C” Pitch, 13,7 mm
W mm	6 – 40	4 – 30	4 – 25
L mm	40 and over	30 – 35	20 – 25

The Utensilegno sets set out in this price list are produced for stationery and portable mortising machines (generally with a guide bar-sprocket centres of 70 mm).

The **machine centres** is the distance between the centre of the sprocket and that of the screw that locks the guide bar to the machine, as shown in the figure in page 10 (“E” centres).

The Utensilegno **guide bars** are supplied with a lubrication system for the automatic oil pump fixture or, on request, with Stauffer manual grease cups.

They are also supplied with a **chain stretcher** to obtain an optimal tension of the chain.

The dimensions of the guide bar joint - for the fixture of the guide bar on the machine - is 13 mm, and the guide bar bolt dimensions are 12.7 x 50 mm.

The guide bars and sprockets are used for more than one chain size, as shown in the table of international standard below. On the first line you'll find the chain thickness, on the second the thickness of the central link of the chain and on the third the thickness of the guide bar slide rail.

For example, the description "12-17" set out below and stamped on the guide bar means that the guide bar in question is suitable for use with chains whose thickness is 12, 13, 14, 15, 16 or 17 mm.

The inner diameter of the sprockets is 16 mm (14 mm for Mafell LS 103, and 15 mm for Ryobi CM40): they are produced with 2 dragging slots. The minimum cutting speed is 250 m/min approximately, while the chains with the highest performance operate at a speed of 360 m/min.

THE INTERNATIONAL STANDARD

Chain thickness in mm	4	5	6 - 7	8	9-11	12-17	18-21	22-25	25-30	32-35	40
Inner link chain in mm	1,5	2	2,5	3	4	6	12 (3x4)	13,5 (3x4,5)	17,4 (3x5,8)	22,5 (5x4,5)	29 (5x5,8)
Guide bar rail in mm	1,4	1,9	2,4	2,8	3,8	5,8	11,8	13,3	17,2	22,3	28,8

SPARE PARTS

For a correct use of the mortise chains and an up keeping easiness, following spare parts are available:

Links: these are supplied in packets with two pieces and six pins each. They should therefore always be ordered in multiples of two. The pins can also be supplied separately.

Lubricators for Utensilegno guide bars: these have a 1/8" GAS thread and are available for the types indicated in the figure by side.

Copper pipes for the lubrication of the guide bars: these are available in different lengths, according to the length of the guide bars. When ordering, please refer to the type of guide bar to which they have to be fitted. On request, the copper pipes can also be provided in other lengths.

Patented bar ends for Utensilegno guide bars: these are available for all the guide bar sizes produced with A, B and C pitches.

They are completely differently designed in comparison to those of the other guide bars currently available on the market. They consist of a bearing and two plates solidly fixed to each other; they are supplied already assembled, run-in and ready for use.

With Utensilegno bar ends, it is possible to repair the entire guide bar by means of a single operation that will take only a few minutes for even an unskilled worker. After this operation, the guide bar will be as good as new, and it will be possible to repeat this repair operation several times, since the entire end part subject to wear and tear is totally substituted.

ORDERING INSTRUCTIONS

To order a complete set or a guide bar, please provide the following information:

- Mortise dimensions: width (**W**) (corresponding to the thickness or width of the chain), length (**L**) and depth (**D**).
- "E" machines centres as shown in the figure in page 15.
- Inner link chain.
- Make and model of mortise machine (if possible).
- Specify if the guide bars have to be with «CL» lubrication (connection for automatic oil pump) or «CI», with the Stauffer manual grease cup.

To order a single chain, please provide the following information:

- Width (or thickness) of the chain.
- Number of links making it up.
- Pitch chain and thickness of its inner link.

To order sprockets and bar ends, please provide the following information:

- Mortise width (**W**) and length (**L**).
- Chain pitch and chain inner link.
- Number of sprocket teeth.

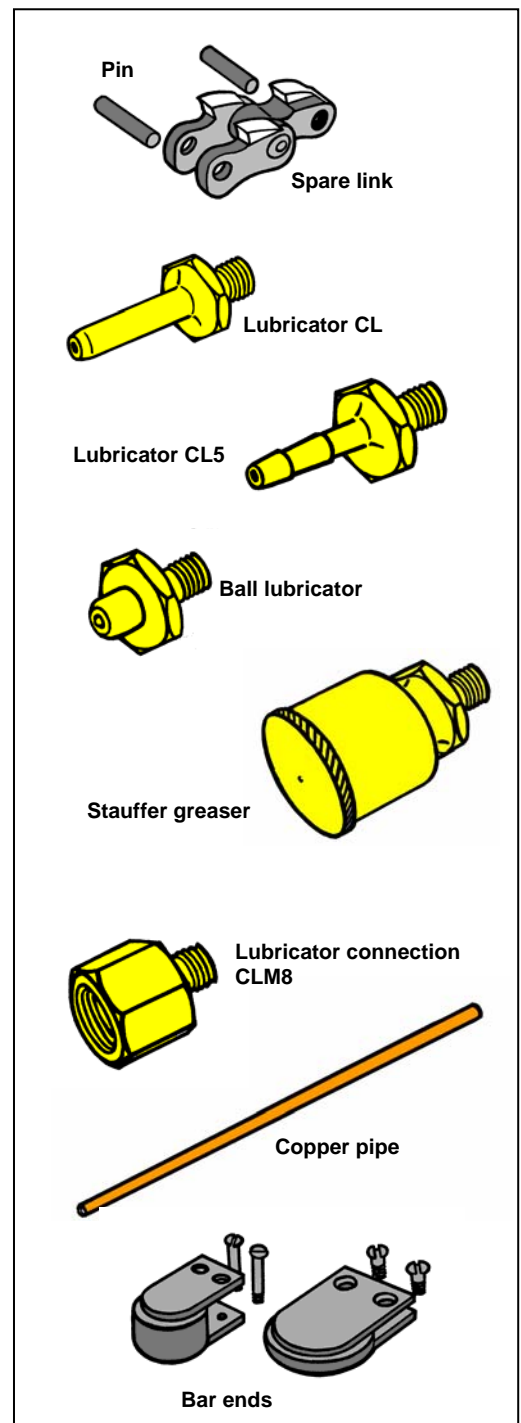


TABLE SHOWING NUMBER OF LINKS OF CHAINS AND GUIDE BARS LENGTHS

Pitch	Mortise dimensions in mm		Chain length expressed in links for «E» centres							Guide bar length in mm for E = 150
			70	90	105	120	130	140	150	
«A»	from 6 to 40 X	40 X 150	29	31	32	33	34	35	36	260
		50 X 150	29	31	32	33	34	35	36	250
«B»	from 4 to 17 X	30/35 X 125	38	40	42	44	45	47	48	230
		from 18 to 30 X 30/35 X 125	40	42	44	46	47	49	50	245
«C»	from 4 to 17 X	20/25 X 125	42	45	47	49	51	52	54	230
		from 18 to 25 X 20/25 X 125	44	47	49	51	53	54	56	245

HAFFNER KKF 15, KF 20, KF 30, SL 100 - ELU MKS 10, MKS 33
FOR MORTISING MACHINES HAVING AN "E" CENTRES OF 70 mm
Guide bars with lubrication

"A" PITCH CHAINS OF mm 22,6 (.89")

FOR MORTISES LENGTH OF mm 40 AND 50x 125, 26 LINKS CHAINS

Mortises sizes mm	N. of links	Compleat sets	Chains	Guide bars	Sprockets T	Bar ends (1)	Links (2)
6 x 40 x 125	26	€ 282,23	93,06	164,64	24,54 4	48,57	11,12
8 x 40 x 125	26	€ 286,83	95,10	167,19	24,54 4	48,57	11,28
10 x 40 x 125	26	€ 293,99	98,68	170,77	24,54 4	48,57	11,56
12 x 40 x 125	26	€ 300,13	100,72	174,86	24,54 4	48,57	11,70
14 x 40 x 125	26	€ 302,68	103,28	174,86	24,54 4	48,57	11,90
16 x 40 x 125	26	€ 325,18	125,78	174,86	24,54 4	48,57	13,64
18 x 40 x 125	26	€ 348,70	143,67	178,95	26,08 4	53,69	15,02
20 x 40 x 125	26	€ 353,30	148,27	178,95	26,08 4	53,69	15,36
25 x 40 x 125	26	€ 371,20	161,06	183,04	27,10 4	53,69	16,34
40 x 40 x 125	26	€ 535,32	247,47	255,13	32,72 4	66,47	23,00
6 x 50 x 125	26	€ 307,29	93,06	189,69	24,54 5	56,24	11,12
8 x 50 x 125	26	€ 312,40	95,10	192,76	24,54 5	56,24	11,28
10 x 50 x 125	26	€ 320,07	98,68	196,85	24,54 5	56,24	11,56
12 x 50 x 125	26	€ 326,72	100,72	201,45	24,54 5	56,24	11,70
14 x 50 x 125	26	€ 329,27	103,28	201,45	24,54 5	56,24	11,90
16 x 50 x 125	26	€ 351,77	125,78	201,45	24,54 5	56,24	13,64
18 x 50 x 125	26	€ 375,80	143,67	206,05	26,08 5	61,87	15,02
20 x 50 x 125	26	€ 380,40	148,27	206,05	26,08 5	61,87	15,36
25 x 50 x 125	26	€ 398,81	161,06	210,65	27,10 5	61,87	16,34
40 x 50 x 125	26	€ 573,67	247,47	293,48	32,72 5	76,69	23,00

FOR MORTISES LENGTH OF mm 40 AND 50 x 150, 29 LINKS CHAINS

Mortises sizes mm	N. of links	Compleat sets	Chains	Guide bars	Sprockets T	Bar ends (1)	Links (2)
6 x 40 x 150	29	€ 295,53	106,35	164,64	24,54 4	48,57	11,30
8 x 40 x 150	29	€ 301,15	109,42	167,19	24,54 4	48,57	11,50
10 x 40 x 150	29	€ 306,78	111,46	170,77	24,54 4	48,57	11,64
12 x 40 x 150	29	€ 314,96	115,55	174,86	24,54 4	48,57	11,92
14 x 40 x 150	29	€ 318,53	119,13	174,86	24,54 4	48,57	12,18
16 x 40 x 150	29	€ 345,63	146,23	174,86	24,54 4	48,57	14,04
18 x 40 x 150	29	€ 369,15	164,12	178,95	26,08 4	53,69	15,28
20 x 40 x 150	29	€ 373,24	168,22	178,95	26,08 4	53,69	15,56
25 x 40 x 150	29	€ 384,49	175,37	183,04	26,08 4	53,69	16,06
40 x 40 x 150	29	€ 574,18	276,10	265,36	32,72 4	66,47	23,00
6 x 50 x 150	29	€ 320,58	106,35	189,69	24,54 5	56,24	11,30
8 x 50 x 150	29	€ 326,72	109,42	192,76	24,54 5	56,24	11,50
10 x 50 x 150	29	€ 332,85	111,46	196,85	24,54 5	56,24	11,64
12 x 50 x 150	29	€ 341,54	115,55	201,45	24,54 5	56,24	11,92
14 x 50 x 150	29	€ 345,12	119,13	201,45	24,54 5	56,24	12,18
16 x 50 x 150	29	€ 372,22	146,23	201,45	24,54 5	56,24	14,04
18 x 50 x 150	29	€ 396,25	164,12	206,05	26,08 5	61,87	15,28
20 x 50 x 150	29	€ 400,34	168,22	206,05	26,08 5	61,87	15,56
25 x 50 x 150	29	€ 412,10	175,37	210,65	26,08 5	61,87	16,06
40 x 50 x 150	29	€ 614,06	276,10	305,24	32,72 5	76,69	23,00

(1) The bar end to repair the guide bars consisting of one bearing plus two plate assembled and run-in plus two screws. (2) The link price refer to a packet of spare links. Every packet consisting of two links and six pins. For Haffner mortising machines with an "E" centres of 70 mm, always use sprockets with 4 teeth

**HAFFNER KKF 15, KF 20, KF 30, SL 100 - ELU MKS 10, MKS 33
FOR MORTISING MACHINES HAVING AN "E" CENTRES OF 70 mm**

Guide bars with lubrication

"B" PITCH CHAINS OF mm 15,7 (.62")

FOR MORTISES LENGTH mm 30 UND 35, 38 LINKS CHAINS

Mortises sizes mm	N. of links	Complete sets	Chains	Guide bars	Sprockets with 6 T	Bar ends (1)	Links (2)
6 x 30 x 100	38	€ 388,58	159,52	200,94	28,12	40,39	13,36
8 x 30 x 115	38	€ 395,23	166,17	200,94	28,12	40,39	13,71
10 x 30 x 125	38	€ 400,85	171,79	200,94	28,12	40,39	14,00
12 x 30 x 125	38	€ 403,41	174,35	200,94	28,12	40,39	14,14
14 x 30 x 125	38	€ 406,99	177,93	200,94	28,12	40,39	14,32
16 x 30 x 125	38	€ 433,58	204,52	200,94	28,12	40,39	15,72
18 x 30 x 125	38	€ 478,06	223,43	221,90	32,72	46,02	16,72
20 x 30 x 125	38	€ 511,29	256,67	221,90	32,72	46,02	18,47
30 x 30 x 125	38	€ 601,28	340,01	228,55	32,72	76,69	22,86
6 x 35 x 100	38	€ 388,58	159,52	200,94	28,12	40,39	13,36
8 x 35 x 115	38	€ 395,23	166,17	200,94	28,12	40,39	13,71
10 x 35 x 125	38	€ 400,85	171,79	200,94	28,12	40,39	14,00
12 x 35 x 125	38	€ 403,41	174,35	200,94	28,12	40,39	14,14
14 x 35 x 125	38	€ 406,99	177,93	200,94	28,12	40,39	14,32
16 x 35 x 125	38	€ 433,58	204,52	200,94	28,12	40,39	15,72
18 x 35 x 125	38	€ 478,06	223,43	221,90	32,72	46,02	16,72
20 x 35 x 125	38	€ 511,29	256,67	221,90	32,72	46,02	18,47
30 x 35 x 125	38	€ 601,28	340,01	228,55	32,72	76,69	22,86

"C" PITCH CHAINS OF mm 13,7 (.54")

FOR MORTISES LENGTH OF mm 20 AND 25, 42 LINKS CHAINS

Mortises sizes mm	N. of links	Complete sets	Chains	Guide bars	Sprockets with 6 T	Bar ends (1)	Links (2)
6 x 20 x 95	42	€ 387,56	167,19	192,25	28,12	35,79	11,92
8 x 20 x 110	42	€ 403,41	183,04	192,25	28,12	35,79	12,68
10 x 20 x 125	42	€ 415,17	194,80	192,25	28,12	35,79	13,24
12 x 20 x 125	42	€ 416,70	196,34	192,25	28,12	39,37	13,30
14 x 20 x 125	42	€ 424,37	204,01	192,25	28,12	39,37	13,68
16 x 20 x 125	42	€ 437,67	217,30	192,25	28,12	39,37	14,30
18 x 20 x 125	42	€ 583,38	257,69	290,41	35,28	43,97	16,24
6 x 25 x 95	42	€ 387,56	167,19	192,25	28,12	35,79	11,92
8 x 25 x 110	42	€ 403,41	183,04	192,25	28,12	35,79	12,68
10 x 25 x 125	42	€ 415,17	194,80	192,25	28,12	35,79	13,24
12 x 25 x 125	42	€ 416,70	196,34	192,25	28,12	39,37	13,30
14 x 25 x 125	42	€ 424,37	204,01	192,25	28,12	39,37	13,68
16 x 25 x 125	42	€ 437,67	217,30	192,25	28,12	39,37	14,30
18 x 25 x 125	42	€ 583,38	257,69	290,41	35,28	43,97	16,24

(1) The bar end to repair the guide bars consisting of one bearing plus two plate assembled and run-in plus two screws.

(2) The link price refer to a packet of spare links. Every packet consisting of two links and six pins.

On request we can supply guide bars from 18 size and over for mortise depth of 140 mm instead of 125 mm, that are 16 mm longer than the normal guide bars that mount chains with two links more.

MAFELL "S"
"E" CENTRES OF 140 mm
Guide bars with Stauffer lubricator and chain stretcher
"A" PITCH OF mm 22,6 (.89") and "B" PITCH OF mm 15,7 (.62")
FOR MORTISES LENGTH OF mm 30, 35, 40 AND 50

Mortises sizes mm	Pitch	N. of links	Complete sets	Chains	Guide bars	Sprockets with 2C (1)	T	Bar ends (2)	Links (3)
16 x 30 x 100	B	42	€ 523,10	226,55	268,43	28,12	5	40,39	14,75
16 x 35 x 100	A	30	€ 450,19	157,22	268,43	24,54	4	69,02	14,44
16 x 40 x 100	A	30	€ 356,63	157,22	174,86	24,54	4	48,57	14,44
16 x 50 x 100	A	31	€ 393,57	162,46	201,45	29,65	5	56,24	14,44
28 x 30 x 100	B	42	€ 667,44	358,62	276,10	32,72	5	76,69	21,04
28 x 35 x 100	A	30	€ 581,85	277,63	276,10	28,12	4	76,69	22,47
28 x 40 x 100	A	30	€ 553,73	277,63	247,98	28,12	4	61,36	22,47
28 x 50 x 100	A	31	€ 604,91	286,89	285,30	32,72	5	71,58	22,47
30 x 30 x 100	B	43	€ 693,57	384,75	276,10	32,72	6	76,69	21,86
30 x 35 x 100	A	31	€ 603,78	299,57	276,10	28,12	5	76,69	23,29
30 x 40 x 100	A	31	€ 575,66	299,57	247,98	28,12	5	61,36	23,29
30 x 50 x 100	A	32	€ 627,25	309,23	285,30	32,72	5	71,58	23,29
40 x 40 x 100	A	30	€ 646,78	345,12	268,94	32,72	4	66,47	26,97
40 x 50 x 100	A	31	€ 704,82	356,63	309,33	38,86	5	76,69	26,97
16 x 30 x 150	B	50	€ 575,46	269,71	277,63	28,12	5	40,39	14,75
16 x 35 x 150	A	35	€ 485,60	183,43	277,63	24,54	4	69,02	14,44
16 x 40 x 150	A	35	€ 382,83	183,43	174,86	24,54	4	48,57	14,44
16 x 50 x 150	A	36	€ 419,77	188,67	201,45	29,65	5	56,24	14,44
28 x 30 x 150	B	50	€ 765,92	426,93	306,26	32,72	5	76,69	21,04
28 x 35 x 150	A	35	€ 658,29	323,90	306,26	28,12	4	76,69	22,47
28 x 40 x 150	A	35	€ 611,76	323,90	259,74	28,12	4	61,36	22,47
28 x 50 x 150	A	36	€ 667,54	333,16	301,66	32,72	5	71,58	22,47
30 x 30 x 150	B	50	€ 786,37	447,38	306,26	32,72	6	76,69	21,86
30 x 35 x 150	A	35	€ 672,60	338,22	306,26	28,12	5	76,69	23,29
30 x 40 x 150	A	35	€ 626,08	338,22	259,74	28,12	5	61,36	23,29
30 x 50 x 150	A	36	€ 682,27	347,88	301,66	32,72	5	71,58	23,29
40 x 40 x 150	A	35	€ 716,58	402,64	281,21	32,72	4	66,47	26,97
40 x 50 x 150	A	36	€ 776,65	414,15	323,65	38,86	5	76,69	26,97
16 x 35 x 200	A	39	€ 531,10	204,39	302,17	24,54	4	69,02	14,44
16 x 40 x 200	A	39	€ 491,22	204,39	262,29	24,54	4	48,57	14,44
16 x 50 x 200	A	40	€ 538,39	209,63	299,11	29,65	5	56,24	14,44
28 x 40 x 200	A	39	€ 698,37	360,92	309,33	28,12	4	61,36	22,47
28 x 50 x 200	A	40	€ 742,40	370,18	339,50	32,72	5	71,58	22,47
30 x 40 x 200	A	39	€ 714,33	376,87	309,33	28,12	5	61,36	23,29
30 x 50 x 200	A	40	€ 758,76	386,54	339,50	32,72	5	61,36	23,29
40 x 40 x 200	A	39	€ 801,96	448,66	320,58	32,72	4	66,47	26,97
40 x 50 x 200	A	40	€ 868,17	460,16	369,15	38,86	5	76,69	26,97

(1) 2C: sprocket with 2 dragging slots. (2) The bar end to repair the guide bars consisting of one bearing plus two plate assembled and run-in plus two screws.

(3) The link price refer to a packet of spare links. Every packet consisting of two links and six pins.

MAFELL LS 101, 102, 103 - RYOBI CM40 - MAKITA KC100

HEMA ZKS 15 - PROTOOL CMP 150

HAFFNER KF 416 E - HOLZHER ZK 2340

FOR PORTABLE MORTISING MACHINES HAVING AN "E" CENTRES OF 70 mm AND OVER

Guide bars with lubrication and chain stretcher

"A" PITCH CHAINS OF mm 22,6 (.89") and "B" PITCH OF mm 15,7 (.62")

FOR MORTISES LENGTH OF mm 30, 35, 40 AND 50

Mortises sizes mm	Pitch	N. of links	Complete sets	Chains	Guide bars	Sprockets with 2C (1)	T	Bar ends (2)	Glieder (3)
16 x 30 x 100	B	34	€ 479,95	183,40	268,43	28,12	6	40,39	14,75
16 x 35 x 100	A	24	€ 418,75	125,78	268,43	24,54	4	69,02	14,44
16 x 40 x 100	A	24	€ 325,18	125,78	174,86	24,54	4	48,57	14,44
16 x 50 x 100	A	24	€ 356,88	125,78	201,45	29,65	5	56,24	14,44
28 x 30 x 100	B	34	€ 599,13	290,31	276,10	32,72	6	76,69	21,04
28 x 35 x 100	A	24	€ 526,32	222,11	276,10	28,12	4	76,69	22,47
28 x 40 x 100	A	24	€ 498,20	222,11	247,98	28,12	4	61,36	22,47
28 x 50 x 100	A	25	€ 549,38	231,36	285,30	32,72	5	71,58	22,47
30 x 30 x 100	B	34	€ 613,04	304,22	276,10	32,72	6	76,69	21,86
30 x 35 x 100	A	25	€ 545,80	241,59	276,10	28,12	5	76,69	23,29
30 x 40 x 100	A	25	€ 517,68	241,59	247,98	28,12	5	61,36	23,29
30 x 50 x 100	A	25	€ 559,61	241,59	285,30	32,72	5	71,58	23,29
40 x 40 x 100	A	24	€ 577,76	276,10	268,94	32,72	4	66,47	26,97
40 x 50 x 100	A	25	€ 635,79	287,60	309,33	38,86	5	76,69	26,97
28 x 30 x 125	B	38	€ 648,62	324,47	291,44	32,72	4	76,69	21,04
30 x 30 x 125	B	38	€ 664,17	340,01	291,44	32,72	4	76,69	21,86
16 x 30 x 150	B	40	€ 521,52	215,77	277,63	28,12	6	40,39	14,75
16 x 35 x 150	A	29	€ 454,16	151,98	277,63	24,54	4	69,02	14,44
16 x 40 x 150	A	29	€ 351,39	151,98	174,86	24,54	4	48,57	14,44
16 x 50 x 150	A	30	€ 388,33	157,22	201,45	29,65	5	56,24	14,44
28 x 30 x 150	B	40	€ 680,53	341,54	306,26	32,72	6	76,69	21,04
28 x 35 x 150	A	29	€ 602,76	268,38	306,26	28,12	4	76,69	22,47
28 x 40 x 150	A	29	€ 556,23	268,38	259,74	28,12	4	61,36	22,47
28 x 50 x 150	A	30	€ 612,02	277,63	301,66	32,72	5	71,58	22,47
30 x 30 x 150	B	40	€ 696,89	357,90	306,26	32,72	6	76,69	21,86
30 x 35 x 150	A	30	€ 624,29	289,90	306,26	28,12	5	76,69	23,29
30 x 40 x 150	A	30	€ 577,76	289,90	259,74	28,12	5	61,36	23,29
30 x 50 x 150	A	30	€ 624,29	289,90	301,66	32,72	5	71,58	23,29
40 x 40 x 150	A	29	€ 647,55	333,62	281,21	32,72	4	66,47	26,97
40 x 50 x 150	A	30	€ 707,63	345,12	323,65	38,86	5	76,69	26,97

(1) 2C: sprocket with 2 dragging slots. (2) The bar end to repair the guide bars consisting of one bearing plus two plate assembled and run-in plus two screws.

(3) The link price refer to a packet of spare links. Every packet consisting of two links and six pins.

FESTO - SAUER "TIGER" - HOLZ HER ZK
FOR PORTABLE MORTISING MACHINES HAVING AN "E" CENTRES OF 90 AND 100 mm
Guide bars with lubrication and with chain stretcher

"A" PITCH CHAINS OF mm 22,6 (.89") and "B" PITCH OF mm 15,7 (.62")
FOR MORTISE LENGTH OF mm 30, 35, 40 AND 50

Mortises sizes mm	Pitch	N. of links	Complete sets	Chains	Guide bars	Sprockets with 2C (1)	T	Bar ends (2)	Links (3)
16 x 30 x 100	B	37	€ 496,13	199,58	268,43	28,12	6	40,39	14,75
16 x 35 x 100	A	26	€ 429,23	136,26	268,43	24,54	4	69,02	14,44
16 x 40 x 100	A	26	€ 335,66	136,26	174,86	24,54	4	48,57	14,44
16 x 50 x 100	A	26	€ 367,36	136,26	201,45	29,65	5	56,24	14,44
28 x 30 x 100	B	37	€ 624,75	315,93	276,10	32,72	6	76,69	21,04
28 x 35 x 100	A	26	€ 544,83	240,61	276,10	28,12	4	76,69	22,47
28 x 40 x 100	A	26	€ 516,71	240,61	247,98	28,12	4	61,36	22,47
28 x 50 x 100	A	27	€ 567,89	249,87	285,30	32,72	5	71,58	22,47
30 x 30 x 100	B	37	€ 639,88	331,06	276,10	32,72	6	76,69	21,86
30 x 35 x 100	A	27	€ 565,13	260,91	276,10	28,12	5	76,69	23,29
30 x 40 x 100	A	27	€ 537,01	260,91	247,98	28,12	5	61,36	23,29
30 x 50 x 100	A	27	€ 578,94	260,91	285,30	32,72	5	71,58	23,29
40 x 40 x 100	A	26	€ 600,77	299,11	268,94	32,72	4	66,47	26,97
40 x 50 x 100	A	27	€ 658,80	310,61	309,33	38,86	5	76,69	26,97
16 x 30 x 150	B	43	€ 537,70	231,95	277,63	28,12	6	40,39	14,75
16 x 35 x 150	A	31	€ 464,64	162,46	277,63	24,54	4	69,02	14,44
16 x 40 x 150	A	31	€ 361,87	162,46	174,86	24,54	4	48,57	14,44
16 x 50 x 150	A	32	€ 398,81	167,70	201,45	29,65	5	56,24	14,44
28 x 30 x 150	B	43	€ 706,15	367,16	306,26	32,72	6	76,69	21,04
28 x 35 x 150	A	31	€ 621,27	286,89	306,26	28,12	4	76,69	22,47
28 x 40 x 150	A	31	€ 574,74	286,89	259,74	28,12	4	61,36	22,47
28 x 50 x 150	A	32	€ 630,53	296,14	301,66	32,72	5	71,58	22,47
30 x 30 x 150	B	43	€ 723,73	384,75	306,26	32,72	6	76,69	21,86
30 x 35 x 150	A	32	€ 643,61	309,23	306,26	28,12	5	76,69	23,29
30 x 40 x 150	A	32	€ 597,09	309,23	259,74	28,12	5	61,36	23,29
30 x 50 x 150	A	32	€ 643,61	309,23	301,66	32,72	5	71,58	23,29
40 x 40 x 150	A	31	€ 670,56	356,63	281,21	32,72	4	66,47	26,97
40 x 50 x 150	A	32	€ 730,64	368,13	323,65	38,86	5	76,69	26,97

(1) 2C: sprocket with 2 dragging slots. (2) The bar end to repair the guide bars consisting of one bearing plus two plate assembled and run-in plus two screws.

(3) The link price refer to a packet of spare links. Every packet consisting of two links and six pins.

HEMA ZKS 15 - PROTOOL CMP 150
MAFELL KSF 230 - KSF 300L - HOLZ HER ZK 2340
FOR PORTABLE MORTISING MACHINES HAVING AN "E" CENTRES OF 70 mm
Guidebars with bar ends lubrication hole in the plate and with chain stretcher
"A" PITCH CHAINS, mm 22,6 (.89")

FOR MORTISES SIZES OF mm 50 x 300, x400 and x450

Mortises sizes mm	N. of Links	Complete sets	Chains	Guide bars	Sprockets with 2C (1)	Bar ends (2)	Links (3)
6 x 50 x 300	43	€ 454,85	181,20	240,10	33,54 5	56,24	12,39
7 x 50 x 300	43	€ 454,85	181,20	240,10	33,54 5	56,24	12,39
8 x 50 x 300	43	€ 480,21	181,20	265,46	33,54 5	56,24	12,39
9 x 50 x 300	43	€ 508,43	209,43	265,46	33,54 5	56,24	13,70
10 x 50 x 300	43	€ 550,15	209,43	307,18	33,54 5	56,24	13,70
11 x 50 x 300	43	€ 592,28	251,56	307,18	33,54 5	56,24	15,66
12 x 50 x 300	43	€ 675,72	251,56	390,63	33,54 5	56,24	15,66
13 x 50 x 300	43	€ 689,63	265,46	390,63	33,54 5	56,24	16,31
14 x 50 x 300	43	€ 689,63	265,46	390,63	33,54 5	56,24	16,31
15 x 50 x 300	43	€ 717,85	293,69	390,63	33,54 5	56,24	17,62
16 x 50 x 300	43	€ 773,89	349,72	390,63	33,54 5	56,24	20,23
17 x 50 x 300	43	€ 773,89	349,72	390,63	33,54 5	56,24	20,23
18 x 50 x 300	43	€ 871,24	418,85	418,85	33,54 5	61,87	23,44
19 x 50 x 300	43	€ 922,37	469,98	418,85	33,54 5	61,87	25,82
20 x 50 x 300	43	€ 983,73	531,33	418,85	33,54 5	61,87	28,67
21 x 50 x 300	43	€ 1.011,54	559,15	418,85	33,54 5	61,87	29,97
10 x 50 x 400	54	€ 632,26	263,32	335,41	33,54 5	56,24	13,70
11 x 50 x 400	54	€ 684,93	315,98	335,41	33,54 5	56,24	15,66
12 x 50 x 400	54	€ 752,83	315,98	403,31	33,54 5	56,24	15,66
13 x 50 x 400	54	€ 770,21	333,36	403,31	33,54 5	56,24	16,31
14 x 50 x 400	54	€ 770,21	333,36	403,31	33,54 5	56,24	16,31
15 x 50 x 400	54	€ 806,00	369,15	403,31	33,54 5	56,24	17,62
16 x 50 x 400	54	€ 876,56	439,71	403,31	33,54 5	56,24	20,23
17 x 50 x 400	54	€ 876,56	439,71	403,31	33,54 5	56,24	20,23
10 x 50 x 450	59	€ 824,55	287,70	503,11	33,75 5	56,24	13,70
11 x 50 x 450	59	€ 882,09	345,24	503,11	33,75 5	56,24	15,66
12 x 50 x 450	59	€ 899,99	345,24	521,01	33,75 5	56,24	15,66
13 x 50 x 450	59	€ 918,98	364,23	521,01	33,75 5	56,24	16,31
14 x 50 x 450	59	€ 918,98	364,23	521,01	33,75 5	56,24	16,31
15 x 50 x 450	59	€ 958,09	403,33	521,01	33,75 5	56,24	17,62
16 x 50 x 450	59	€ 1.035,18	480,43	521,01	33,75 5	56,24	20,23
17 x 50 x 450	59	€ 1.035,18	480,43	521,01	33,75 5	56,24	20,23

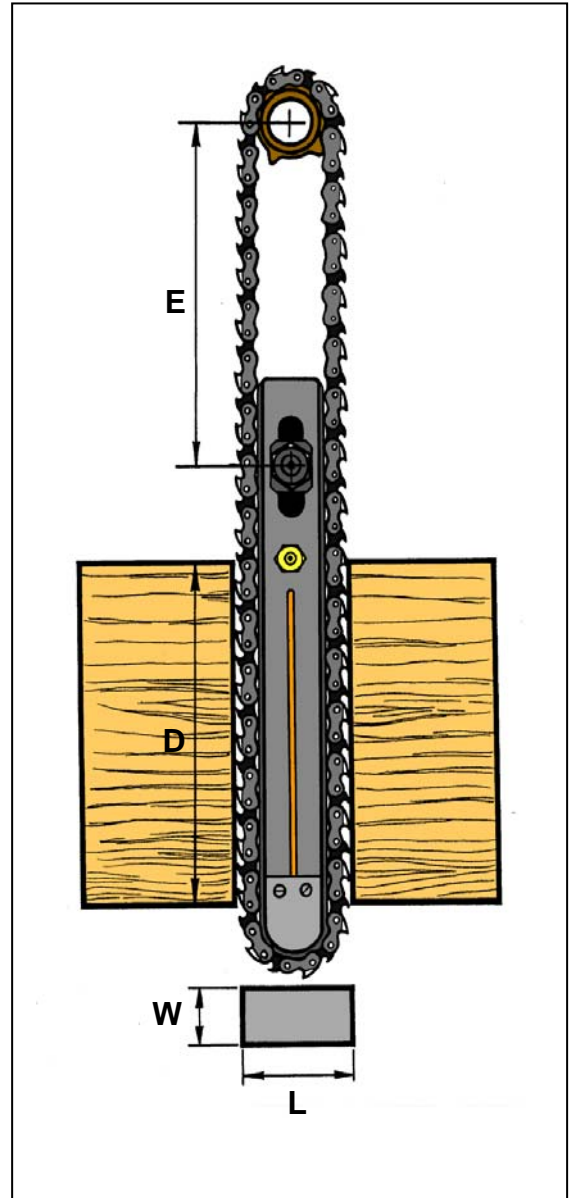
(1) 2C: sprocket with 2 dragging slots.

(2) Ordering bar ends for guide bars of 50x300 and 50x400 please specify: "BAR ENDS WITH LUBRICATION HOLE IN THE PLATE".

(3) The link price refer to a packet of spare links. Every packet consisting of two links and six pins.

ISTRUZIONI FOR A CORRECT USE OF THE MORTISE CHAINS

1. Do not use excessive chain tension. When pulled sideways halfway along its length, there should be a clearance of 6 to 8 mm. Check the tension when the chain is warm, after about ten mortises have been made.
2. If the lubrication is not by automatic oil pump, lubricate the chain and guide bar every fifteen minutes working with a few drops of medium viscosity oil in proximity of bearing, or rotate greaser by half a turn. (Never use petrol or diesel, even if mixed with oil, non-lubricating or recovery oil or a too fluid oil. Poorly lubricated chains and guide bars seize up and burn).
3. Make the mortise by soft and uniform movements, in order to avoid sudden jerking of the chain, especially if the wood is hard or the chains are small sized ones.
4. Do not force the work, to prevent overheating of the guide bar or breakage of the chain.
5. Never work horizontally on a considerable height.
6. Sharpen the chain frequently and lightly, ensuring that the tooth retains its slope and original profile, as specified below.
7. After works' performance, the chains and guide bars should be lubricated as soon as they are removed from the machine, preferably by immersion, to enable the oil to penetrate the pins of the chain and the guide bar bearing.
8. "B" and "C" pitch chains should be employed with particular care, taking twice the time as necessary to make mortises of same width and depth as required with an "A" pitch chain.
9. Excessive clearance of the bearing and a missing or incorrect sharpening of the chains give badly cut mortises and cause a quick wear out of the tools.

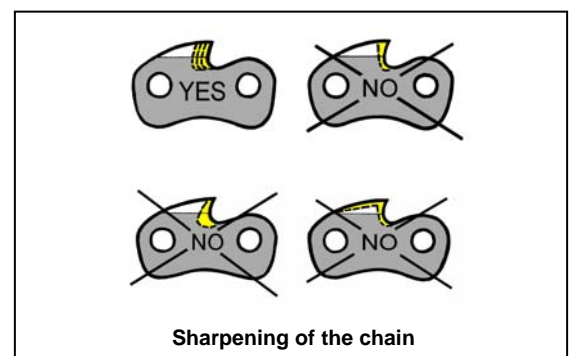


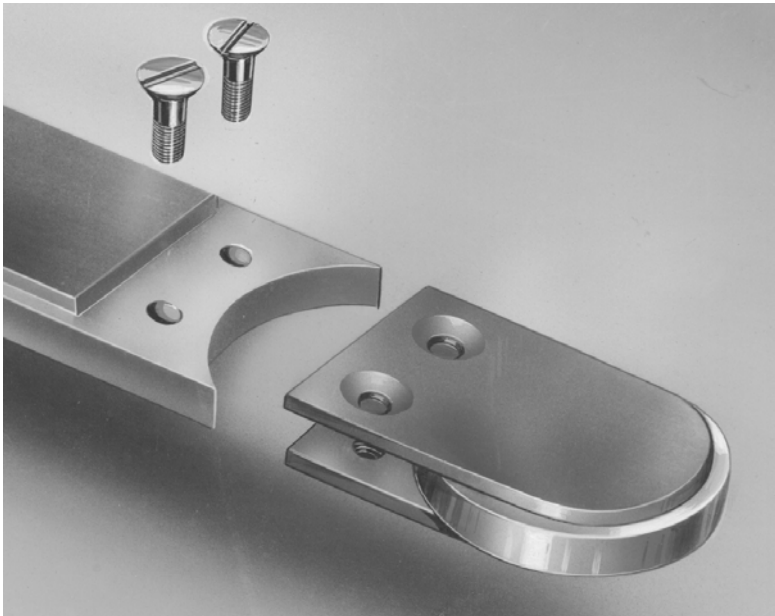
SHARPENING THE CHAINS

Sharpen the chains frequently to ensure the original cutting angle is maintained, as shown in the figure. Only the front part of the tooth should be sharpened, never the sides or back, to avoid altering the dimensions.

Correct and frequent sharpening will lead to longer lasting chain cutting capacity and reduced guide bar wear.

We recommend that you always have more than one chain of the same size available, to avoid forced stoppage of the work.





COMBINED ASSEMBLY OF BEARING & PLATES FOR MORTISING GUIDE BARS (Patent)

Our new Guidebars offer the following advantages in respect of the traditional ones.

- The guidebar is always like new, because only parts that wear out (bearing and plates) are changed when necessary, at the undamaged end of the guidebar.
- The life of the roller bearing is double, because it is already assembled, fit, run in on the support plates, i.e. ready for work.
- Better work precision, thanks to the excellent axial strain of the roller bearing, that keeps the initial clearance over its whole life.
- Guidebar repairs are no longer insoluble problems of difficult mechanical nature, giving always unsatisfactory results, but a five minute job of an unskilled worker.

GUIDANCE FOR THE SUBSTITUTION OF THE DOUBLE PLATE WITH BEARING

- Put down horizontally the guidebar between the jaws of a vice, grip slightly the projecting part under the bearing that remains over the vice. Screwheads must point downwards.
- Punch out the screws.
- Set to place the new assembly with new screws.
- Screw in the screws tight and rivet their ends with the hammer, whilst the guidebar rests on an anvil or steel plate.
- Remove by file or emery wheel almost all riveted parts of the screws.
- Lubricate the roller bearing before starting work.

NOTE: *The life of the bearing depends on constant lubrication with grease or good new semidense car oil. Never add to oil or never make use of naphtha or gasoil: guidebars and chains would suffer for ever. Avoid oils that are too fluid, or non-lubricating, or not new. Lubricate every 15 minutes working operations, when the lubrication is not performed automatically by special devices. Never wash guidebars or chains with naphtha, gasoil, petrol, solvents, but clean only with oil and brush.*



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SINCE 1945 WE HAVE MANUFACTURED MORTISING CHAINS FOR ALL STANDARDS
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