



ROEMHELD
HILMA ■ STARK

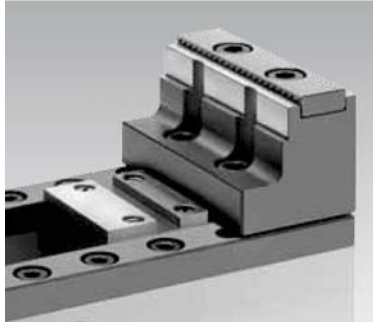
Issue 10-15 E

WS 5.358-Z

Accessories for Workholding Systems MC

Clamping jaws and jaw inserts,
accessories for mounting, positioning and operation

Clamping jaws / jaw inserts



Scope of delivery - clamping jaws

All clamping jaws are supplied with fixing screws.
Clamping jaws with interchangeable jaw inserts and
fixing screws for the jaw inserts are included in the delivery.

Important notes

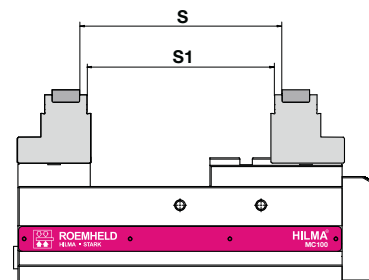
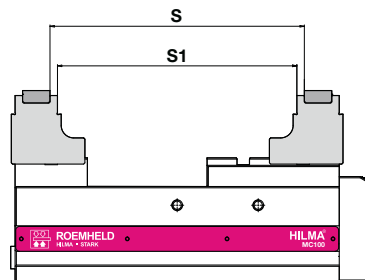
- Technical information and recommendations for use for jaw inserts:
see page 4 as well as data sheet [WS 12-SE](#)
- Accessories for rapid change block Quintus:
see data sheet [WS 5.6150](#)

S: Clamping range **step at the jaw insert**

S1: Clamping range **step at the jaw body**

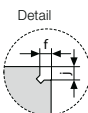
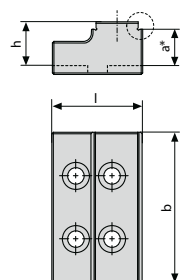
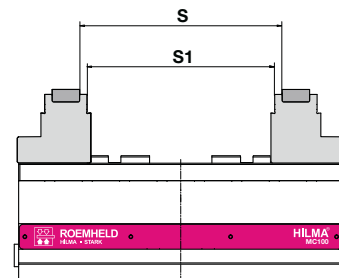
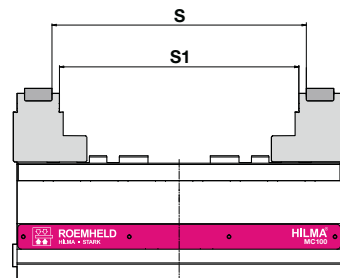
Series MC

Fixed jaw



Series MC

Concentric

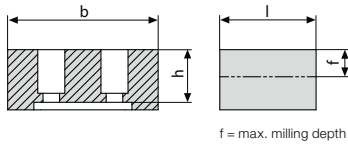


Reversible jaws with step hardened

Type	Part no.	Dimensions [mm]									Clamping range [mm]	
		l	b	h	a	e	f	i	j	k	S	S1
MC 40	9.3581.6901	36	40	15	12*		3		3			6 – 79
MC 60	9.3583.6901	49	60	23	18*		3		5			6 – 150
MC 100	9.3585.6901	60	100	30	25*		3		5			6 – 204
MC 125	9.3586.6911	80	125	35	30*		5		5			10 – 400

* Tolerance ±0.01 mm

Accessories Clamping jaws / jaw inserts

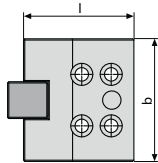
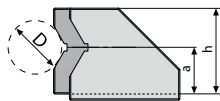


f = max. milling depth



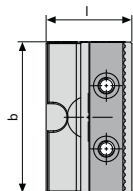
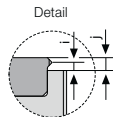
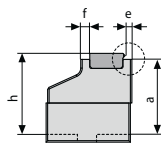
Block jaws, soft for milling workpiece contours

Type	Part no.	Dimensions [mm]										Clamping range [mm]	
		l	b	h	a	e	f	i	j	k		S	S1
MC 40	9.3581.6902	36	40	21			6						
MC 60	9.3583.6902	42	60	25			9						
MC 100	9.3585.6902	64	100	35			19						
MC 125	9.3586.6902	88	125	55			33						



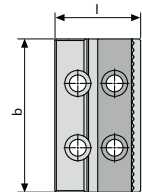
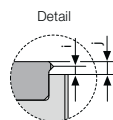
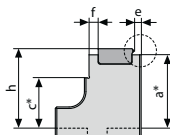
Vee jaws with jaw insert hardened

Type	Part no.	Dimensions [mm]										Clamping range [mm]	
		l	b	h	a	e	f	i	j	k		D	
MC 60	9.3583.6905	60	60	70	40							D 10-76	
MC 100	9.3585.6905	90	100	70	38							D 12-86	



Pendulum jaws with jaw insert grip/smooth, hardened

Type	Part no.	Dimensions [mm]										Clamping range [mm]	
		l	b	h	a	e	f	i	j	k		S	S1
MC 100	9.3585.6904	56	100	54	50	4.5	6	2.5	4			12-204	
Jaw insert	5.5050.0542												
MC 125	9.3586.6904	88	125	66	62	4.5	6	2.5	4			12-400	
Jaw insert	5.5050.0509												

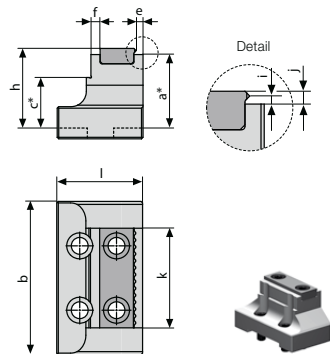


Step jaws with jaw insert grip/smooth, hardened

Type	Part no.	Dimensions [mm]										Clamping range [mm]	
		l	b	h	a	c	e	f	i	j	k	S	S1
MC 60	9.3583.6906	56	60	34	30*	(1)	4.5	6	2.5	4	60	12-126	(1)
Jaw insert	5.5050.0543												
MC 100	9.3585.6906	56	100	54	50*	35*	4.5	6	2.5	4	100	12-204	44-192
Jaw insert	5.5050.0542												
MC 125	9.3586.6906	88	125	66	62*	42*	4.5	6	2.5	4	125	12-400	96-388
Jaw insert	5.5050.0509												

* Tolerance ±0.01 mm
(1): Jaw without step

Accessories Clamping jaws / jaw inserts

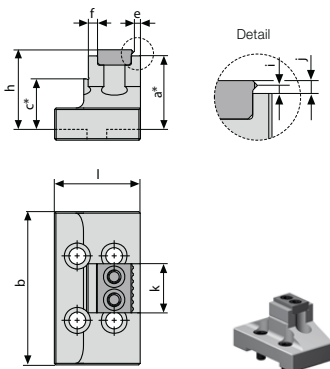


Step jaws with jaw insert

Grip/smooth, hardened, various widths

Type	Part no.	Dimensions [mm]										Clamping range [mm]	
		l	b	h	a	c	e	f	i	j	k	S	S1
MC 60	9.3583.6907	56	60	34	30*	(1)	4.5	6	2.5	4	35	12-126	(1)
Jaw insert	5.5050.0545												
MC 100	9.3585.6907	56	100	54	50*	35*	4.5	6	2.5	4	65	12-204	44-192
Jaw insert	5.5050.0471												
MC 125	9.3586.6907	88	125	66	62*	42*	4.5	6	2.5	4	80	12-400	96-388
Jaw insert	5.5050.0547												

* Tolerance ±0.01 mm
(1): Jaw without step

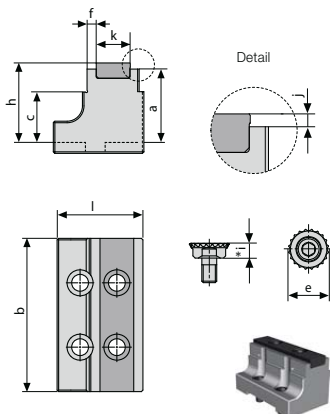


Step jaws with jaw insert

Grip/smooth, hardened, various widths

Type	Part no.	Dimensions [mm]										Clamping range [mm]	
		l	b	h	a	c	e	f	i	j	k	S	S1
MC 100	9.3585.6908	56	100	54	50*	35*	4.5	6	2.5	4	32	15-204	44-192
Jaw insert	5.5050.0470												

* Tolerance ±0.01 mm



Step jaws with jaw insert

HM coating coarse/ smooth, hardened
and insert round with grip (2 off)

Type	Part no.	Dimensions [mm]										Clamping range [mm]	
		l	b	h	a	c	e	f	i	j	k	S	S1
MC 100	9.3585.6910	59	100	54	50*	35*		6		4		18-204	6-192
Jaw insert	5.5050.0523										22		
Round insert	5.5050.0464						27		10				
MC 125	9.3586.6910	91	125	66	62*	42*		6		4		18-406	6-394
Jaw insert	5.5050.0660										28		
Round insert	5.5050.0486						33		12				

Accessories Adaptor plate / jaw inserts

Adaptor plate

Adaptor plate including screws and positioning bolts

Top side: 4 through holes in the grid of 52 mm
Bottom side: 4 tapped holes M8 in the grid of 96 mm
Top surface prepared for the location of MC 60.
See data sheet 5.3580



Type	Part no.	Dimensions
MC 60	9.3297.8093	170 x 130 x 32

Interchangeable jaw inserts

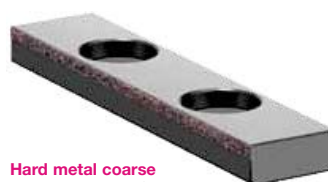
see also: data sheet WS 12-SE Technical information "Jaw inserts for clamping jaws"

Jaw inserts grip serrated



Grip

Jaw inserts with coatings



Hard metal coarse
Hardness 58 HRC
Grain size 0.3 – 0.5 mm



TUC
Hardness 80 HRC
Coarseness RA 10

Part numbers

Type	Part no.	Part no.	Part no.
MC 60	Jaw width 60	Jaw width 35	
Jaw inserts Grip	5.5050.0543	5.5050.0545	
Jaw inserts HM coarse	5.5050.0635	5.5050.0740	
Jaw inserts TUC	5.5050.0743	5.5050.0744	
MC 100	Jaw width 100	Jaw width 65	Jaw width 32
Jaw inserts Grip	5.5050.0542	5.5050.0471	5.5050.0470
Jaw inserts HM coarse	5.5050.0523	5.5050.0723	5.5050.0741
Jaw inserts TUC	5.5050.0586	5.5050.0745	5.5050.0746
MC 125	Jaw width 125	Jaw width 80	
Jaw inserts Grip	5.5050.0509	5.5050.0547	
Jaw inserts HM coarse	5.5050.0660	5.5050.0742	
Jaw inserts TUC	5.5050.0747	5.5050.0748	

Recommendation for jaw inserts to increase the retention forces

Workpiece material	Workpiece surface	rolled / cast / forged	drawn	sawn	milled	ground
Steel, e.g. C45, 20MnCr5, 31CrMoV9		HM coarse, Grip	TUC	HM coarse, Grip	TUC	TUC
Heat-treated steel e.g. C45 induction-hardened, 20 Mn Cr 5 case-hardened, 31 Cr Mo V9 nitrided					TUC	TUC
Cast e.g. GG, red bronze		HM coarse, Grip			TUC	TUC
Titanium			TUC		TUC	TUC
Aluminium		HM coarse, Grip		Grip		TUC
Non-ferrous metals				Grip		TUC

Accessories for mounting, positioning and operation

Mounting and positioning

Centring bolt for hub centring on machine table



Type	Part no.	Ø [mm]	L [mm]
Quintus 1/2/3	9.6153.5001	D30 g6	15/38
	9.6153.5002	D32 g6	15/38
	9.6153.5003	D50 g6	25/48
	9.6153.5009	D50 g6	18/41

Draw-in nipple assembly at the clamping system



Type	Part no.	Quantity
Quintus 1/ MC 60	9.3920.0201	1 off
Quintus 2/ MC 100	9.3920.0202	1 set = 2 off
Quintus 3/ MC 125	9.3920.0203	1 set = 3 off

Positioning pins stepped for grid plate and Quintus, set of 2 off



Type	Part no.	Ø [mm]
MC 60	9.3920.0101	10/12
MC 100	9.3920.0103	25/12
MC 125	9.3920.0103	25/12

Clamping claws Set of 4 off including screws



Type	Part no.	Thread
MC 40	9.3581.7001	M 8
MC 60	9.3583.7001	M10
MC 60	9.3583.7002	M12
MC 100	9.3585.7001	M12
MC 125	9.3777.3011	M12
MC 125	9.3777.3021	M16

Key block with screw for Quintus 1,2,3



Part no.	Slot [mm]
9.6153.5004	DIN 6322, 1 off
	14

T-nut with screw for Quintus 1,2,3



Part no.	Slot [mm]
9.6153.5005	DIN 508, 4 off
	14

Operation

Torque wrench



Type	Part no.	Torque [Nm]
MC 40 / 60	9.3583.7010	5– 60
MC 100 Fixed jaw	9.3583.7010	5– 60
MC 100 Concentric	9.3792.6610	20–120
MC 125	9.3792.6620	40–200

Socket for torque wrench



Type	Part no.	SW
MC 40 Fixed jaw	1.3124.0103	6
MC 40 Concentric	1.3124.0025	10
MC 60 Fixed jaw	1.3124.0104	8
MC 60 Concentric	1.3124.0021	12
MC 100 Fixed jaw	1.3124.0024	12
MC 100 Concentric	1.3124.0020	14
MC 125	1.3124.0019	19
MC 125 Z Compact	1.3124.0017	17

Allen wrench for fixing screws and jaw inserts



Type	Part no.	SW
MC 60	1.6911.0002	6
MC 100	1.6911.0003	8
MC 125	1.6911.0003	8

Accessories

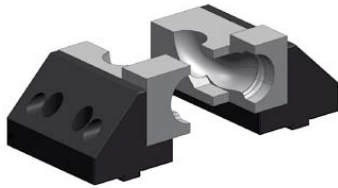
Workpiece-specific clamping jaws

Workpiece-specific clamping jaws

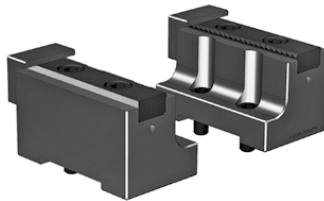
Delivery of customer-specific clamping jaws. Please contact us.

Examples

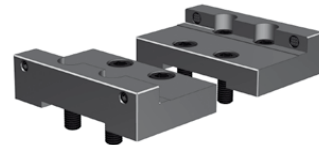
Base jaws with workpiece-specific formed jaws



Step jaws with jaw inserts and customer-specific workpiece stops



Step jaws for jaw inserts



Vee jaws with two workpiece-specific location areas



Vee jaws with customer-specific height centring



Application example



MC 125 Z Compact with workpiece-specific base jaws and formed jaws.
The base jaws can also be designed for the location of standard clamping bars and QIS jaw inserts.