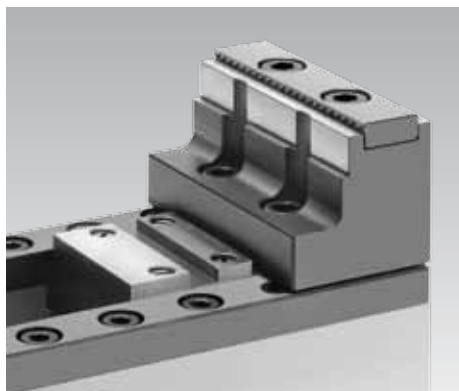


## Accessories for Workholding Systems MC

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

#### Clamping jaws / jaw inserts



#### Scope of delivery - clamping jaws

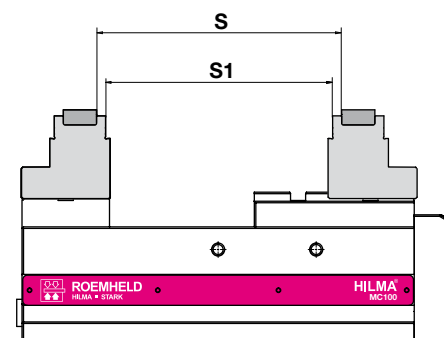
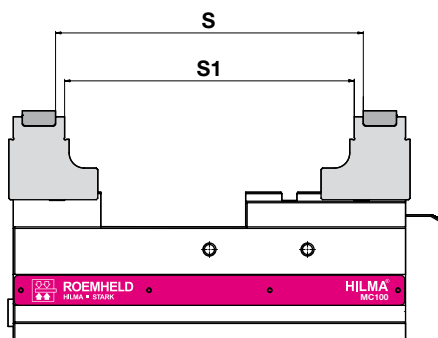
All clamping jaws are supplied with fixing screws. Clamping jaws with interchangeable jaw inserts and fixing screws for the jaw inserts are included in the delivery.

#### Important notes

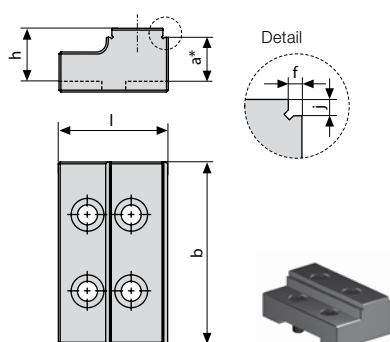
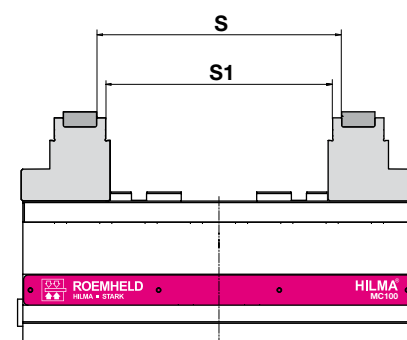
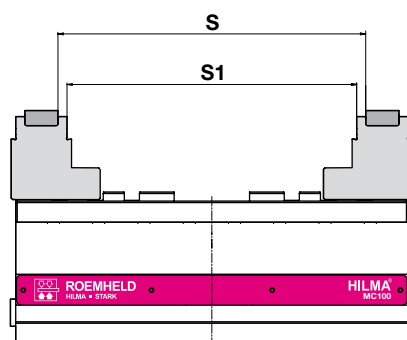
- Technical information and recommendations for use for jaw inserts: see page 4 as well as data sheet [WS 12-SE](#)
- Accessories for rapid change block Quintus: see data sheet [WS 5.6150](#)

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

#### Series MC Fixed jaw



#### Series MC Concentric



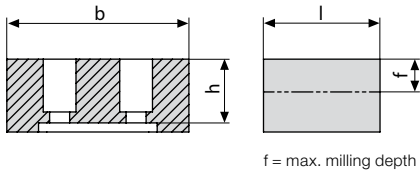
#### Reversible jaws with step hardened

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

\* Tolerance ±0.01 mm

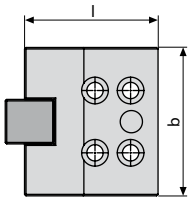
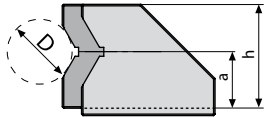
## Accessories

### Clamping jaws / jaw inserts



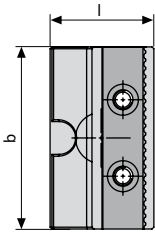
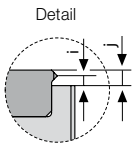
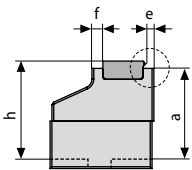
#### Block jaws, soft for milling workpiece contours

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



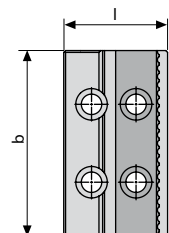
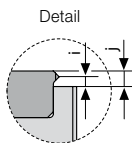
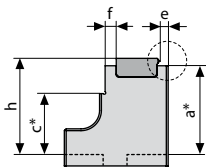
#### Vee jaws with jaw insert hardened

Type	Part no.	Dimensions [mm]										Clamping range [mm]		
		l	b	h	a	e	f	i	j	k	S	S1		
<b>MC 60</b>	<b>9.3583.6905</b>	60	60	70	40								D 10-76	
<b>MC 100</b>	<b>9.3585.6905</b>	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		
<b>MC 100</b>	<b>9.3585.6904</b>	56	100	54	50	4.5	6	2.5	4				12-204	
<b>Jaw insert</b>	<b>5.5050.0542</b>													
<b>MC 125</b>	<b>9.3586.6904</b>	88	125	66	62	4.5	6	2.5	4				12-400	
<b>Jaw insert</b>	<b>5.5050.0509</b>													



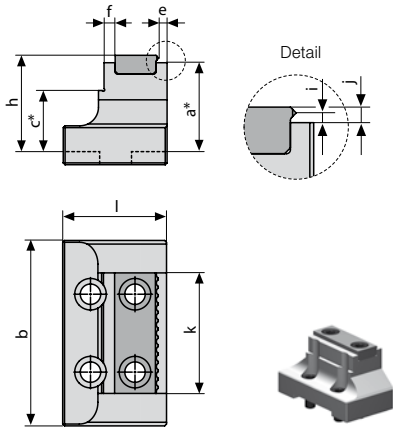
#### Step jaws with jaw insert grip/smooth, hardened

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

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

## Accessories

### Clamping jaws / jaw inserts

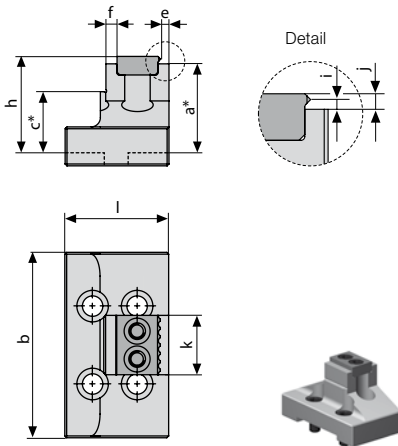


#### Step jaws with jaw insert

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
<b>MC 60</b>	<b>9.3583.6907</b>	56	60	34	30*	(1)	4.5	6	2.5	4	35	12-126	(1)
Jaw insert	<b>5.5050.0545</b>												
<b>MC 100</b>	<b>9.3585.6907</b>	56	100	54	50*	35*	4.5	6	2.5	4	65	12-204	44-192
Jaw insert	<b>5.5050.0471</b>												
<b>MC 125</b>	<b>9.3586.6907</b>	88	125	66	62*	42*	4.5	6	2.5	4	80	12-400	96-388
Jaw insert	<b>5.5050.0547</b>												

\* Tolerance  $\pm 0.01$  mm  
(1): Jaw without step

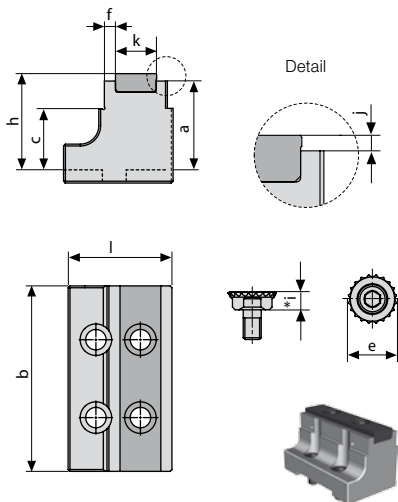


#### Step jaws with jaw insert

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
<b>MC 100</b>	<b>9.3585.6908</b>	56	100	54	50*	35*	4.5	6	2.5	4	32	15-204	44-192
Jaw insert	<b>5.5050.0470</b>												

\* Tolerance  $\pm 0.01$  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
<b>MC 100</b>	<b>9.3585.6910</b>	59	100	54	50*	35*	6	4				18-204	6-192
Jaw insert	<b>5.5050.0523</b>										22		
Round insert	<b>5.5050.0464</b>						27	10					
<b>MC 125</b>	<b>9.3586.6910</b>	91	125	66	62*	42*	6	4				18-406	6-394
Jaw insert	<b>5.5050.0660</b>										28		
Round insert	<b>5.5050.0486</b>						33	12					

## 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
<b>MC 60</b>	<b>9.3297.8093</b>	170 x 130 x 32

## Interchangeable jaw inserts

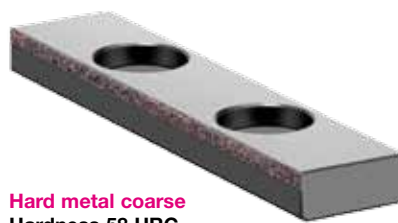
see also: data sheet WS 12-SE Technical information "Jaw inserts for clamping jaws"

### 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.
<b>MC 60</b>	<b>Jaw width 60</b>	<b>Jaw width 35</b>	
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	
<b>MC 100</b>	<b>Jaw width 100</b>	<b>Jaw width 65</b>	<b>Jaw width 32</b>
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
<b>MC 125</b>	<b>Jaw width 125</b>	<b>Jaw width 80</b>	
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	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]
<b>Quintus 1/2/3</b>	<b>9.6153.5001</b>	D30 g6	15/38
	<b>9.6153.5002</b>	D32 g6	15/38
	<b>9.6153.5003</b>	D50 g6	25/48
	<b>9.6153.5009</b>	D50 g6	18/41

**Draw-in nipple**  
assembly at the clamping system



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

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



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

**Clamping claws**  
Set of 4 off including screws



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

**Key block**  
with screw for Quintus 1,2,3



Part no.		Slot [mm]
<b>9.6153.5004</b>	DIN 6322, 1 off	14

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



Part no.		Slot [mm]
<b>9.6153.5005</b>	DIN 508, 4 off	14

### Operation

**Torque wrench**



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

**Socket**  
for torque wrench



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

**Allen wrench**  
for fixing screws and jaw inserts



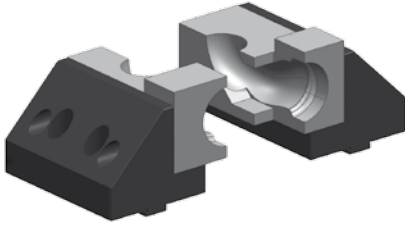
Type	Part no.	SW
<b>MC 60</b>	<b>1.6911.0002</b>	6
<b>MC 100</b>	<b>1.6911.0003</b>	8
<b>MC 125</b>	<b>1.6911.0003</b>	8

## Workpiece-specific clamping jaws

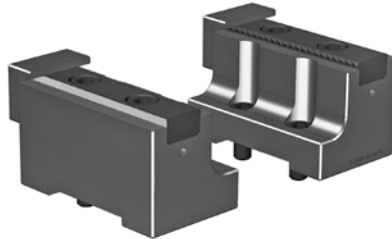
Delivery of customer-specific clamping jaws. Please contact us.

### Examples

Base jaws with workpiece-specific formed jaws



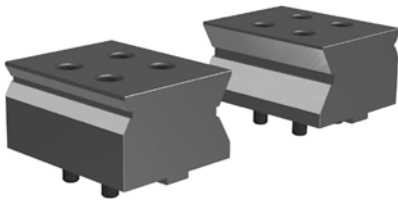
Step jaws with jaw inserts and customer-specific workpiece stops



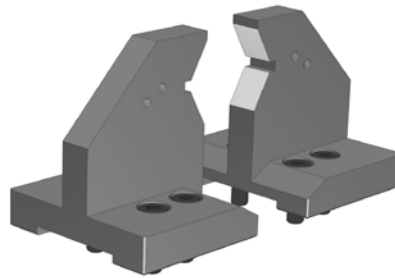
Step jaws for jaw inserts



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.