



TOMBSTONES FOR HORIZONTAL MACHINING

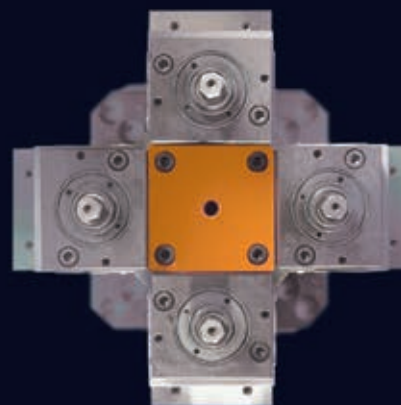
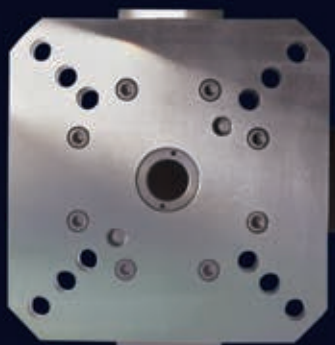
In addition to our standard products, ALLMATIC offers a wide range of customised solutions, each of which can be individually tailored to your machine, workpiece and machining techniques.

The majority of these solutions are monoblocs and set-ups.

- Monoblocs are made from a single piece, are long-time gas nitrated and ground and polished on all sides. This ensures a very high stability and produces optimal machining results.
- Set-ups are tombstones comprising several standard vices.

The base plates are suitably adapted to ensure exact positioning on the machine table or on a pallet. According to your requirements, we can manufacture base plates with an elevation, with a different spacing of the mounting holes, with a centering mechanism (possibly with a second index) or with a JIS stop system.

To give you even greater flexibility, we will manufacture special clamping jaws adapted to the geometry of your workpieces. Similarly, in customised solutions, the clamping force of the spindles can be adapted to suit your machining requirements. In addition to the set-ups for conventional clamping, we can also offer you solutions for clamping unmachined parts. For this, we employ the functions of our tried and tested T-REX, TITAN and DUO Plus 125 vices.



The set-ups described on the following pages are just a few examples of already realised clamping solutions. We shall be pleased to provide you with a customised solution – let us know your requirements!

MONOBLOC – 3 x 120° SINGLE TITAN 2

Scope of application:

- Modular clamping system for horizontal machining centres

Product features:

- High stability from base cast as one piece-maximum precision or workpiece machining
- Very good accessibility, even with large workpieces
- Conventional clamping, gripper clamping or pull-down clamping are all possible (see TITAN 2)
- High-pressure spindle with mechanical power-transfer device
- Stepless adjustment of the clamping force with torque wrench
- Individual adaptation to your machine (pallet, traverses and workpieces) is possible
- Three clamping points permit three-sided machining



Clamping is carried out using a torque wrench - max. 30 Nm

Accurate spindle nut guidance

Inductively hardened, ground and polished guideway

Rigid spindle nut

Robust base made of GGG 60


M8 thread for workpiece stop

Base plate can be adapted to suit your requirements

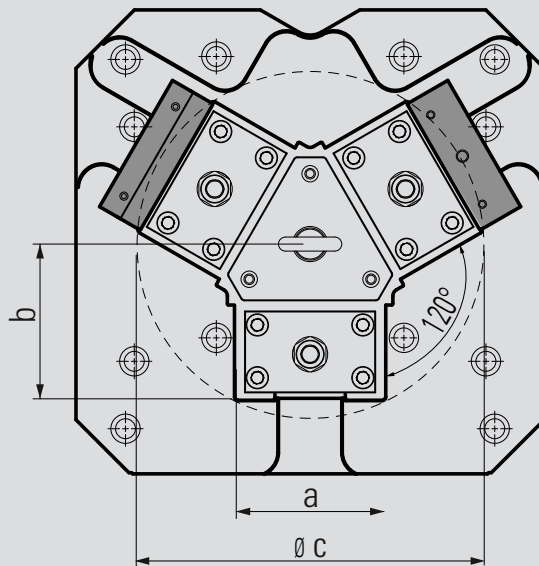
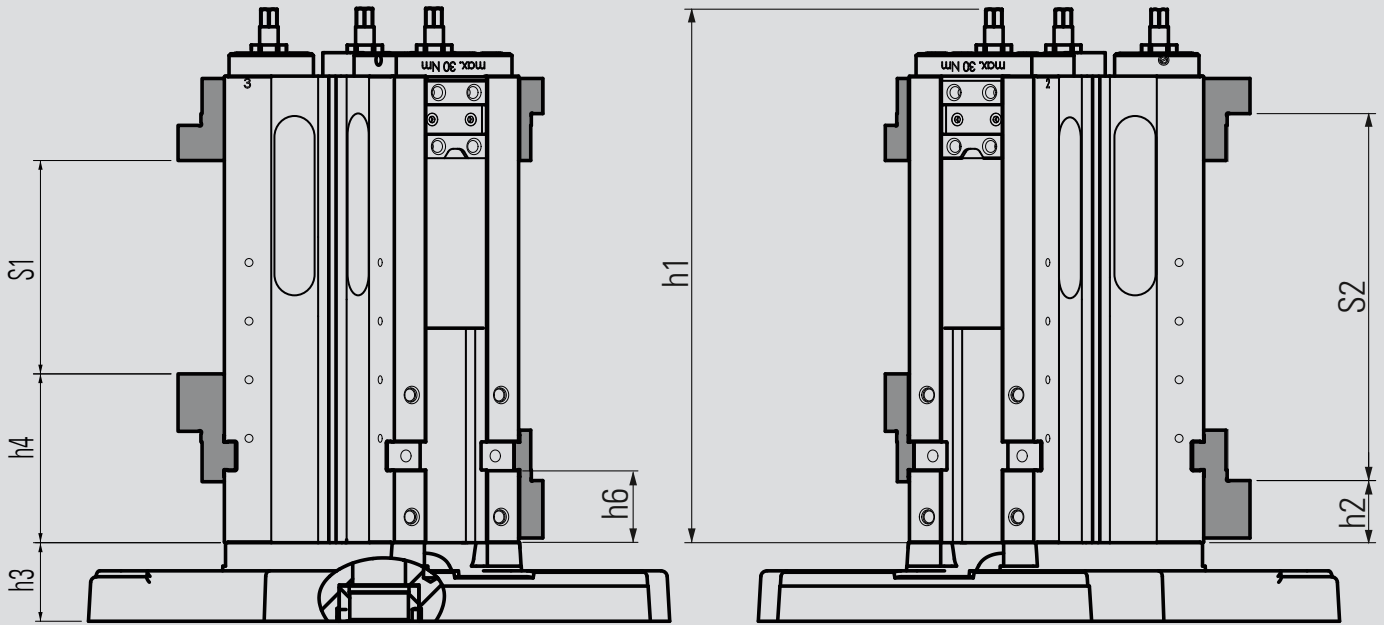
Order no.: available on request

Scope of supply:

- Monobloc without jaws
- 3 socket screw wrench
- Hexagonal insert for torque wrench, 3/8"

 The Monoblock, type TITAN 2, is also available with the LC/TC spindle (see version LC/TC, photos on page 28)

An overview of the clamping jaws and other accessories is given in the section: Accessories for the ALLMATIC TITAN 2 K-M-L.



Technical data

Jaw width TITAN 2 M	125	
Dimensions in mm	a	126
	b	132
	c (swing circle)	dia. 300
	h1	456
	h2	53
	h3	67
	h4	144
h5	62	

Jaw width with step jaws	125
Clamping width S1 in mm	0 – 182
Clamping width S2 in mm	131 – 313
Max. torque in Nm	30
Max. clamping force in kN	40

MONOBLOC – 4 x 90° SINGLE

Scope of application:

- Modular clamping system for horizontal machining centres

Product features:

- Base gives high stability and extreme accuracy for your machining
- Clamping force can be preset in 4 to 11 increments. At most, two revolutions are required to reach the max. clamping force
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm
- Individual adaptation to your machine (pallet, traverses and workpieces) is possible
- Four clamping points permit three-sided machining



Clamping force presetting

Robust base
made of GGG 60

Connecting thread for
angular drive

Hardened,
ground and polished
guideway

M8 thread for work-
piece stop

Base plate can be
adapted to suit your
requirements

Important:

- Type 90: drive head with finer clamping force presetting for sensitive workpieces (11 increments)
- Type 125: drive head with clamping force presetting in 4 increments



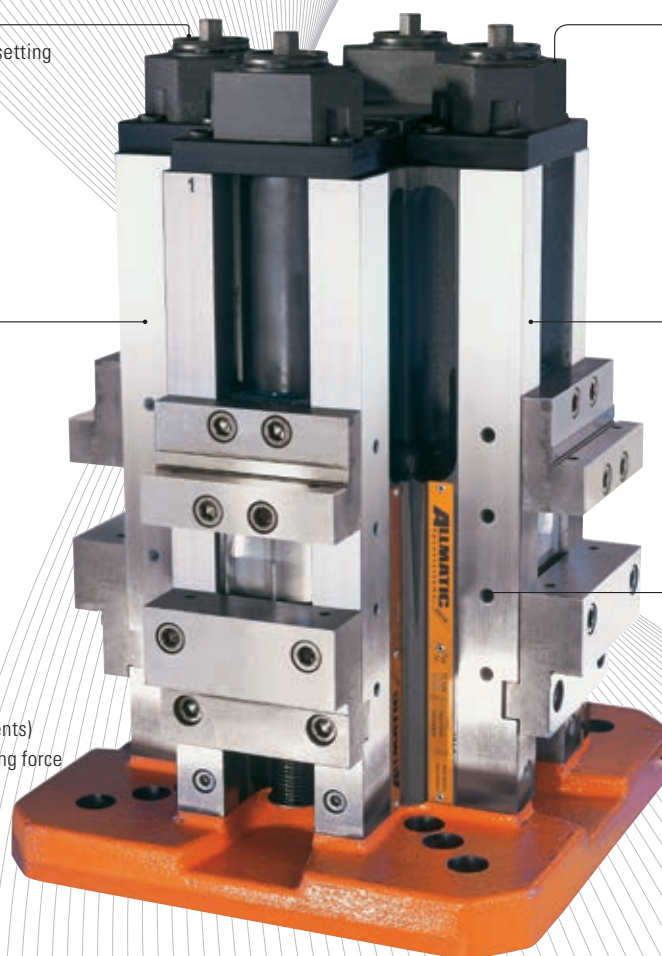
The monobloc, type 125, is also available with gripper spindle (see TITAN 2 version, photos on p.90)

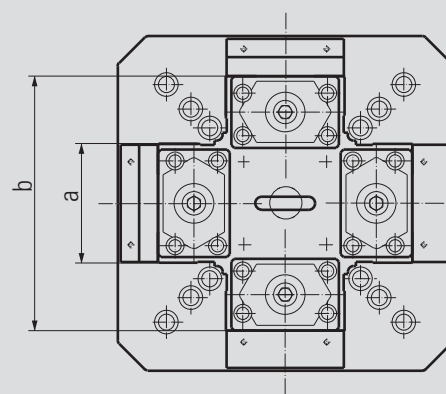
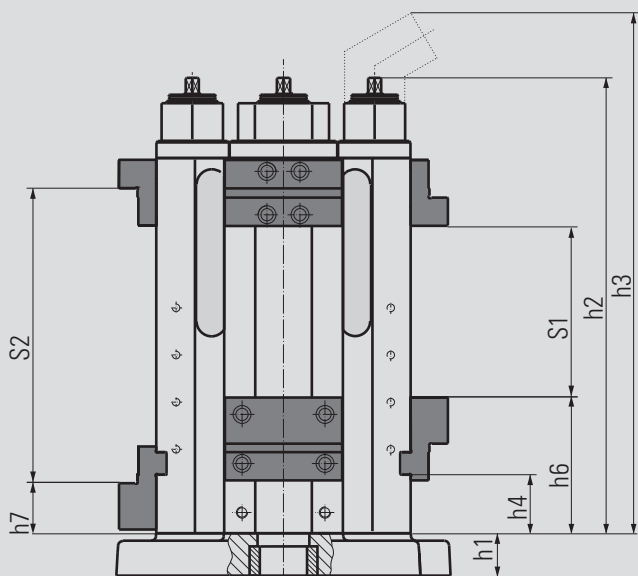
Order no.: on request

Scope of supply:

- Monobloc with step jaws
- 1 hand crank
- Socket screw wrench

An overview of the clamping jaws and other accessories is given in the section: Accessories ALLMATIC NC – mechanical / TC.





Technical data

Jaw width		90	125
Dimensions in mm	a	90	126
	b	220	270
	h1	min. 45	min. 45
	h2	340	483
	h3	403	452
	h4	39	62
	h6	97	144
	h7	37	53

Jaw width	90	125
Clamping range S1 in mm	0 – 126	0 – 182
Clamping range S2 in mm	91 – 217	131 – 313
Clamping force levels	11	4
Max. clamping force in kN	28	40

MONOBLOC – 4 x 90° DUO 90

Scope of application:

- Modular clamping system for horizontal machining centres

Product features:

- Base gives high stability and extreme accuracy for your machining
- Clamping force can be preset in 4 to 6 increments
At most, two revolutions are required to reach the max. clamping force
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm
- Individual adaptation to your machine (pallet, traverses and workpieces) is possible
- Eight clamping points permit Three-sided machining



Clamping force presetting

Connecting thread for angular drive

Robust base made of GGG 60

Hardened, ground and polished guideway

M8 thread for workpiece stop

Base plate can be adapted to suit your requirements

Important:

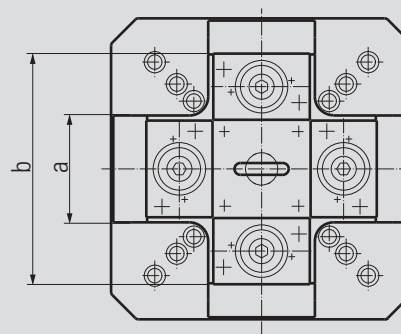
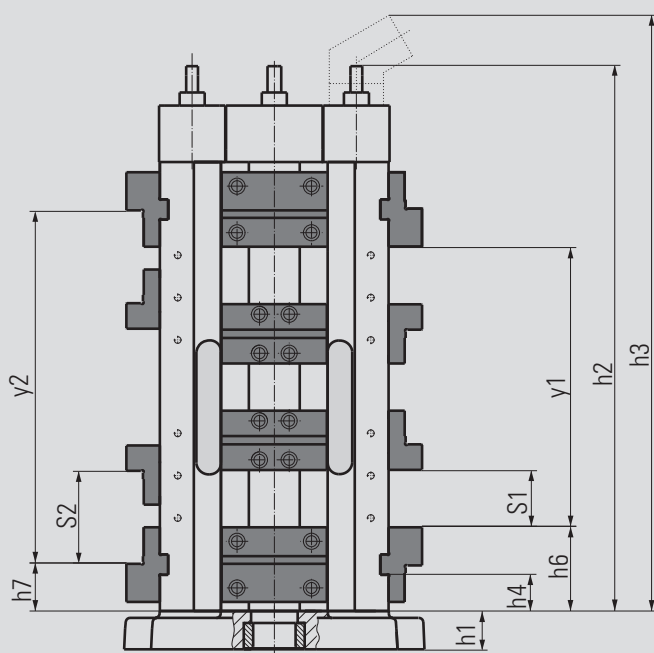
- Type 90: drive head with finer clamping force preselection for sensitive workpieces (6 increments)

Order no.: on request

Scope of supply:

- Monobloc with step jaws
- 1 hand crank
- Socket screw wrench

An overview of the clamping jaws and other accessories is given in the section: Accessories ALLMATIC NC – mechanical / DUO.



As an alternative to the star set-ups (see customised solutions), we offer the monobloc 4 x 90° DUO with a larger square dimension:

Technical data

Jaw width		90
Dimensions in mm	a	90
	b (square dimension)	220
	h1	min. 45
	h2	482
	h3	547
	h4	30
	h6	72
	h7	47
	y1	256
	y2	306

Jaw width		90
Clamping range S1 in mm		0 – 64
Clamping range S2 in mm		56 – 120
Clamping force increments		6
Max. clamping force in kN		28

Jaw width		90
Dimensions in mm	a	90
	b (square dimension)	326
	h1	min. 45
	h2	482
	h3	547
	h4	30
	h6	72
	h7	47
	y1	256
	y2	306

Jaw width		90
Clamping range S1 in mm		0 – 64
Clamping range S2 in mm		56 – 120
Clamping force increments		6
Max. clamping force in kN		28

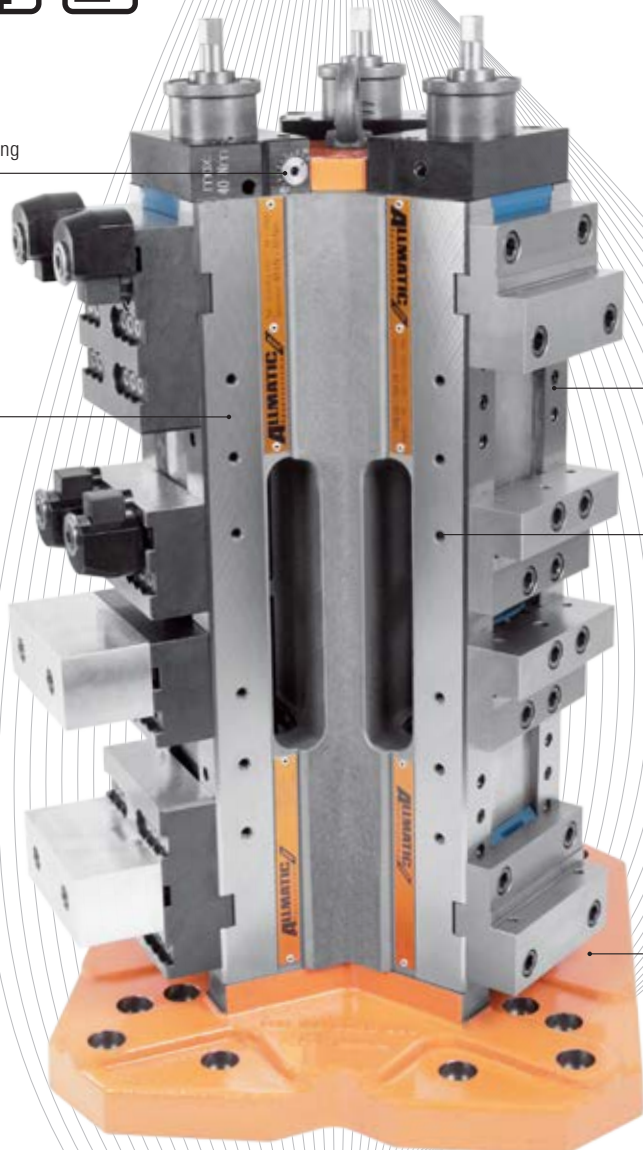
MONOBLOC – 3 x 120° DUO PLUS 125

Scope of application:

- Modular clamping system for horizontal machining centres

Product features:

- Base gives high stability and extreme accuracy for your machining
- Clamping width adjustment for clamping two workpieces of different sizes
- Reproducible clamping forces enable excellent repeating accuracy of the workpiece position
- Individual adaptation to your machine (pallet, traverses and workpieces) is possible
- Six clamping points



Clamping force presetting

Robust base
made of GGG 60

Hardened,
ground and polished
guideway

M8 thread for work-
piece stop

Base plate can be
adapted to suit your
requirements

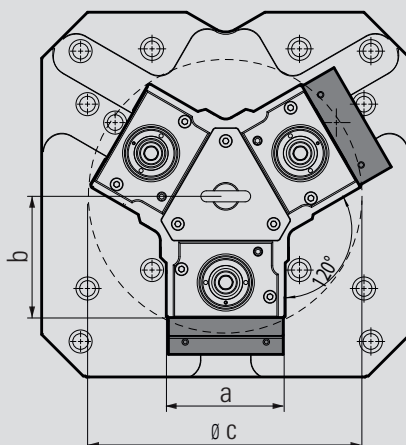
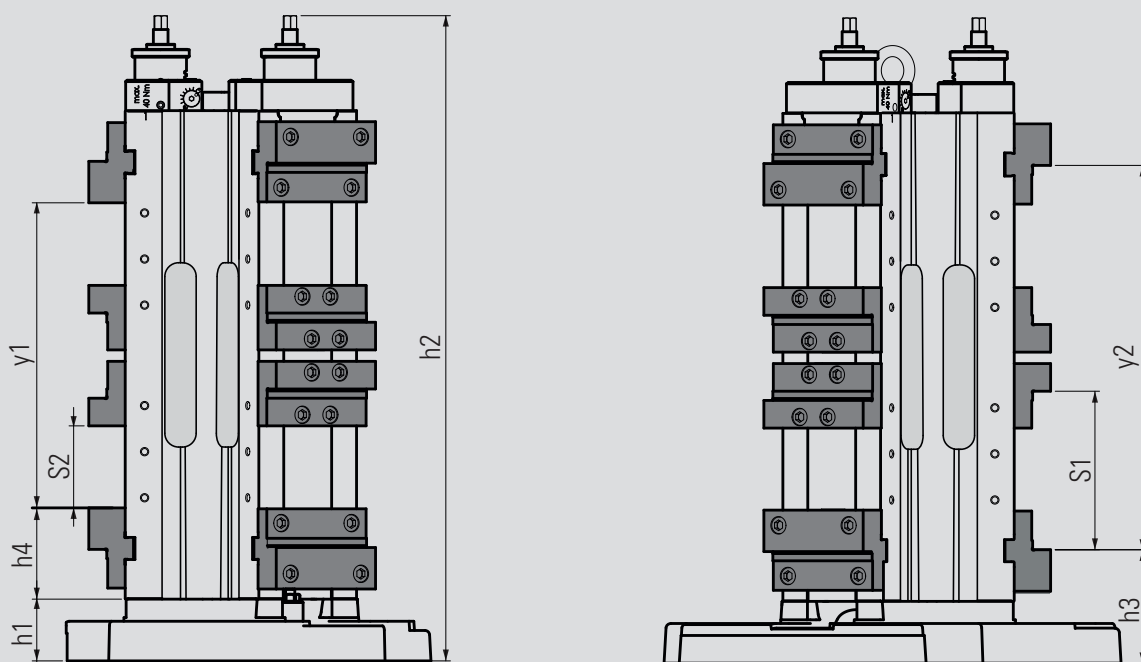
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Scope of supply:

- Monobloc without jaws
- 1 hand crank
- Socket screw wrench

Note:

Delivery does not include a torque wrench. An overview of the clamping jaws and other accessories is given in the section: Accessories ALLMATIC NC – mechanical / DUO Plus.



Technical data

Jaw width		125
Dimensions in mm	a	126
	b	132
	c (swing circle)	dia. 300
	h1	67
	h2	700
	h3	123
	h4	99
	y1	331
y2	417	

Jaw width with step jaws	125
Clamping range S1 in mm	0 – 89*
Clamping range S2 in mm	43 – 172*
Max. clamping force in kN	28

* When using step jaws without clamping width adjustment

MONOBLOC – 4 x 90° DUO PLUS 125

Scope of application:

- Modular clamping system for horizontal machining centres

Product features:

- Base gives high stability and extreme accuracy for your machining
- Clamping width adjustment for clamping two workpieces of different sizes
- Reproducible clamping forces enable excellent repeating accuracy of the workpiece position
- Individual adaptation to your machine (pallet, traverses and workpieces) is possible
- Eight clamping points



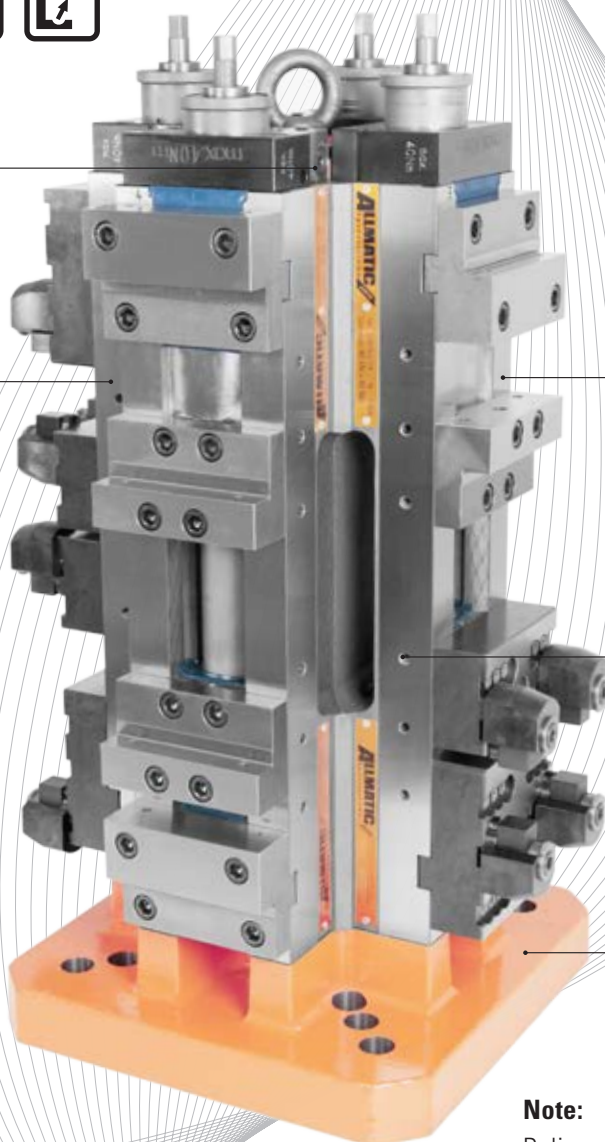
Setting and adjusting the spindle position

Robust base

Hardened, ground and polished guideway

M8 thread for workpiece stop

Base plate can be adapted to suit your requirements



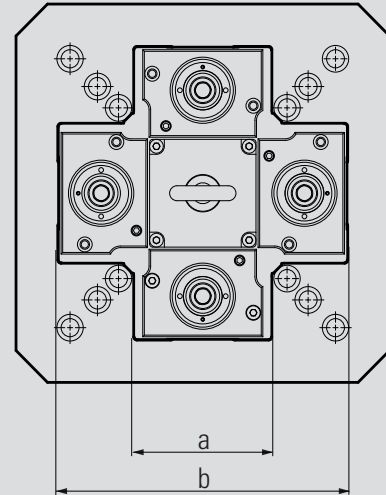
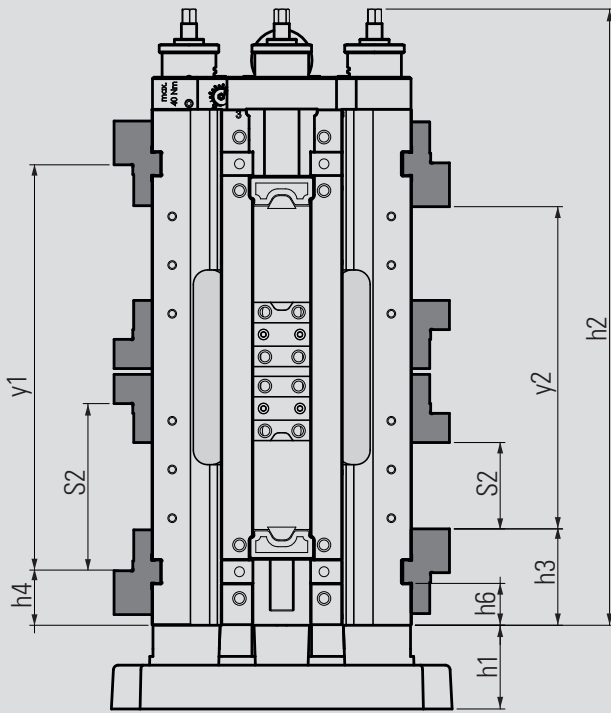
Order no.: on request

Scope of supply:

- Monobloc without jaws
- 1 wrench socket WS 14
- 3 socket screw wrenches

Note:

Delivery does not include a torque wrench. An overview of the clamping jaws and other accessories is given in the section: Accessories ALLMATIC NC – mechanical /DUO Plus.



As an alternative to the star set-ups (see customised solutions), we offer the monobloc 4 x 90° DUO Plus with a larger square dimension:

Technical data

Jaw width		125
Dimensions in mm	a	126
	b (square dimension)	270
	h1	min. 86
	h2	633
	h3	99
	h4	56
	h6	43
	y1	417
	y2	331

Jaw width with step jaws		125
Clamping range S1 in mm		0 – 89 *
Clamping range S2 in mm		43-172 *
Max. clamping force in kN		40

* When using step jaws without clamping width adjustment

Jaw width		125
Dimensions in mm	a	126
	b (square dimension)	360
	h1	min. 86
	h2	633
	h3	99
	h4	56
	h6	43
	y1	417
	y2	331

Jaw width with step jaws		125
Clamping range S1 in mm		0 – 89 *
Clamping range S2 in mm		43-172 *
Max. clamping force in kN		40

The DUO Plus 125 monobloc offers a huge number of clamping possibilities (see DUO Plus p. 122). For exact details on the resulting clamping widths, see our clamping width calculator at:

www.allmatic.de

BACK-TO-BACK SET-UP

Scope of application:

- Modular clamping system for horizontal machining centres

Product features:

- Comprises standard Single (TC series) or DUO vices
- Clamping force increments can be preset. At most, two revolutions are required to reach the max. clamping force
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm
- Individual adaptation to your machine (pallet, traverses and workpieces) is possible
- Two or four clamping points permit 3-sided machining



Clamping force presetting

Connecting thread for angular drive

Robust base made of GGG 60

Hardened, ground and polished guideway

M8 thread for work-piece stop

Base plate can be adapted to suit your requirements



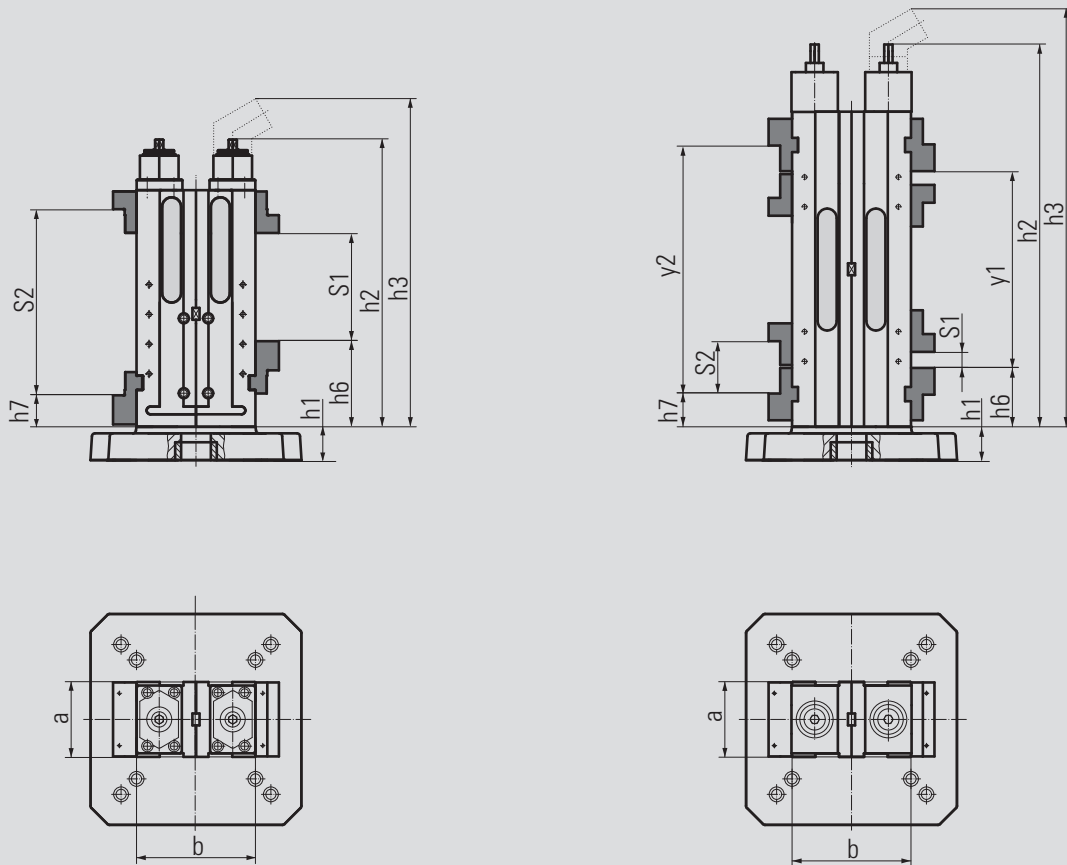
Order no.: on request

Scope of supply:

Back-to-back set-up Single / DUO

- 1 back-to-back set-up Single / DUO
- 1 hand crank
- Socket screw wrench

If you are interested in a Single or DUO back-to-back set-up, you will find an overview of the clamping jaws and other accessories in the respective section: Accessories ALLMATIC NC – mechanical / TC or DUO.



Technical data

Jaw width Single		90	125	160	200
Dimensions in mm	a	90	125	160	200
	b	160	200	230	280
	h1	min. 45	min. 45	min. 45	min. 74
	h2	340	483	615	615
	h3	403	552	683	683
	h6	97	144	164	164
	h7	37	53	56	56

Jaw width		DUO 90	DUO Plus 125
Dimensions in mm	a	90	125
	b	160	200
	h1	min. 45	min. 86
	h2	482	633
	h3	547	–
	h6	72	99
	h7	47	56
	y1	256	331
y2	306	417	

Type	90	125	160	200
Clamping range S1 in mm	0 – 126	0 – 182	17 – 263	17 – 263
Clamping range S2 in mm	91 – 217	131 – 313	189 – 435	189 – 435
Clamping force increments	11	4	4	4
Max. clamping force in kN	28	40	60	80

Type	DUO 90	DUO Plus 125
Clamping range S1 in mm	0 – 64	0 – 89 *
Clamping range S2 in mm	56 – 120	43-172 *
Clamping force increments	6	–
Max. clamping force in kN	28	40

* When using step jaws without clamping width adjustment

The DUO Plus 125 back-to-back set-up offers a huge number of clamping possibilities. For exact details on the resulting clamping ranges, see our clamping range calculator at:

www.allmatic.de