

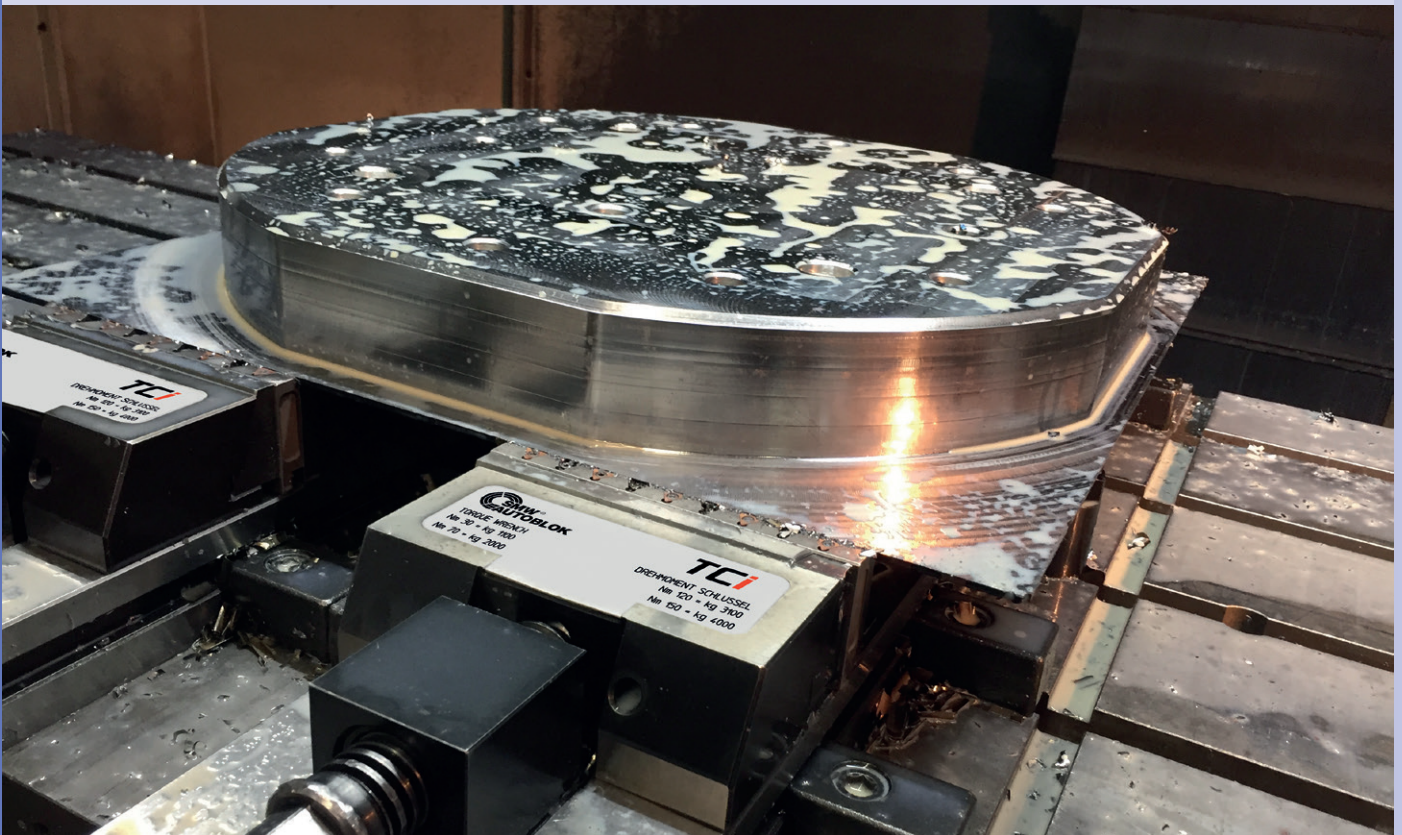


Precise machine vices from SMW-AUTOBLOK

Advantages:

- High constant clamping forces
- Maximum rigidity of the body
- Highest precision and accuracy
- Interfaces for zero point clamping system APS / WPS
- Economic efficiency and flexibility

High precision vices from SMW-AUTOBLOK ensures highest process reliability while machining and best handling. The large range of accessories guarantees the flexible use of the vices. The use of SinterGrip inserts allow lowest clamping depths without pre-marking and is ideal for OP 10 operations.



Precision Machine Vices



Page 166

TCi

Precision Bench Vice

- Quick pre-positioning for the movable jaw
- Pull down jaws
- Jaws for SinterGrip clamping
- Parallels quick change system CLAK
- Wide range of standard accessories
- Interface Zero point clamping system
Type APS / WPS (optional)



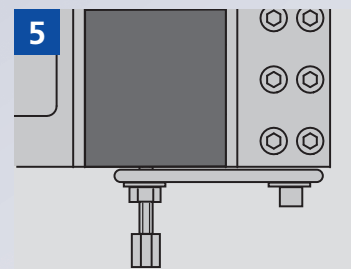
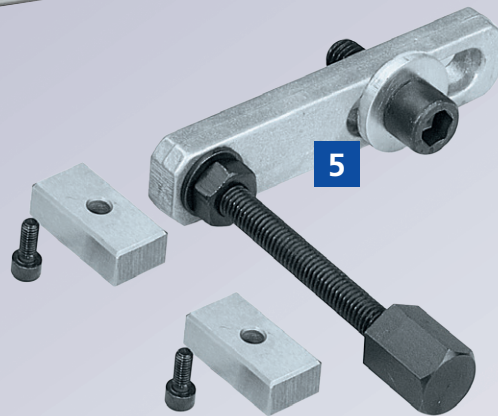
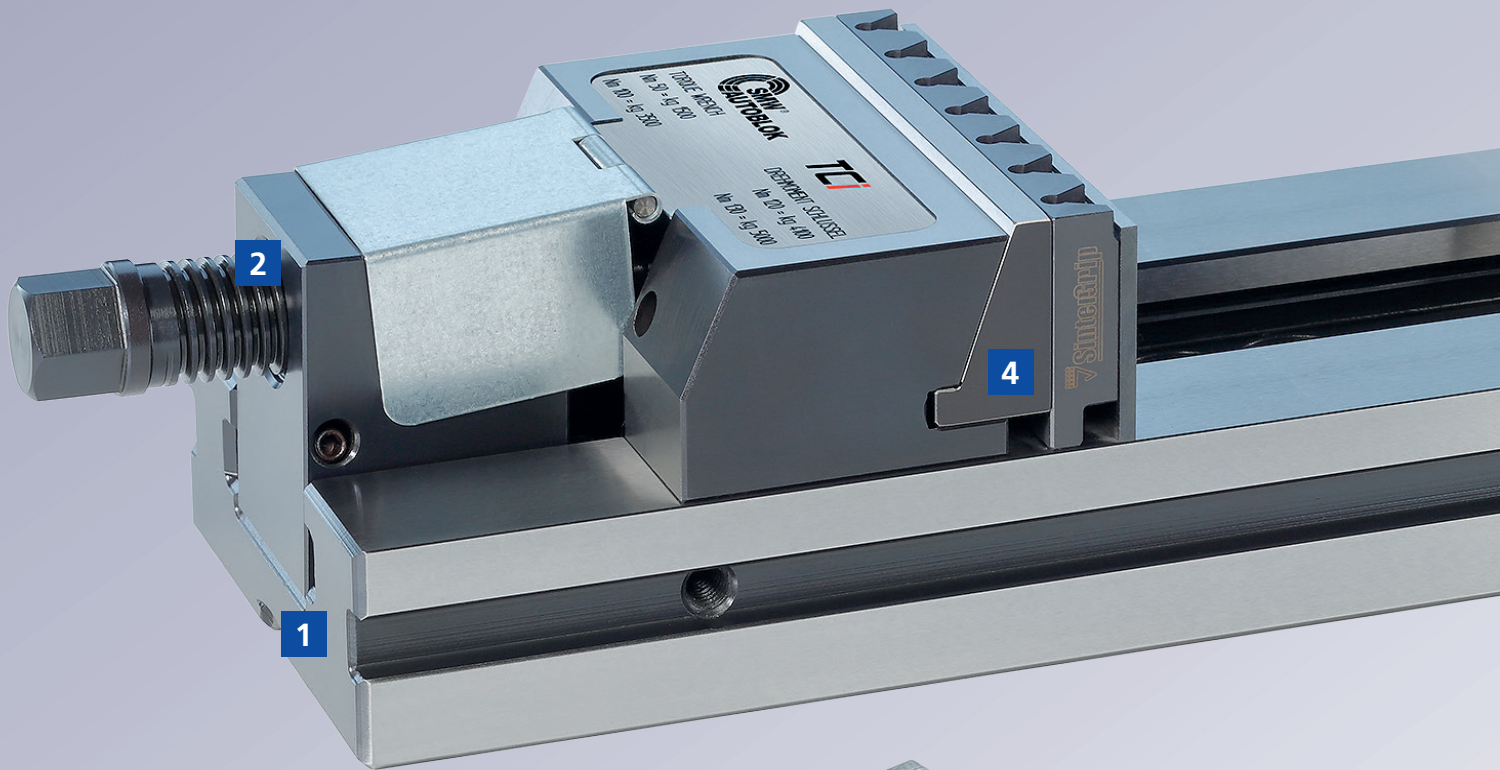
Page 178

TTi-2G

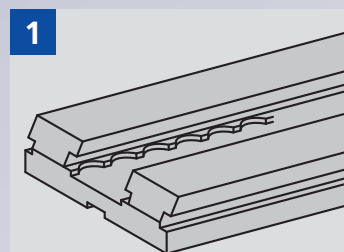
NC Clamping Vice

- Mechanical precise power transmitter
- Low maintenance sealed spindle
- Easy and quick cleaning
- Exact clamping force pre-adjustment (up to 11 steps)
- Standard jaw interface (Allmatic-interchangeable)
- Interface zero point clamping system
Type APS / WPS

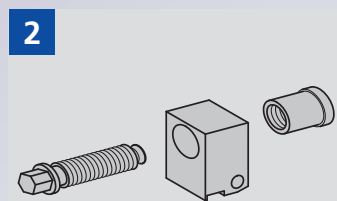
TCi Precision Bench Vice



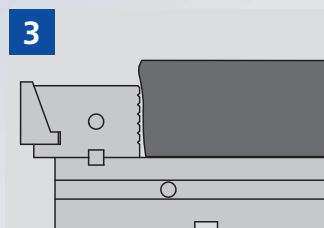
Workpiece stop



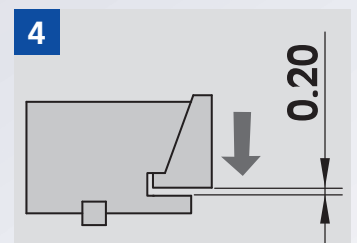
Quick positioning of the movable jaw



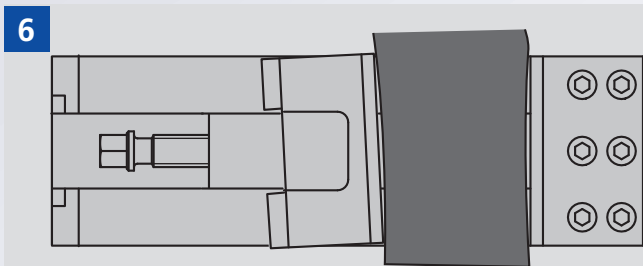
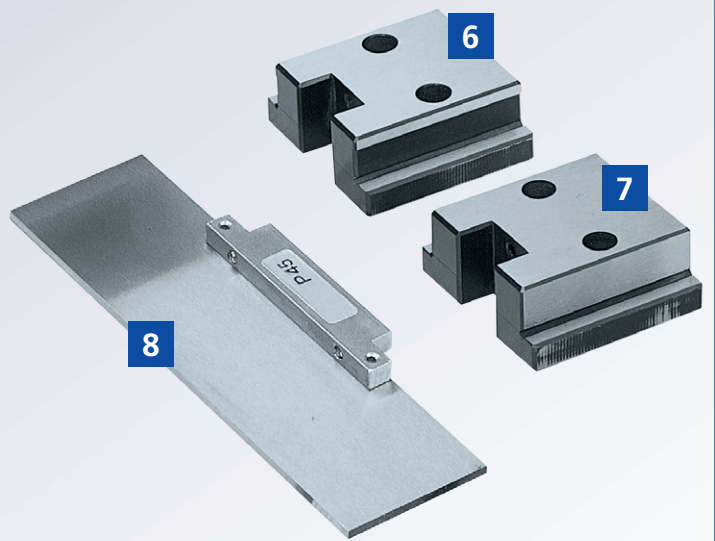
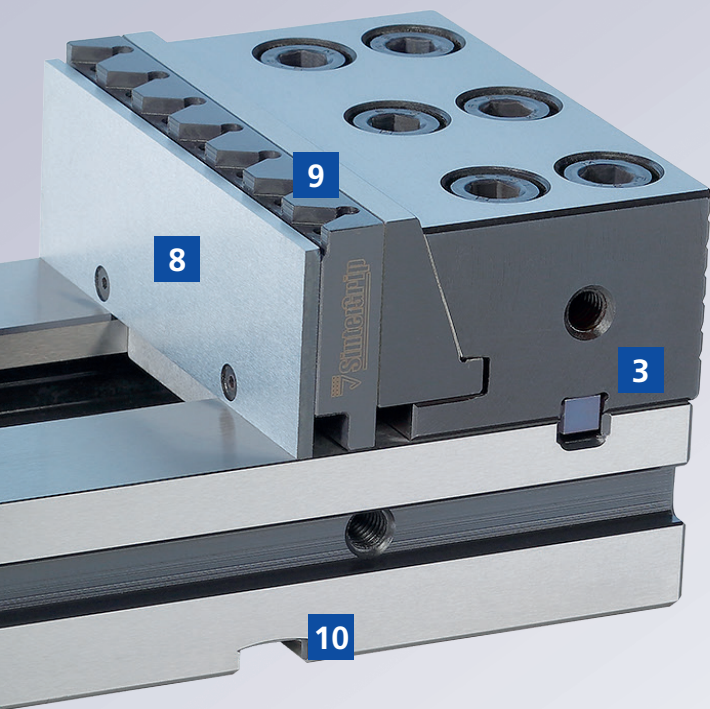
Block for clamping screw with threaded anti-friction bronze bushing



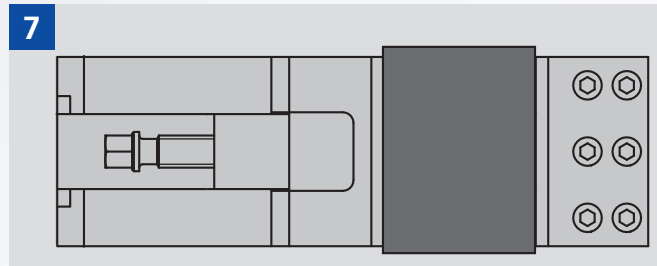
Fixed support turned of 180° (grooved part)



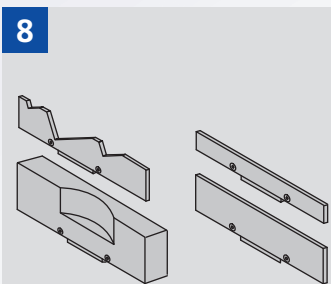
Pull-down jaws (Pull-down lockable)



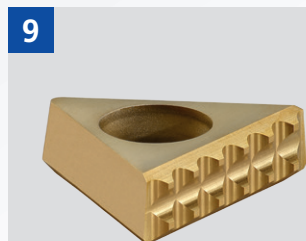
6 Floating slide-way raw workpieces



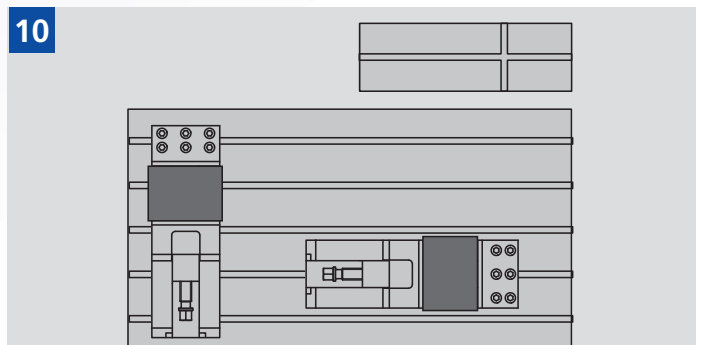
7 Rigid slide-way for finished workpieces



8 CLAK Quick change system for parallels

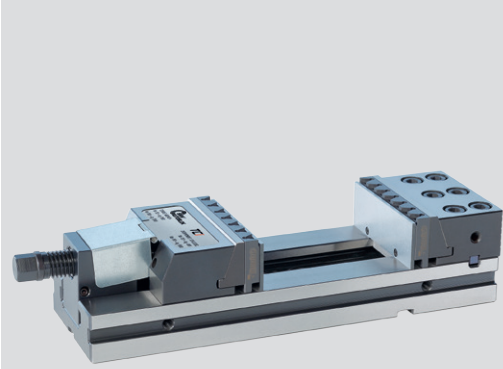


9 Jaws for SinterGrip clamping inserts



10 Precise T-slots for the assembling on the machine table by using positioning keys

- Quick positioning for the jaw
- Pull-down jaws with SinterGrip

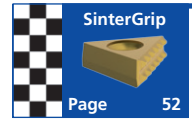


Application/customer benefits

- High precision bench vice
- Quick positioning for the movable jaw
- Pull-down jaws including the possibility to use them without pull down effect for OP 10 operations
- Easy and quick cleaning possible
- Maximum flexibility due to the wide range of accessories

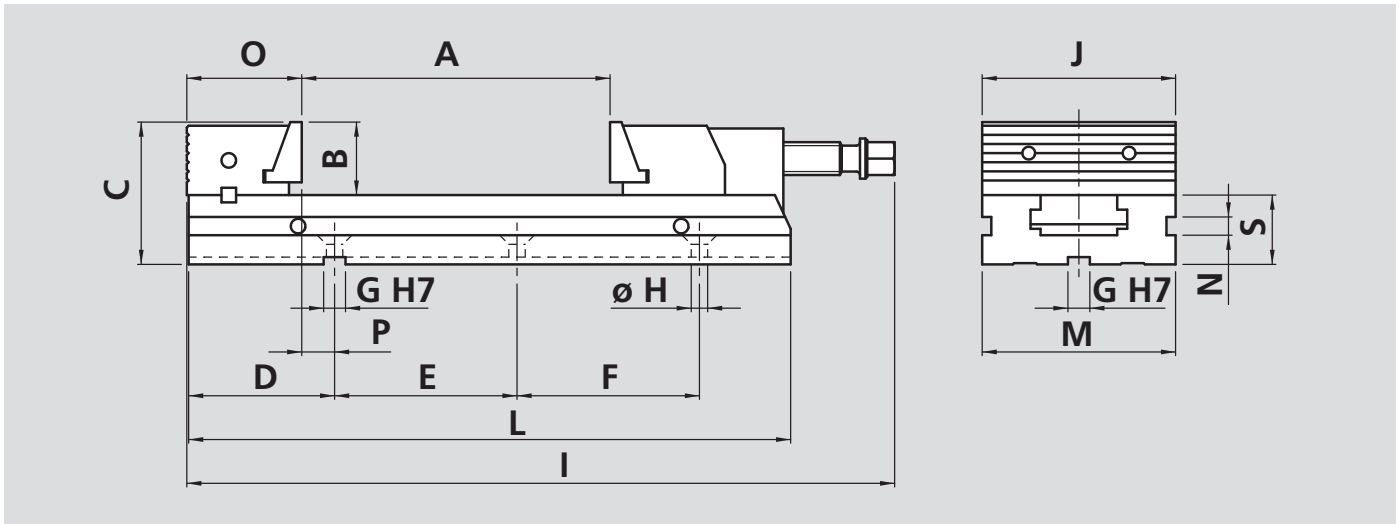
Technical features

- 3 different jaw sizes
- Pull-down jaws (0.2 mm), 180° turned with serrated clamping side for OP 10
- Parallel stripes with quick change „CLAK-System“ see page 176
- Optional: interface for zero point clamping systems APS / WPS (on request)



Standard equipment

TCi precision bench vice with clamping wrench, pull-down jaws, jaws for SinterGrip clamping inserts, workstop, protection cover for spindle, parallels with quick change „CLAK-System“, floating slide-ways, 1 pair positioning keys, transport box



Order review

Type	Id. No.	A	B	C	D	E	F	G	H	I	J	L	M	N	O	P	S	Weight kg
TCi 110x100	465000	100	40	78	80	150	-	12	9	338	110	280	110	10	63	18	38	11.5
TCi 110x150	465001	150	40	78	80	100	100	12	9	388	110	330	110	10	63	18	38	12.5
TCi 150x200	465002	200	50	98	114	200	-	18	12.5	481	150	413	150	13	85	30	48	27
TCi 150x250	465003	250	50	98	114	100	150	18	12.5	531	150	463	150	13	85	30	48	29
TCi 150x300	465004	300	50	98	114	100	100	18	12.5	588	150	520	150	13	85	30	48	31.5
TCi 200x300	465005	300	70	138	149	200	200	18	12.5	697	200	610	200	15.5	123	27	68	78
TCi 200x400	465006	400	70	138	149	150	150	18	12.5	797	200	710	200	15.5	123	27	68	86

Special sizes on request.

- Quick positioning for the jaw
- Extra long clamping range



Application/customer benefits

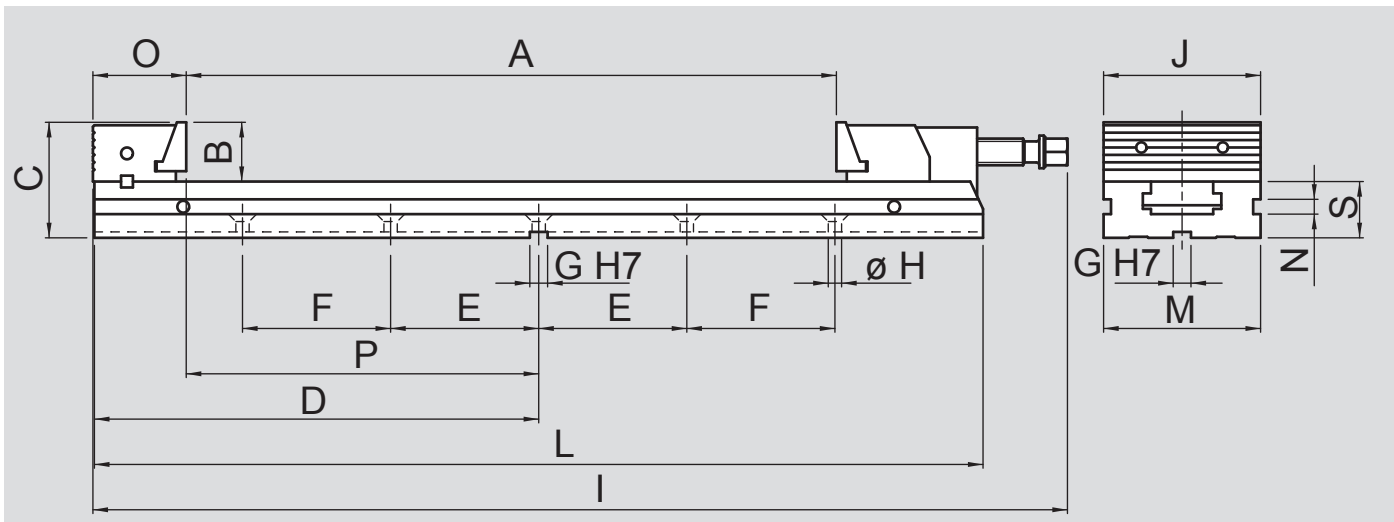
- High precision bench vice in extra long version
- Quick positioning for the movable jaw
- Pull-down jaws including the possibility to use them without pull down effect for OP 10 operations
- Easy and quick cleaning possible
- Maximum flexibility due to the wide range of accessories

Technical features

- 3 different jaw sizes
- Pull-down jaws (0.2 mm), 180° turned with serrated clamping side for OP 10
- Parallel stripes with quick change „CLAK-System“ see page 176
- Optional: interface for zero point clamping systems APS / WPS (on request)

Standard equipment

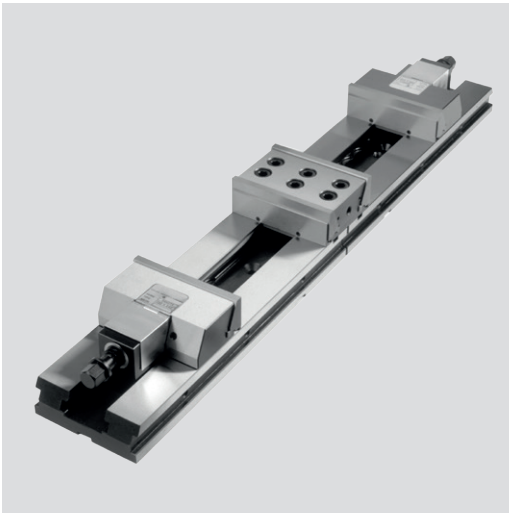
TCi-XL precision bench vice with clamping wrench, pull-down jaws, workstop, protection cover for spindle, parallels with quick change „CLAK-System“, floating slide-ways, 1 pair positioning keys, transport box



Order review

Type	Id. No.	A	B	C	D	E	F	G	H	I	J	L	M	N	O	P	S	Weight kg
TCi-XL 110x425	465100	425	40	78	300	100	100	12	9	658	110	600	110	10	63	238	38	18.2
TCi-XL 150x545	465101	545	50	98	379	100	150	18	12.5	825	150	758	150	13	85	298	48	40.0
TCi-XL 150x665	465102	665	50	98	439	100	200	18	12.5	946	150	878	150	13	85	355	48	44.7

- Quick positioning for the jaw
- Double clamping system



Application/customer benefits

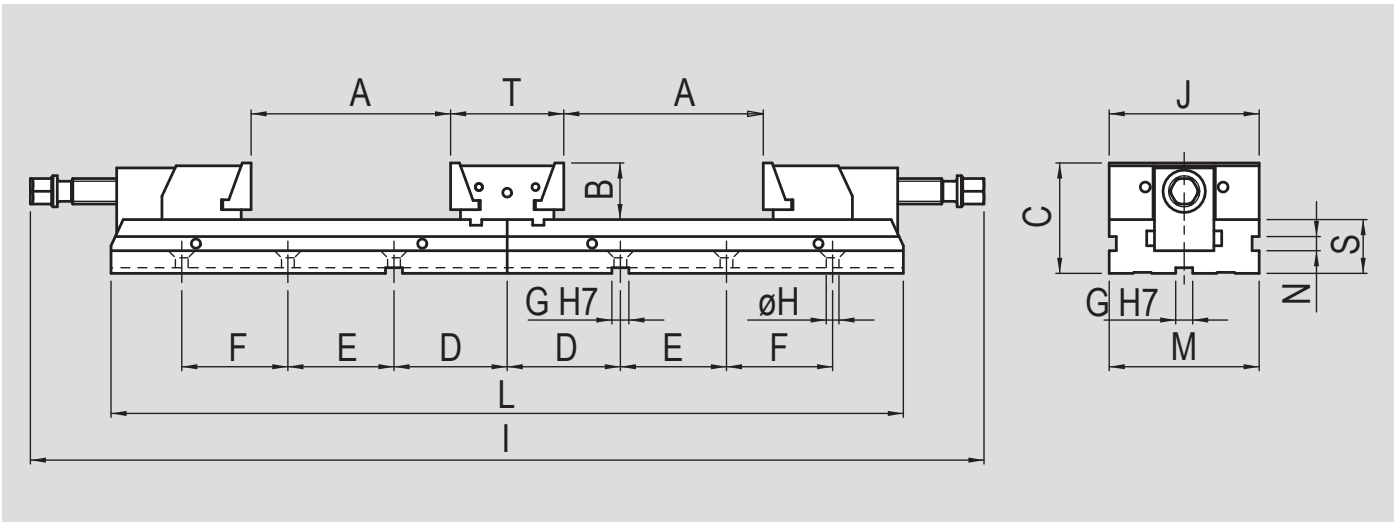
- High precision bench vice with double clamping system
- Quick positioning for the movable jaw
- Pull-down jaws including the possibility to use them without pull down effect for OP 10 operations
- Easy and quick cleaning possible
- Maximum flexibility due to the wide range of accessories

Technical features

- 3 different jaw sizes
- Pull-down jaws (0.2 mm), 180° turned with serrated clamping side for OP 10
- Parallel stripes with quick change „CLAK-System“ see page 176
- Optional: interface for zero point clamping systems APS / WPS (on request)

Standard equipment

TCi-DC precision bench vice with clamping wrench, pull-down jaws, workstop, protection cover for spindle, parallels with quick change „CLAK-System“, floating slide-ways, 1 pair positioning keys, transport box

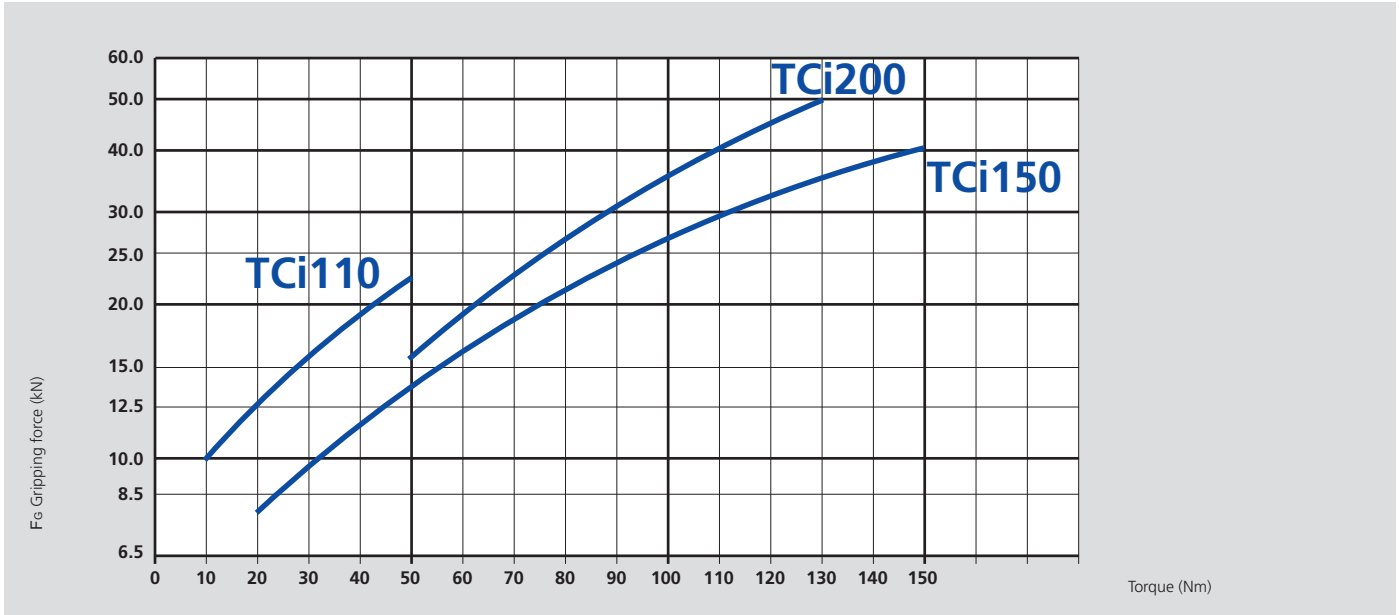


Order review

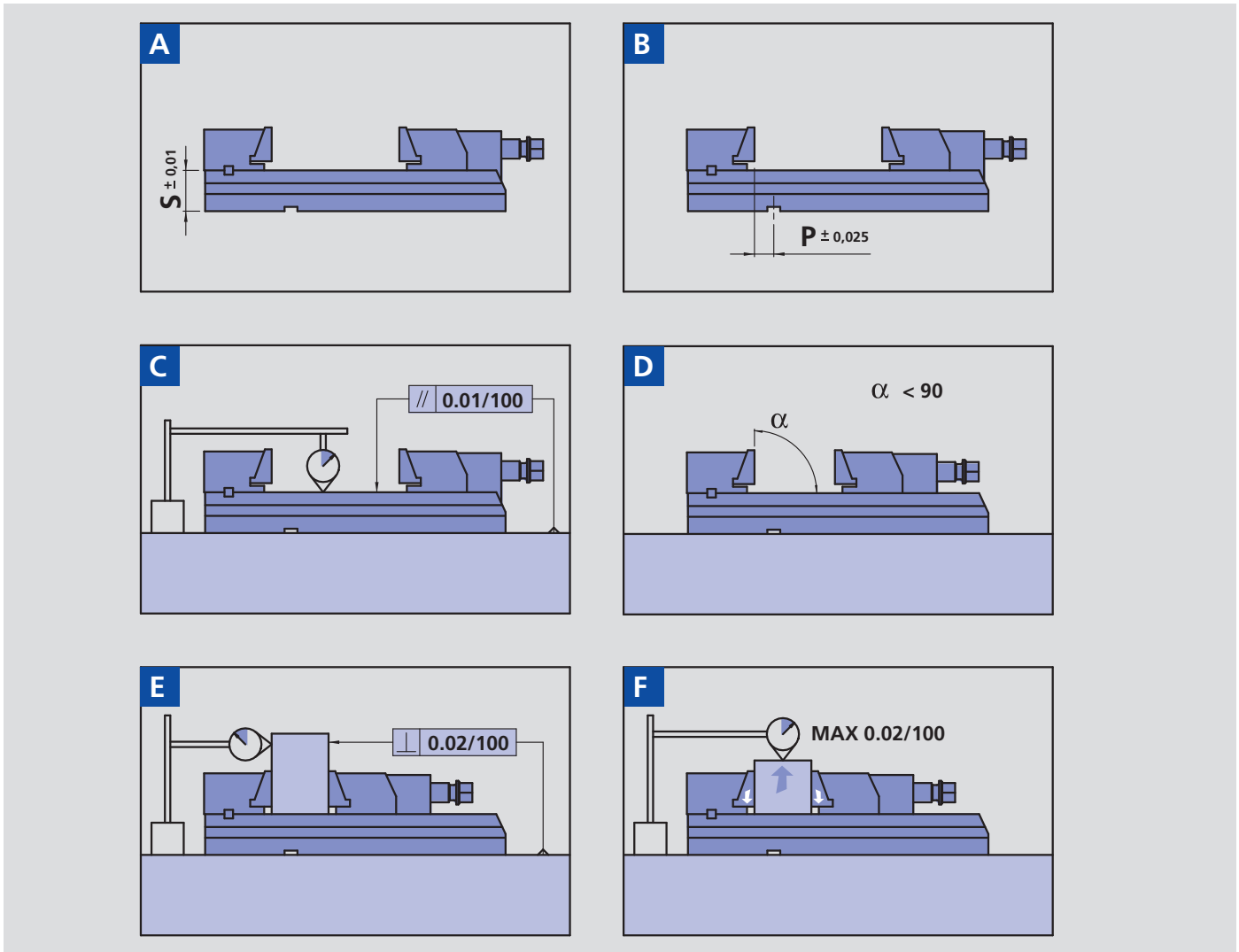
Type	Id. No.	A	B	C	D	E	F	G	H	I	J	L	M	N	S	T	Weight kg
TCi-DC 110x130	465103	130	40	78	80	150	-	12	9	676	110	56	110	10	38	80	22
TCi-DC 110x180	465104	180	40	78	80	100	100	12	9	776	110	660	110	38	80	24	24
TCi-DC 150x230	465105	230	50	98	116	200	-	18	12.5	966	150	830	150	13	48	108	52
TCi-DC 150x280	465106	280	50	98	116	100	150	18	12.5	1066	150	930	150	13	48	108	56
TCi-DC 200x280	465107	280	70	138	150	150	150	18	12.5	1294	200	1122	200	15.5	68	194	136
TCi-DC 200x330	465108	330	70	138	150	200	200	18	12.5	1394	200	1222	200	15.5	68	194	144

- Quick positioning for the jaw
- Modular system

Clamping force diagram

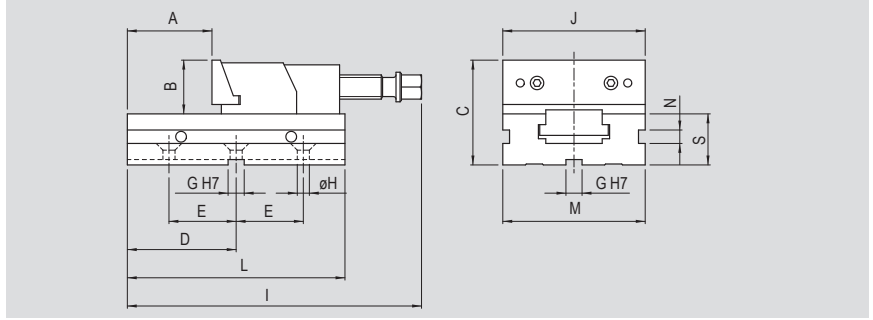
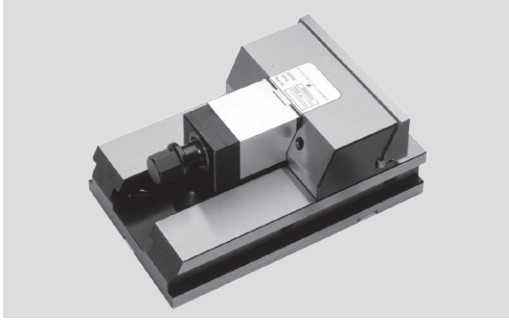


Form-, position- and dimensional tolerances for all clamping vices TCI



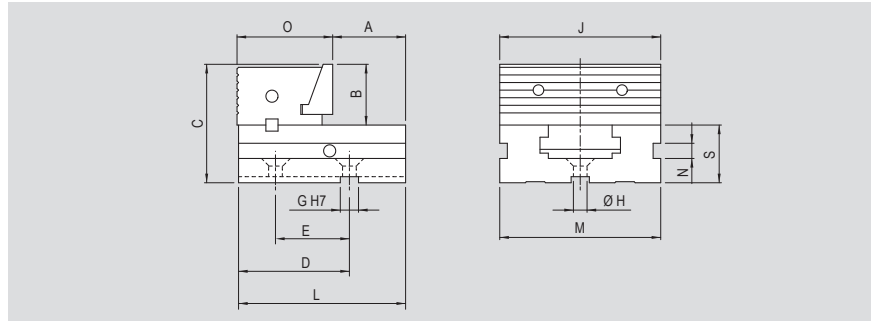
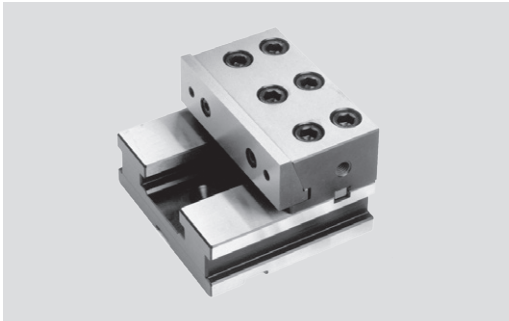
- Clamping unit, fix jaw and double jaw single unit
- Flexible application

TCi Clamping unit for flexible application



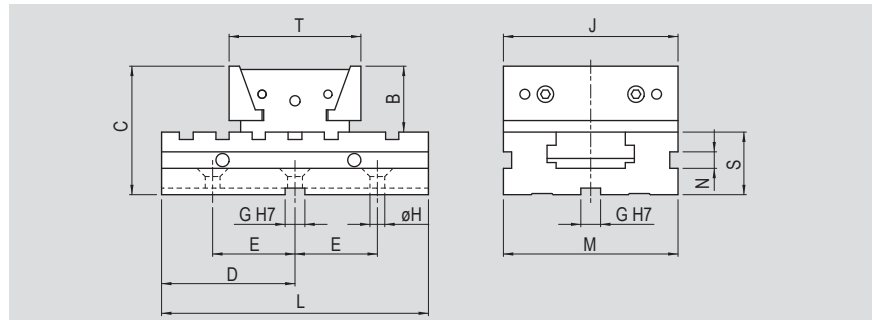
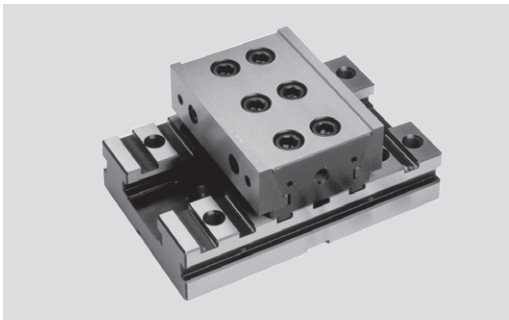
Type	Id. No.	A	B	C	D	E	G	H	I	J	L	M	N	S	Weight kg
TCi-110	465109	60	40	78	81	50	12	9	220	110	162	110	10	38	6.2
TCi-150	465110	100	50	98	114	75	18	12.5	295	150	228	150	13	48	15.1
TCi-200	465111	120	70	138	150	100	18	12.5	390	200	300	200	15.5	68	39.2

TCi Fix jaw unit for flexible application



Type	Id. No.	A	B	C	D	E	G	H	J	L	M	N	O	S	Weight kg
TCi-110	465112	58	40	78	80	50	12	9	110	120	110	10	63	38	4
TCi-150	465113	81	50	98	114	75	18	12.5	150	165	150	13	85	48	9
TCi-200	465114	82	70	138	149	100	18	12.5	200	205	200	15.5	123	68	28

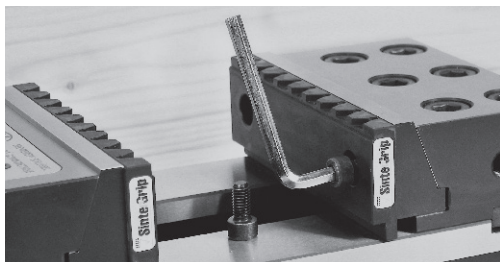
TCi Double jaw unit for flexible application



Type	Id. No.	B	C	D	E	G	H	J	L	M	N	S	T	Weight kg
TCi-110	465115	40	78	81	50	12	9	110	162	110	10	38	80	5.6
TCi-150	465116	50	98	114	75	18	12.5	150	228	150	13	48	108	13.5
TCi-200	465117	70	138	150	100	18	12.5	150	300	200	15.5	68	194	34.7

- Accessories
- Jaws

TCi jaws for SinterGrip clamping inserts



Type	Id. No.
TCi 110	465010
TCi 150	465011
TCi 200	465012

Consisting of
2 pieces jaws
without SinterGrip Inserts



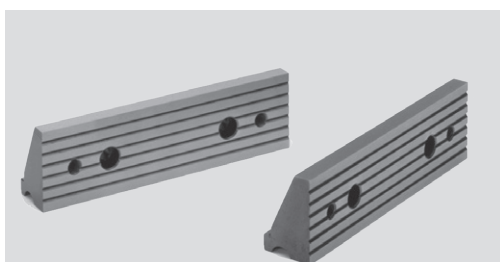
TCi Pull-down jaws smooth



Type	Id. No.
TCi 110	465013
TCi 150	465014
TCi 200	465015

Consisting of
2 pieces jaws

TCi Pull-down jaws serrated



Type	Id. No.
TCi 110	465016
TCi 150	465017
TCi 200	465018

Consisting of
2 pieces jaws

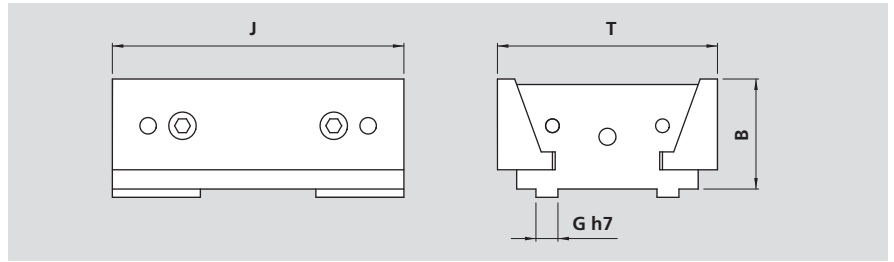
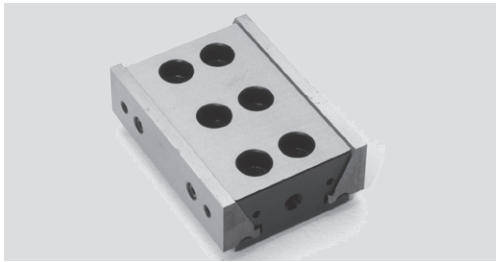
TCi torque wrench



Type	Id. No.
TCi 110	465019
TCi 150	465020
TCi 200	465021

- Accessories
- Mounting

TCi Fixed jaw carrier for double clamping (extension)



Type	Id. No	B mm	G mm	J mm	T mm	Weight kg
TCi 110	465022	40	8	110	80	2.2
TCi 150	465023	50	12	150	108	5
TCi 200	465024	70	14	200	194	11.6

Clamps (1 pair) incl. screw and T-nut



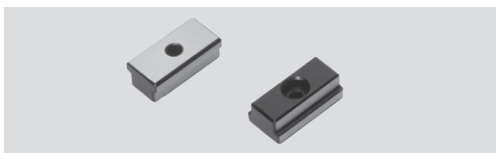
Type	Id. No. / Groove width					
	12 mm	14 mm	16 mm	18 mm	20 mm	22 mm
TCi 110	465025	465026	465027	465028	465029	465030
TCi 150	465031	465032	465033	465034	465035	465036
TCi 200	465037	465038	465039	465040	465041	465042

T-nuts (1 pair) incl. screw



Type	Id. No. / Groove width					
	12 mm	14 mm	16 mm	18 mm	20 mm	22 mm
TCi 110	465043	465044	465045	465046	465047	465048
TCi 150	465049	465050	465051	465052	465053	465054
TCi 200	465055	465056	465057	465058	465059	465060

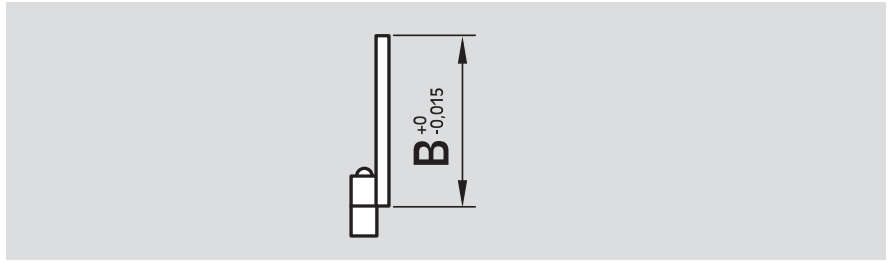
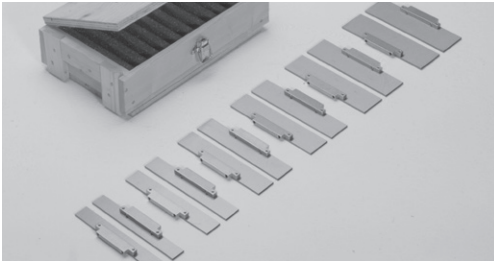
T-nuts (1 pair)



Type	Id. No. / Groove width					
	12h6 mm	14h6 mm	16h6 mm	18h6 mm	20h6 mm	22h6 mm
TCi 110	-	465061	465062	465063	465064	465065
TCi 150	465066	465067	465068	-	465070	465071
TCi 200	465072	465073	465074	-	465076	465077

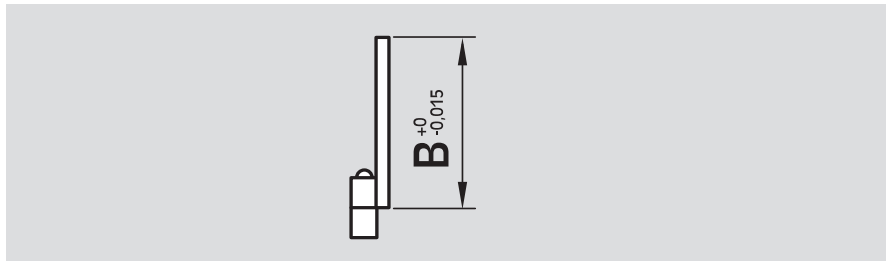
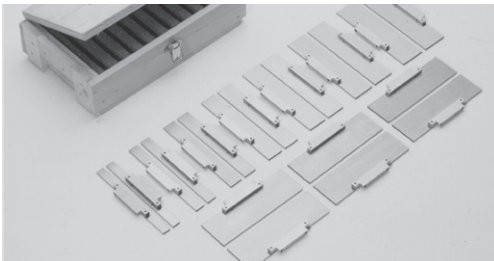
- Accessories
- Parallels for quick change CLAK-System

Set 6 pair of parallels for quick change CLAK-System



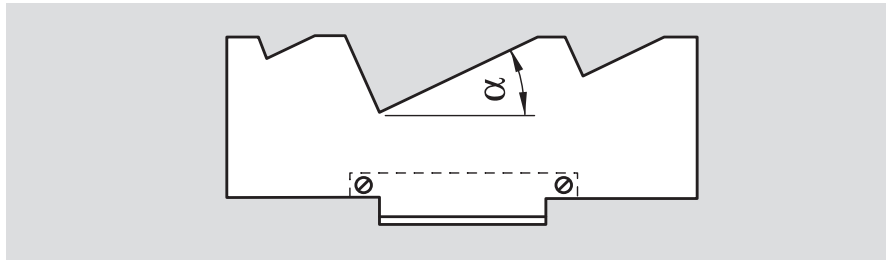
Type	Id. No.	B					
		mm	mm	mm	mm	mm	mm
TCi 110	465080	10	15	20	25	30	35
TCi 150	465081	20	25	30	35	40	45
TCi 200	465082	20	30	40	50	60	65

Set 10 pair parallels for quick change CLAK-System



Type	Id. No.	B										
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
TCi 110	465083	10	12	15	20	25	28	30	33	35	37	
TCi 150	465084	12	15	20	25	30	35	40	43	45	47	
TCi 200	465085	20	25	30	35	40	45	50	55	60	65	

Set 6 pair prisms parallels for quick change CLAK-System



Type	Id. No.	α					
		mm	mm	mm	mm	mm	mm
TCi 110	465086	20°	25°	30°	35°	40°	45°
TCi 150	465087	20°	25°	30°	35°	40°	45°
TCi 200	465088	20°	25°	30°	35°	40°	45°

Notes

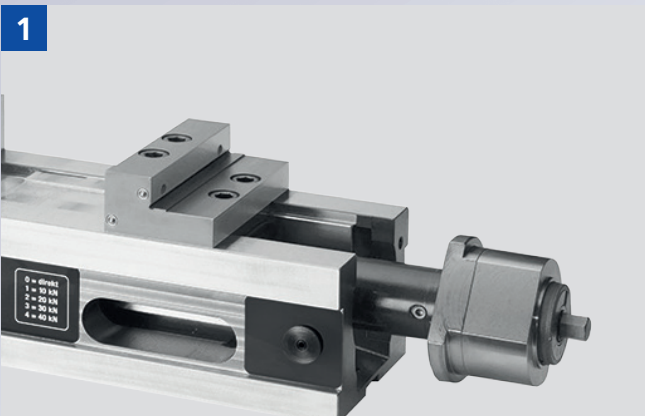
A large area for taking notes, consisting of alternating light blue and medium blue horizontal stripes.

TTi-2G

NC Clamping Vice

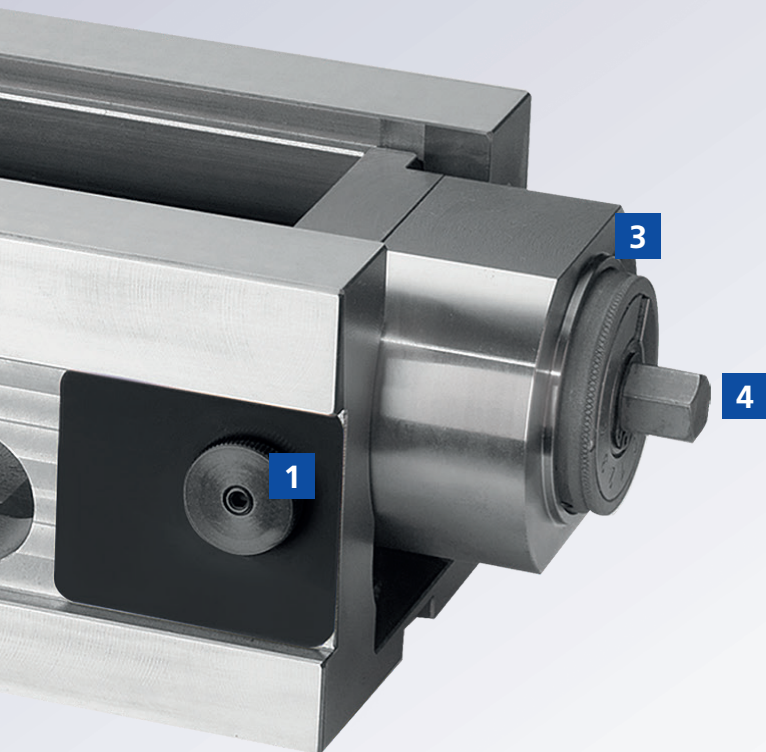


Quick change system of the spindle unit
Disassembling of the spindle unit without tools
Easy and quick cleaning of the vice



Parallels with quick change system
Mounting of parallels without tools
No penetration of chips below parallels





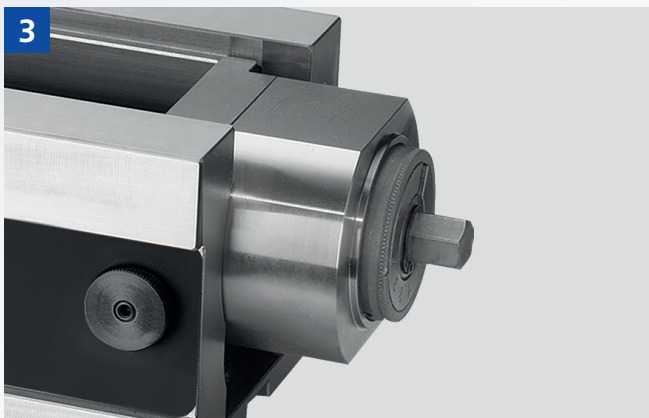
Interface for zero point clamping systems APS | WPS
as a standard for highest efficiency while set-up



SinterGrip
Jaws for SinterGrip clamping inserts as an accessory for
OP 10 operations available



Protected spindle with mechanical power intensifier
Exact pre-select of the clamping force (up to 11 steps)
Constant clamping force for maximum process reliability



Angle drive (accessory)
Easy use on the machine table
Best accessibility for the setting of the clamping force



- With precision power transmitter
- Clamping against fixed jaw



Application/customer benefits

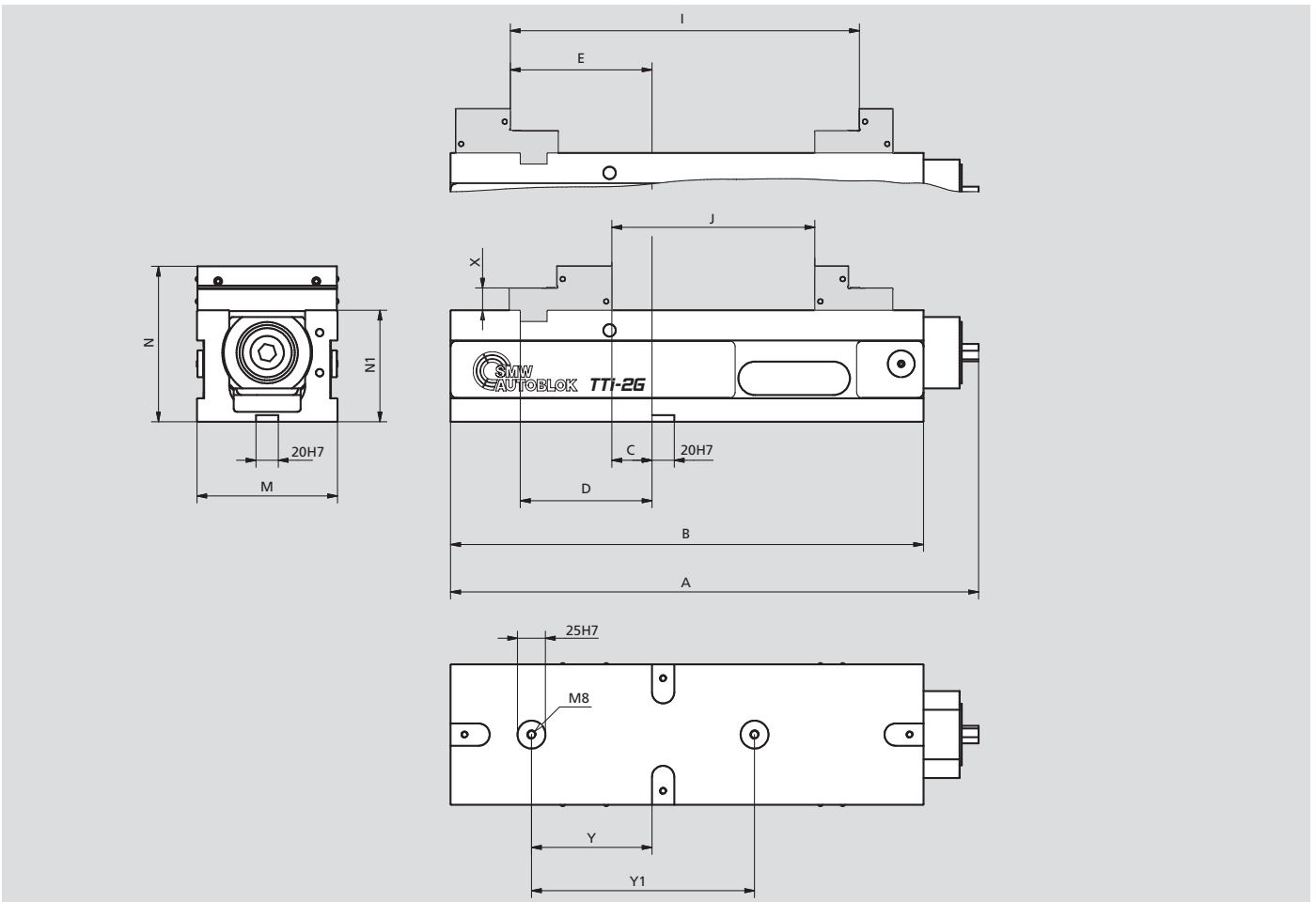
- NC clamping vice with precision power transmitter for high clamping forces
- Maintenance-free encapsulated spindle
- Accurate and highest repeatability of the clamping process
- Easy and quick cleaning possibility
- Maximum flexibility due to the huge range of accessories
- Clamping force pre-adjustment (up to 11 clamping steps)
- Standardized jaw interface (Allmatic compatible)
- Parallels with quick change

Technical features

- High clamping forces (up to 60 kN)
- 3 different sizes
- Precision guideway hardened and ground
- Interface for zero point clamping systems APS / WPS as a standard

Standard equipment

TTi-2G clamping vice together with hand crank
4 pieces clamps for fixing

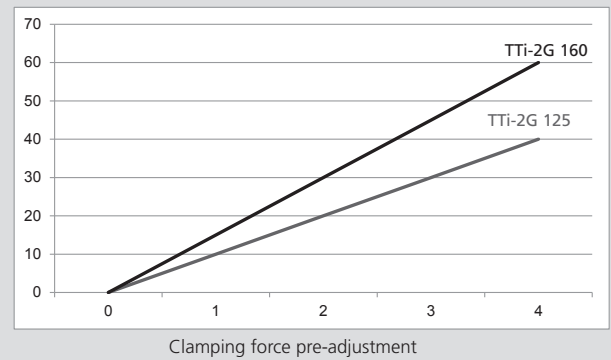
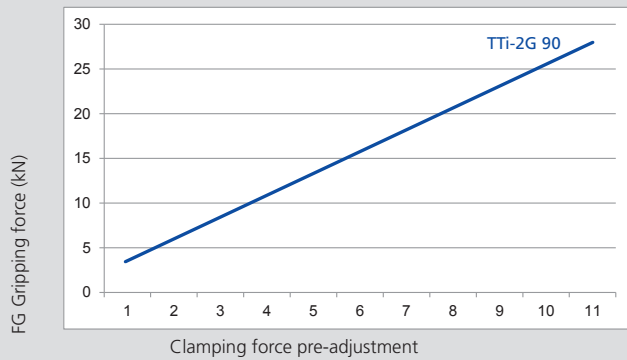


Order review

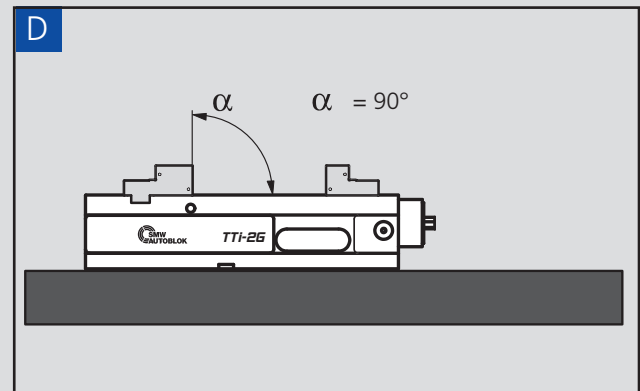
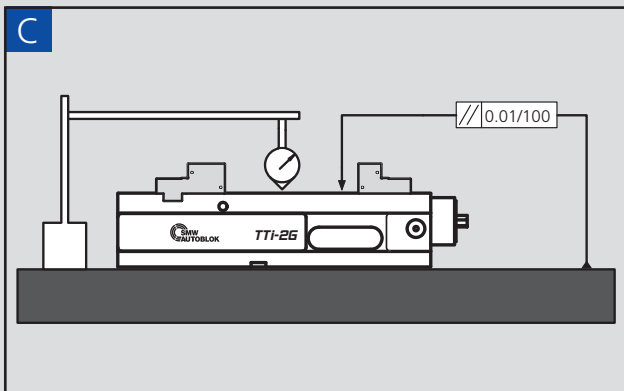
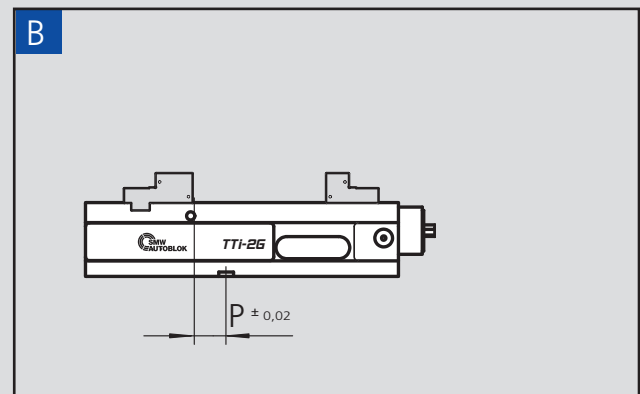
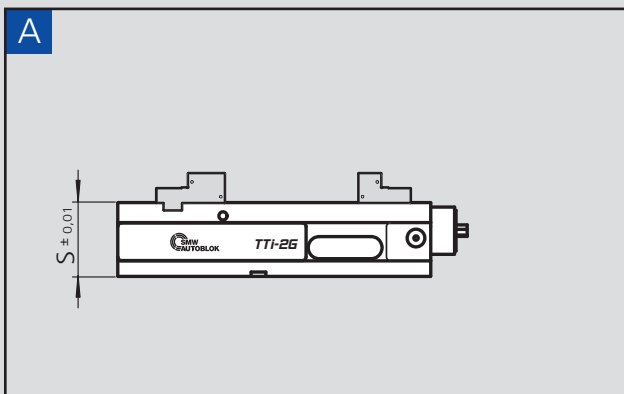
Type	Id. No.	A	B	C	D	E	J	I	M	N	N1	X	Y	Y1	Clamping force kN	Weight kg
TTi-2G 90	462734	340	305	15	73	75	0-126	91-217	90	114	80	16	58	200	28	15
TTi-2G 125	462735	483	424	36	118	127	0-185	131-313	126	139.5	100	20	108	200	40	35
TTi-2G 160	462736	616	560	70	164	178	17-263	187-433	164	164.8	115	25	114	300	60	60

- With precision transmitter
- Clamping against fixed jaw

Clamping force diagram

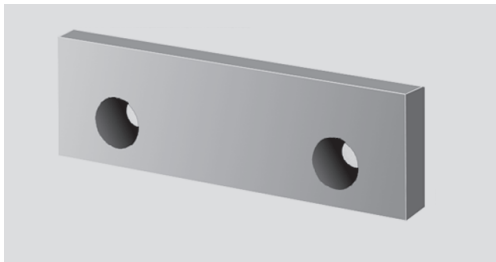


Form-, position- and dimensional tolerances for all NC clamping vices TTI-2G



- Accessories
- Jaw sets

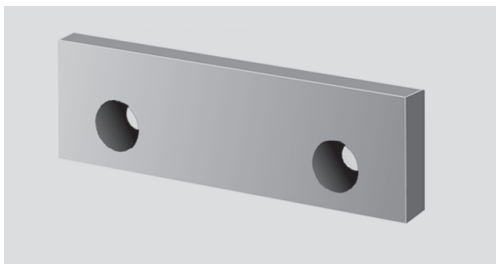
Flat clamping jaw hardened and grinded



Type	Id. No.	Height mm	Depth mm
TTi-2G 90	462738	34	10
TTi-2G 125	462739	39.2	12
TTi-2G 160	462740	49.2	16

Consisting of:
1 piece clamping jaw

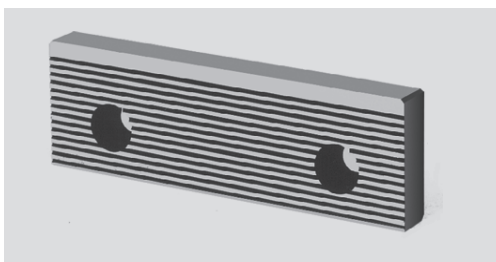
Flat clamping jaw soft (Material 1.2842)



Type	Id. No.	Height mm	Depth mm
TTi-2G 90	462741	34	12
TTi-2G 125	462742	39.2	12
TTi-2G 160	462743	49.2	16

Consisting of:
1 piece clamping jaw

Clamping jaw with transverse rib



Type	Id. No.	Height mm	Depth mm
TTi-2G 90	462744	34	10
TTi-2G 125	462745	39.2	12
TTi-2G 160	462746	49.2	16

Consisting of:
1 piece clamping jaw

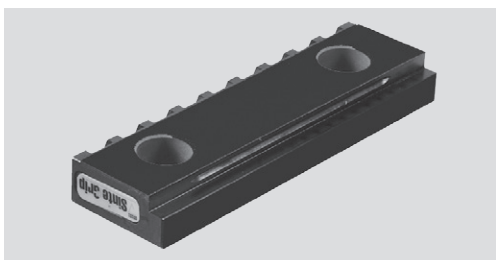
Level bar with quick change fixing



Type	Id. No.	Height mm	Depth mm
TTi-2G 90	462747	14	3
TTi-2G 90	462748	30	3
TTi-2G 125	462749	39	3
TTi-2G 125	462750	35	3
TTi-2G 125	462751	15	3
TTi-2G 160	462752	14	3
TTi-2G 160	462753	30	3
TTi-2G 160	462754	44	3

Consisting of:
1 piece level bar

SinterGrip clamping jaw



Type	Id. No.	Qty. SinterGrip per jaw	Height mm	Depth mm
TTi-2G 125	462755	9	39.5	12
TTi-2G 160	462756	11	49.8	12

Consisting of:
1 piece SinterGrip clamping jaw (without clamping inserts)



- Accessories
- Jaws

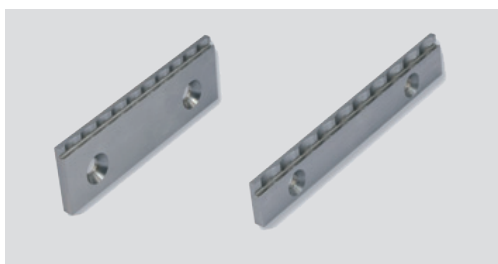
Flat clamping jaw hardened and grinded



Type	Id. No.	Step mm	Height mm	Depth mm
TTi-2G 125	462757	3 x 6	39.2	12
TTi-2G 125	462758	5 x 10	39.2	12
TTi-2G 160	462759	5 x 8	49.2	16

Consisting of:
1 piece clamping jaw

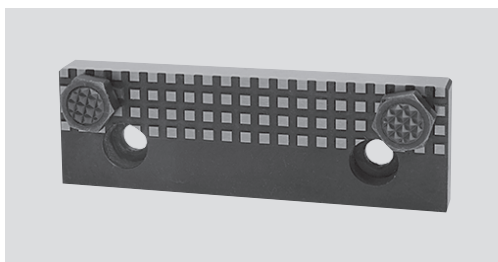
Grip bar suitable for flat clamping jaws TTi-2G 125



Type	Id. No.	Model	Height mm	Step mm
TTi-2G 125	462760	High	39.5	1.4 x 4.5
TTi-2G 125	462761	Step	19.5	2 x 4.5

Consisting of:
1 piece grip bar

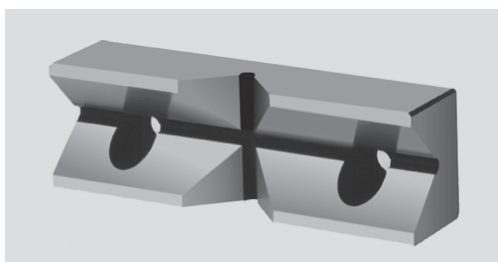
Clamping jaw with fluting



Type	Id. No.	Height mm	Depth mm	Thread	Id. No. Grippers
TTi-2G 90	462762	34	12	M10	462762
TTi-2G 125	462763	40	12	M10	462762
TTi-2G 160	462764	50	16	M12	462763

Consisting of:
1 piece clamping jaw

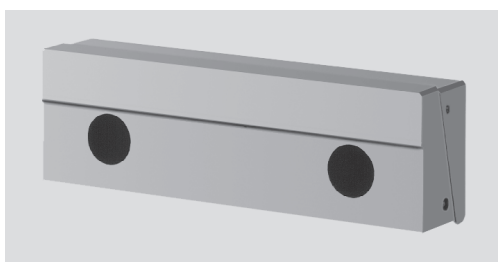
Prismatic jaw horizontal and vertical prisma 90° hardened and grinded



Type	Id. No.	Height mm	Depth mm	Clamping width in mm	
				1 jaw	2 jaws
TTi-2G 90	462765	36	17	Ø 12-14	Ø 18-42
TTi-2G 125	462766	39.2	28	Ø 15-42	Ø 24-42
TTi-2G 160	462767	49.2	32	Ø 18-50	Ø 28-50

Consisting of:
1 piece clamping jaw

Pull-down jaw with interchangeable insert

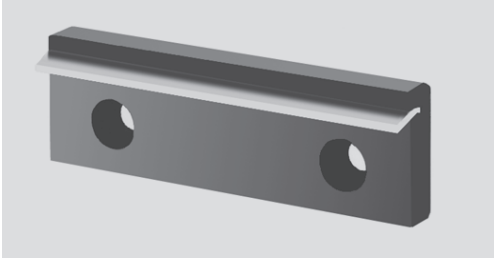


Type	Id. No.	Height mm	Depth mm
TTi-2G 90	462768	34	24
TTi-2G 125	462769	39.2	25
TTi-2G 160	462770	49.2	28

Consisting of:
1 piece clamping jaw

- Accessories
- Jaws

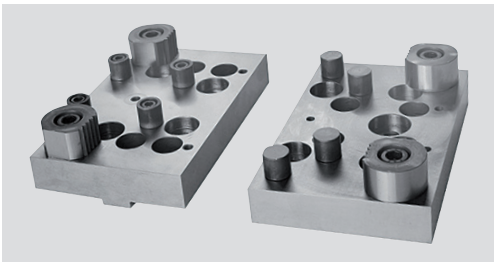
Pull-down jaw for raw parts with spring blade



Type	Id. No.	Height mm	Depth mm
TTi-2G 90	462771	34	18
TTi-2G 125	462772	40	21
TTi-2G 160	462773	50	24

Consisting of:
1 piece clamping jaw

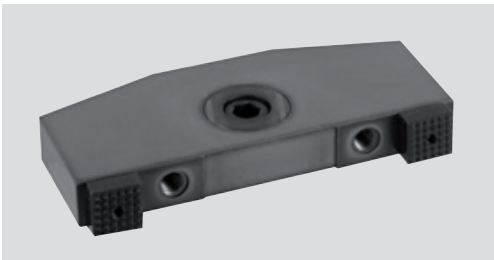
Multi-jaw with grip inserts, pendulum jaws and workstop elements



Type	Id. No. Fix jaw	Id. No. Mobil jaw	Width mm	Length mm	Height mm
TTi-2G 90	462774	462786	25	145	90
TTi-2G 125	462775	462787	25	170	105
TTi-2G 160	462776	462788	25	200	115

Consisting of:
1 piece clamping jaw

Pendulum jaw suitable for multi-jaw (Moveable jaw)

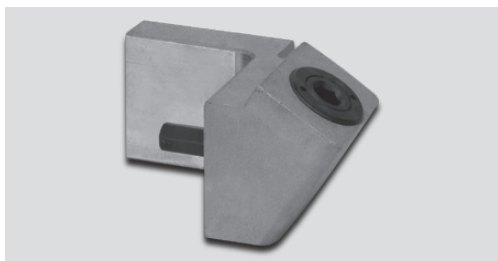


Type	Id. No.	Width mm	Length mm	Height mm
TTi-2G 90	462764	50	141	20
TTi-2G 125	462765	65	156	20
TTi-2G 160	462766	76	196	23

Consisting of:
1 piece clamping jaw

■ Accessories

Angle drive for TTi-2G NC Clamping vices



Type	Id. No.	Length mm	SW
TTi-2G 90	462780	12	SW 12
TTi-2G 125	462781	33	SW 14
TTi-2G 160	462782	49	SW 14

Consisting of:
1 piece angle drive

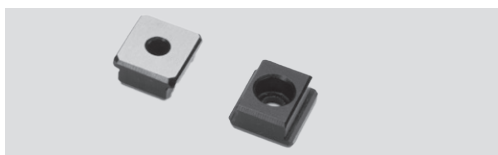
Hand crank standard version for TTi-2G NC Clamping vices



Type	Id. No.	Length mm	SW
TTi-2G 90	462783	160	SW 12
TTi-2G 125	462784	160	SW 14
TTi-2G 160	462785	160	SW 14

Consisting of:
1 piece hand crank

Pair of fitting t-nuts with screws



Type	Id. No.					
	18x12 mm	18x14 mm	18x16 mm	18x18 mm	18x20 mm	18x22 mm
TTi-2G	462638	462639	462640	462641	462642	462643

