

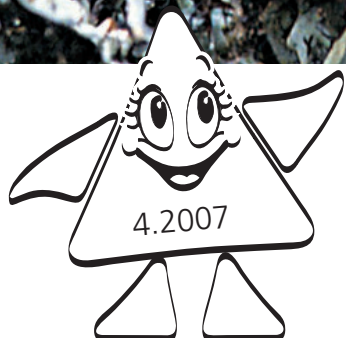
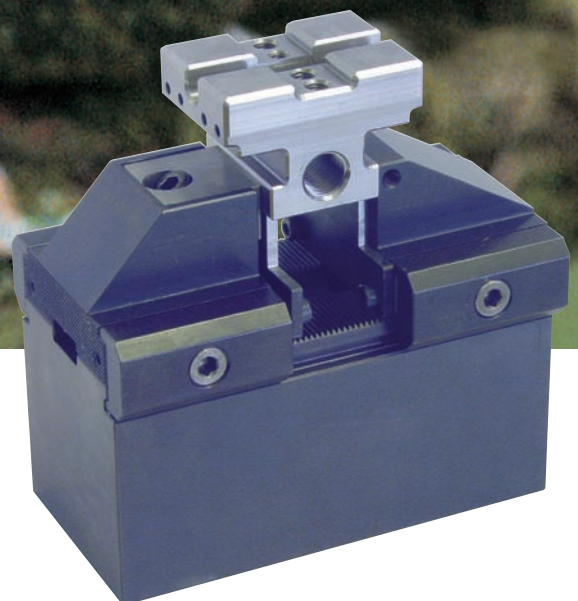


TRIAG[®]

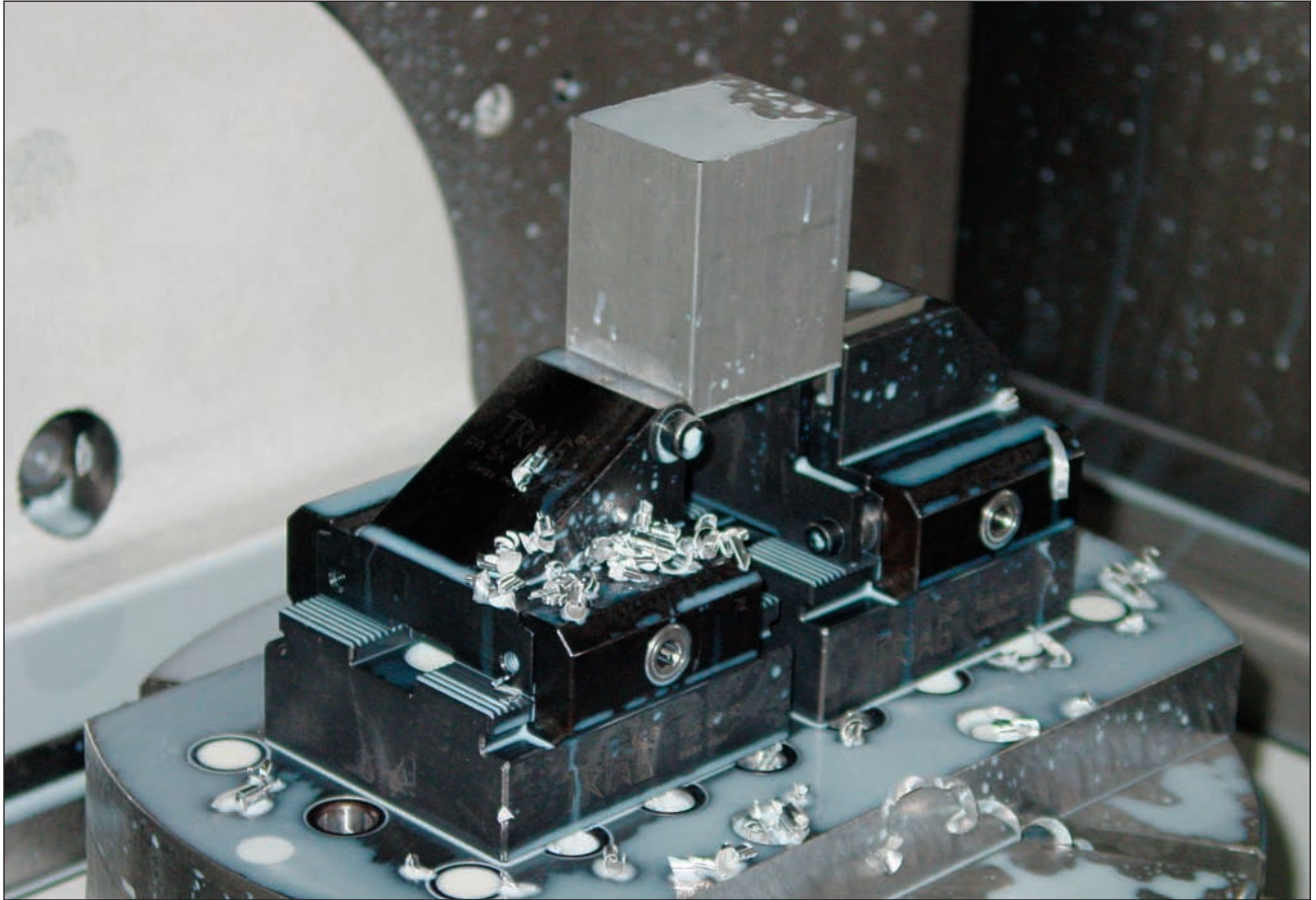
5axesCLAMP

Für 5-Achsenmaschinen
for 5-axes machines
Pour les machines à 5 axes

Modularspannsystem
Modular workholding system
Système de serrage modulaire



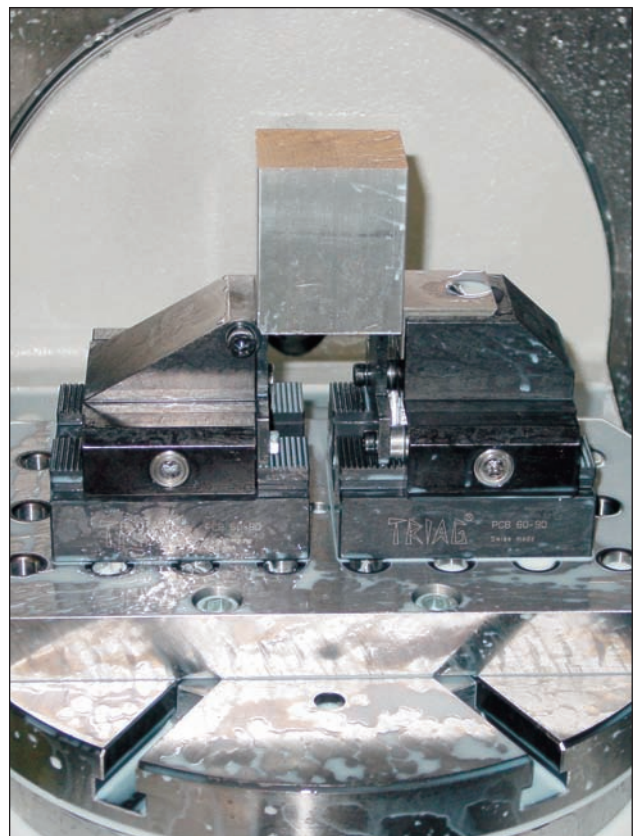
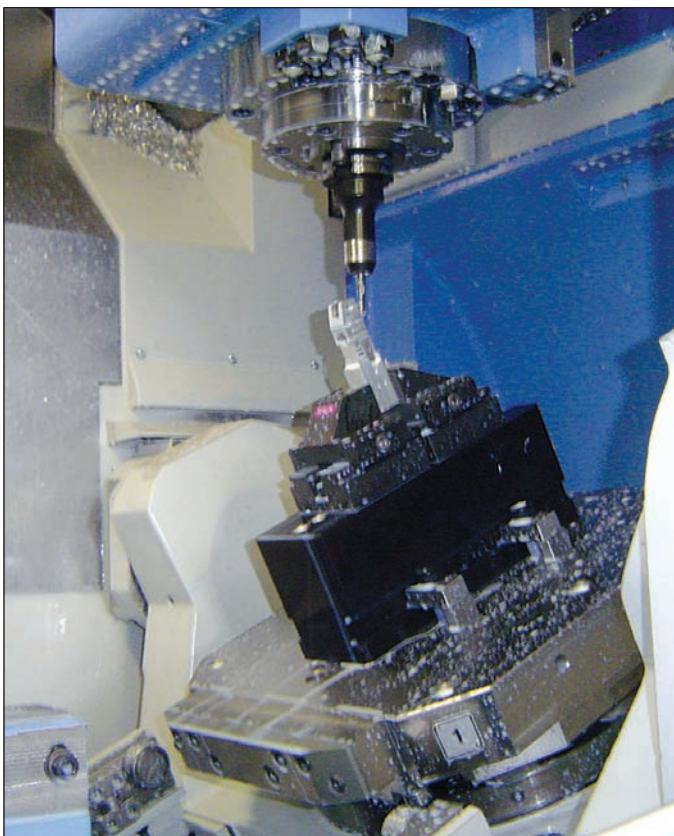
5axesCLAMP



Das 5axesCLAMP wurde speziell für 5-Achsen-Maschinen entwickelt. Dieses modulare Spannsystem ermöglicht ein freies Zukommen der Maschinenspindel zum Werkstück. Es können damit sowohl kleine wie grosse Werkstücke problemlos gespannt werden.

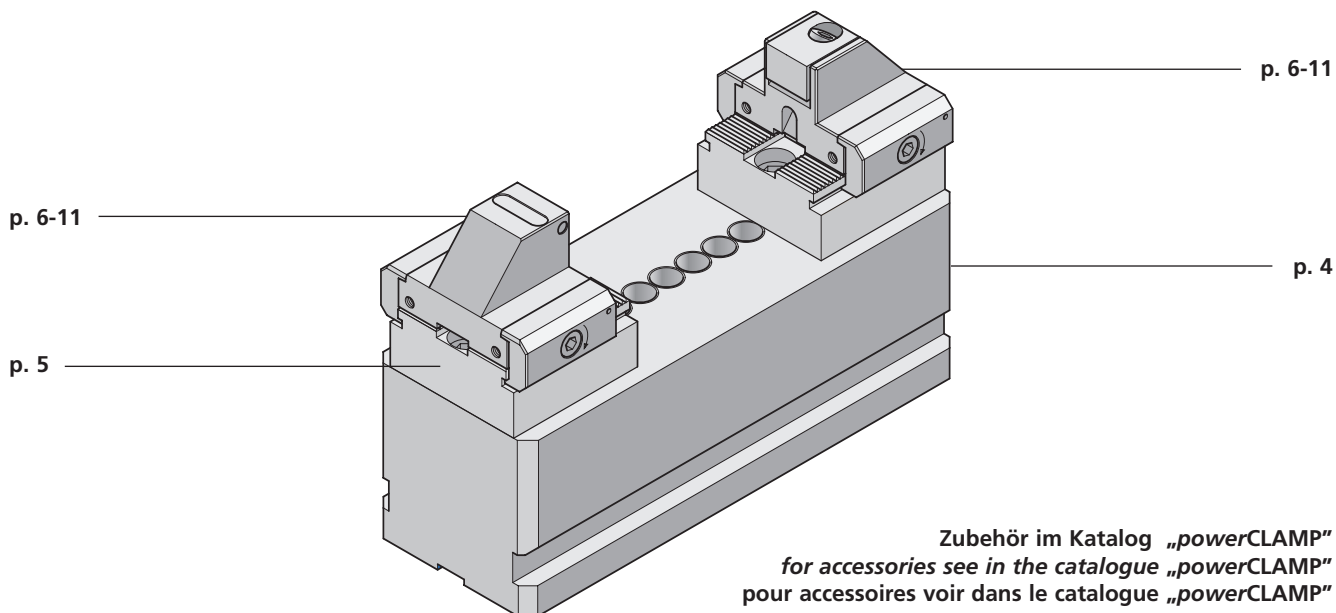
5axesCLAMP was developed especially for 5-axes machines. This modular workholding system allows the machine spindle to reach the workpiece without restraint. Both small and large workpieces can be clamped without difficulties.

Le système 5axesCLAMP a été développé spécialement pour les machines à 5 axes. Ce système de serrage modulaire autorise un libre accès avec la broche vers la pièce à usiner. Le système garantit le serrage de pièces à usiner petites et grandes sans problèmes.

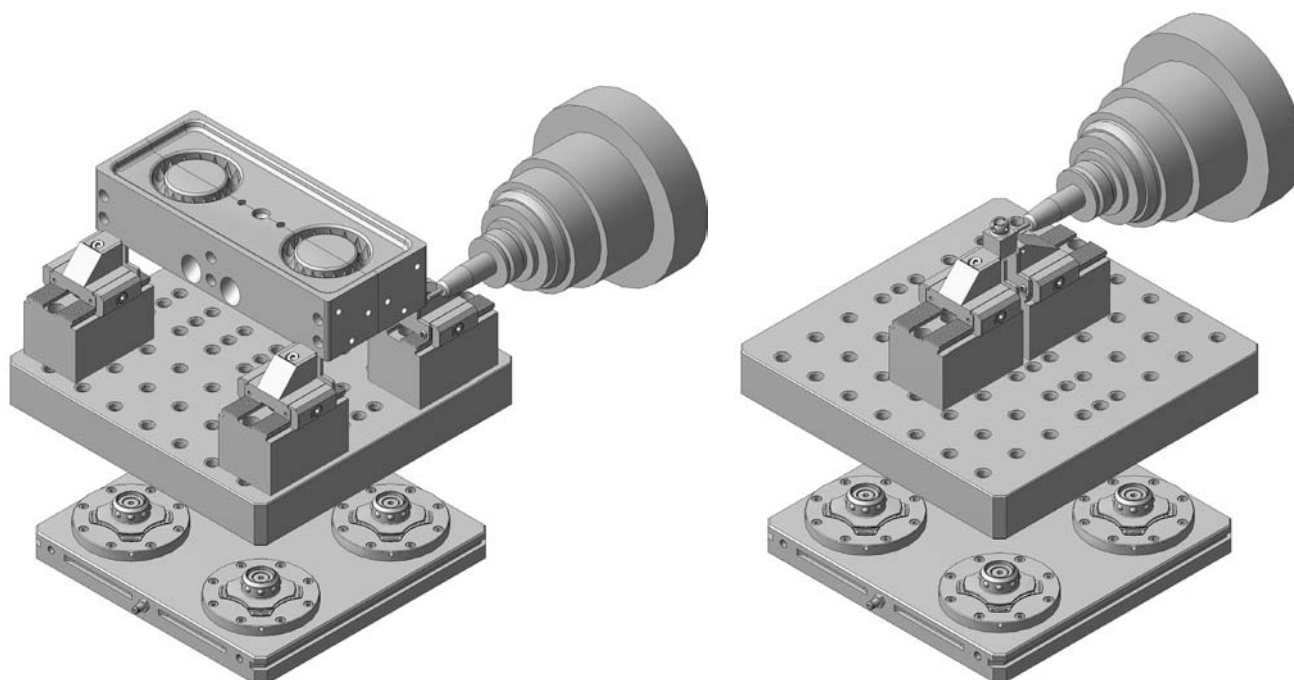


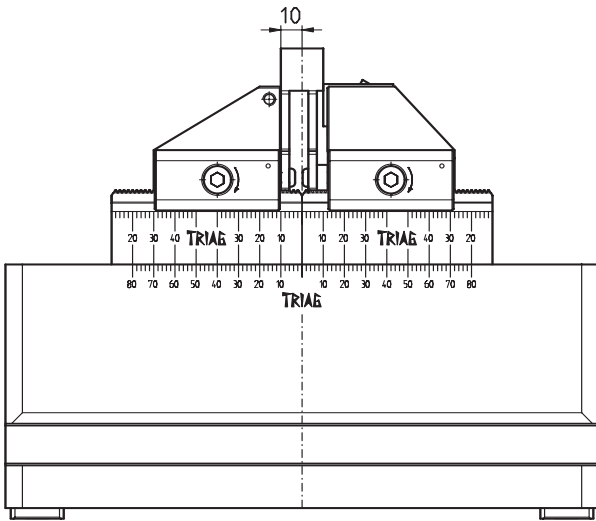
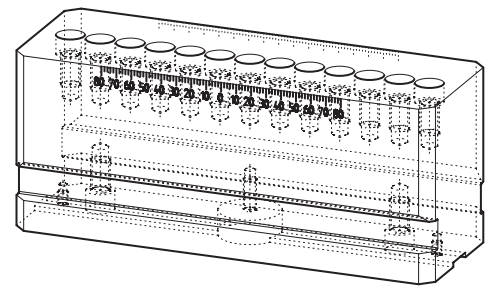
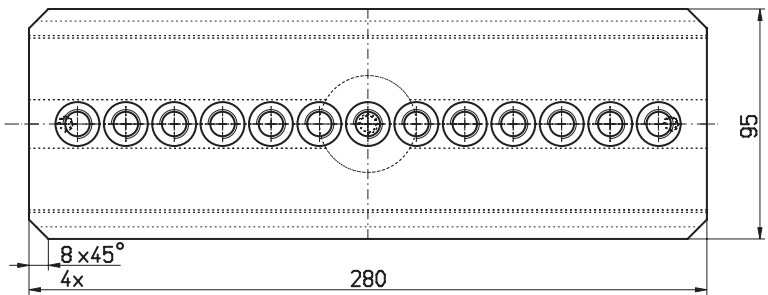
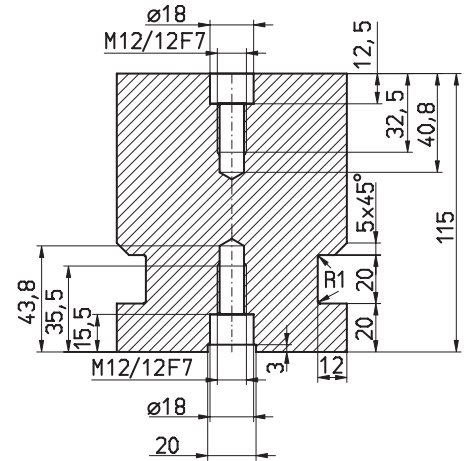
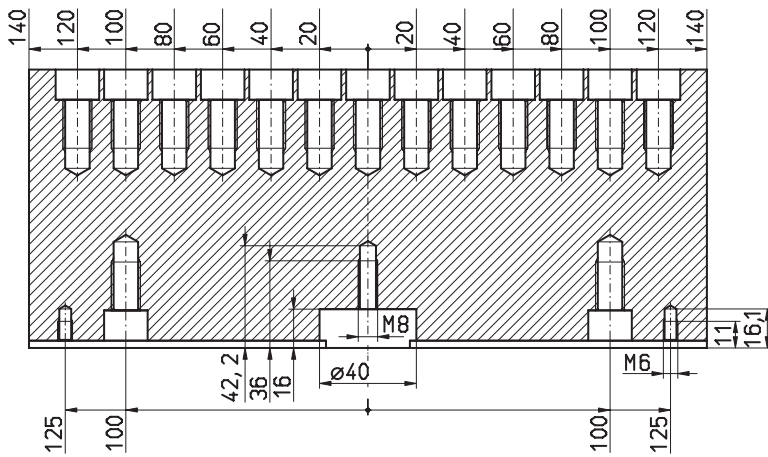
	Spannkraft / Workholding force / Force de serrage			Drehmoment / Torque / Couple de torsion	
	daN	(lb)	t	Nm	(lb/ft)
M8	410	900	0,41	4	3
	490	1080	0,49	5	3,7
	560	1200	0,56	6	4,4
	660	1450	0,66	7	5,2
	730	1600	0,73	8	5,9
	810	1790	0,81	9	6,6
	900	1980	0,90	10	7,4
	1370	3020	1,37	15	11,1
	1810	4000	1,81	20	14,8
	2100	4600	2,10	25	18,4
M10	400	890	0,40	10	7,4
	1400	3080	1,40	20	14,8
	2000	4400	2,00	30	22,1
	2800	6150	2,80	40	29,5

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Anwendungsbeispiel / example for application / exemple d'application

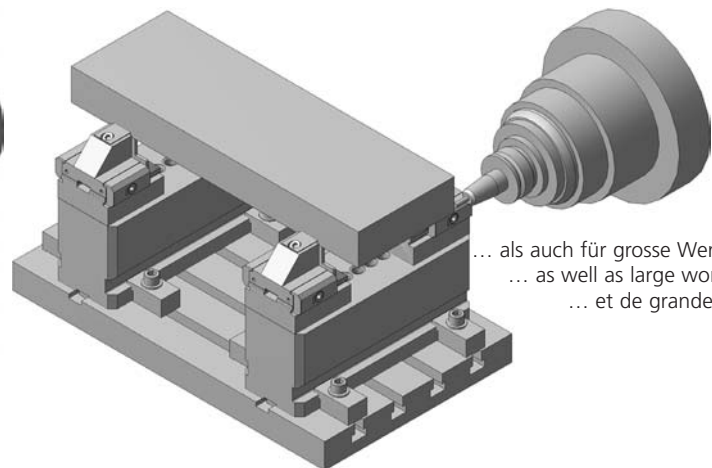
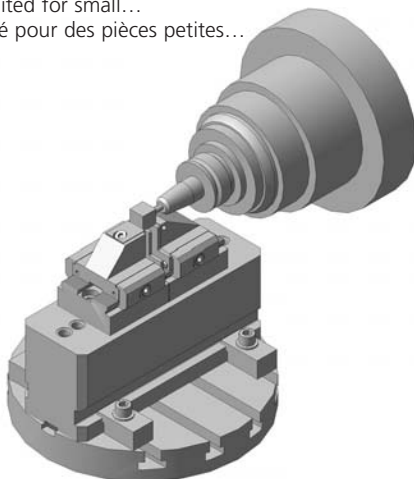




Bestellbeispiel / ordering example / exemple de commande:

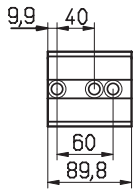
5AX 28-115AL-R20

Geeignet sowohl für kleine...
 especially suited for small...
 recommandé pour des pièces petites...

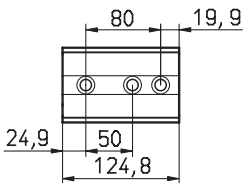


... als auch für grosse Werkstücke!
 ... as well as large workpieces!
 ... et de grandes pièces!

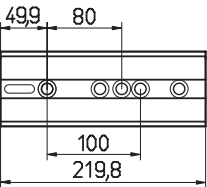
PCB 60-90 1,8 kg



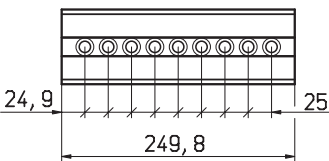
PCB 40-50-125-H80 7,5 kg



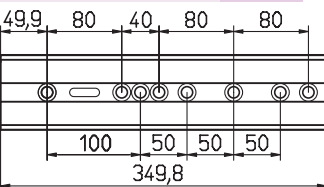
PCB 40-50-220-W2 4,3 kg



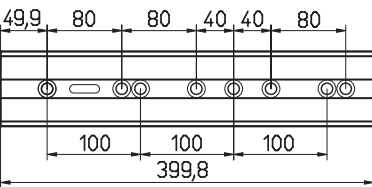
PCB 25-50-250 4,8 kg



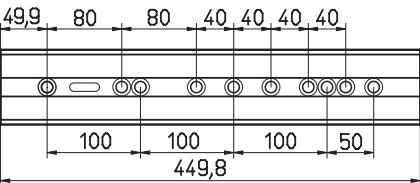
PCB 40-50-350 6,9 kg



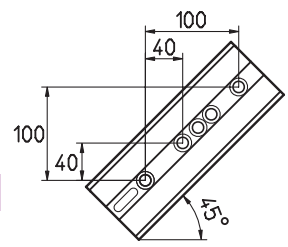
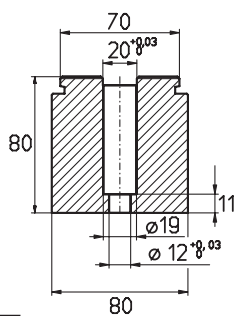
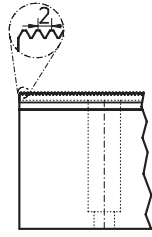
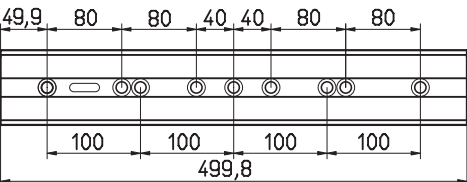
PCB 40-50-400 7,9 kg



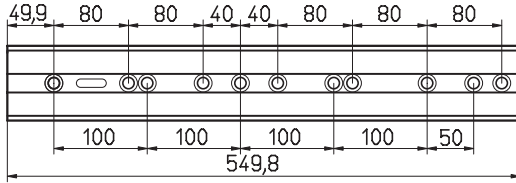
PCB 40-50-450 8,9 kg



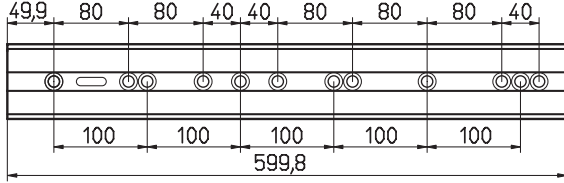
PCB 40-50-500 9,9 kg



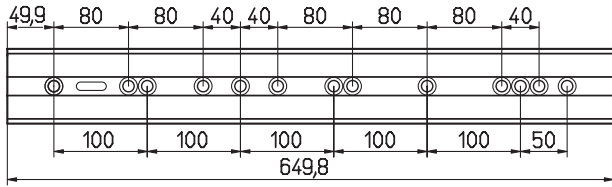
PCB 40-50-550 10,8 kg



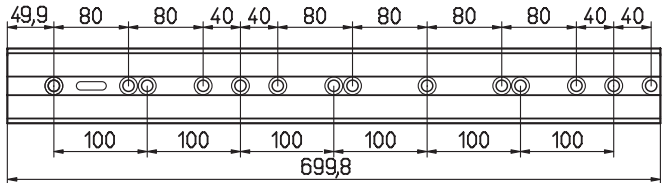
PCB 40-50-600 11,8 kg



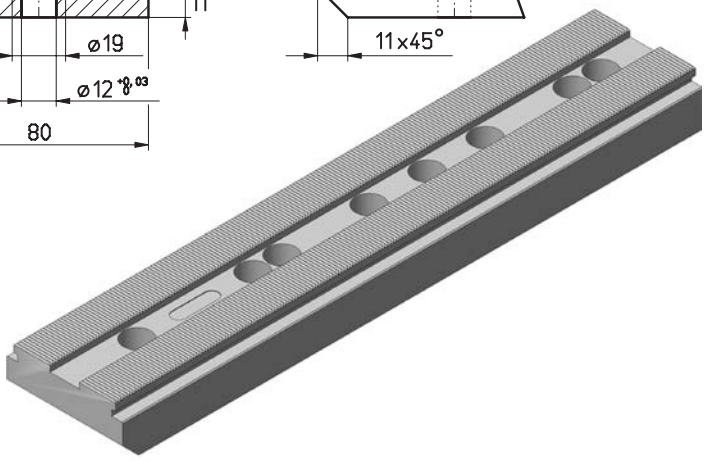
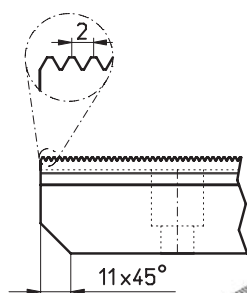
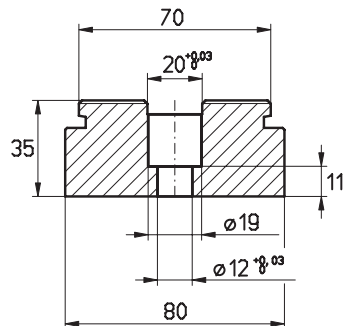
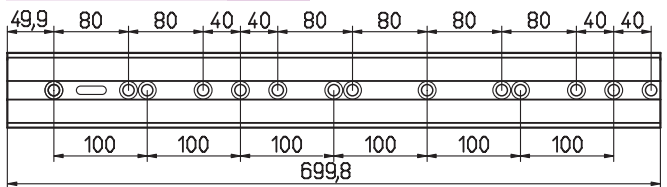
PCB 40-50-650 12,8 kg



PCB 40-50-700 13,8 kg

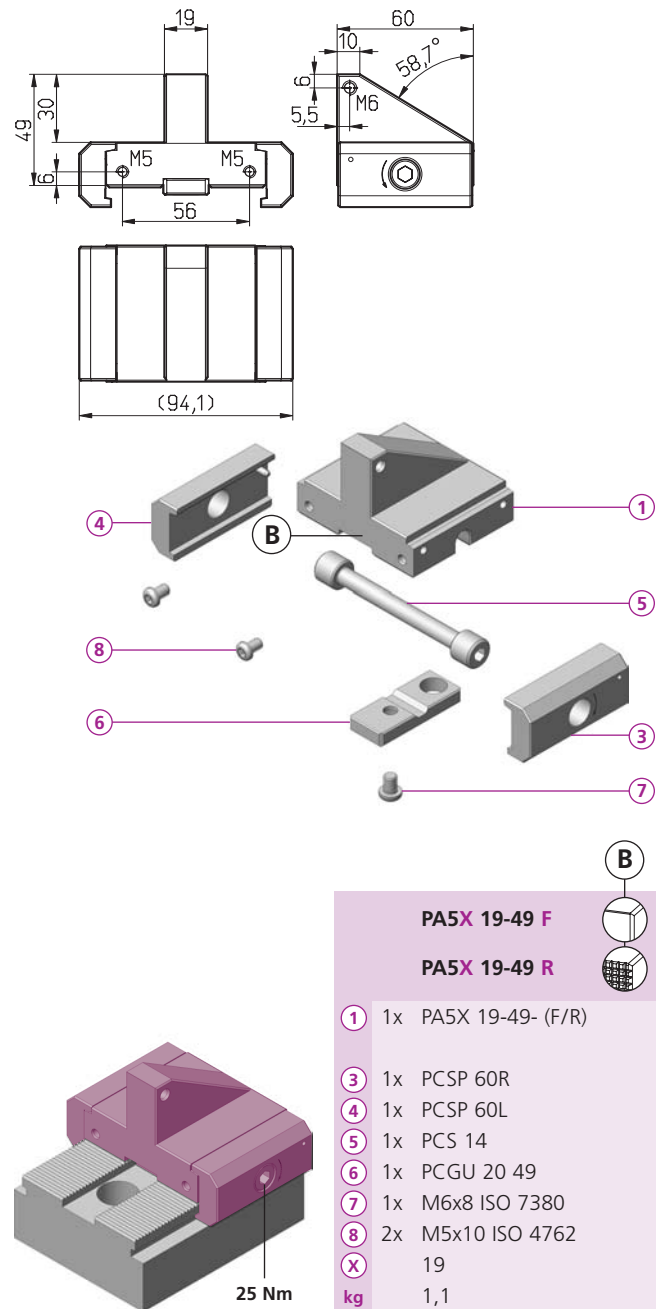
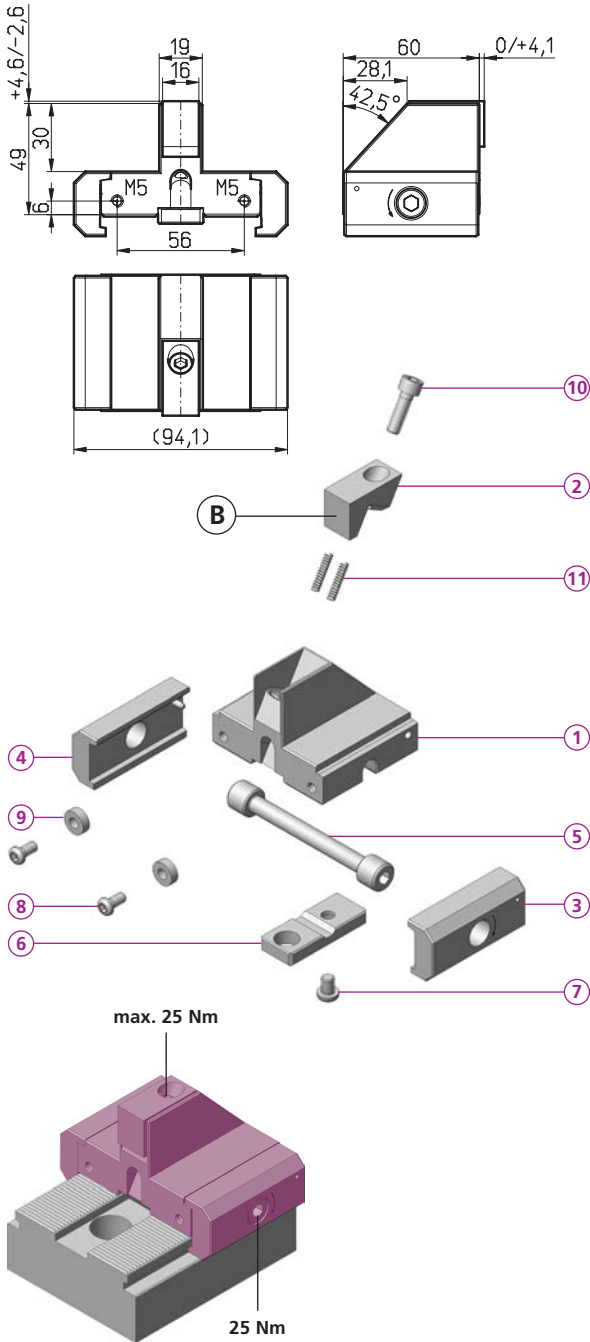




PCB 40-50-750 14,8 kg



PS5X 19N49 -20
PA5X 19-49 R/F

5axesCLAMP



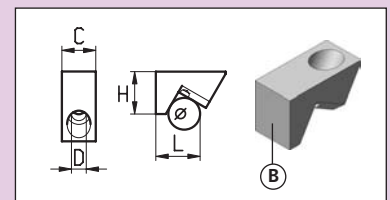
- PA5X 19-49 F** 
- PA5X 19-49 R** 
- 1** 1x PA5X 19-49- (F/R)
 - 3** 1x PCSP 60R
 - 4** 1x PCSP 60L
 - 5** 1x PCS 14
 - 6** 1x PCGU 20 49
 - 7** 1x M6x8 ISO 7380
 - 8** 2x M5x10 ISO 4762
 - X** 19
 - kg** 1,1

PS5X 19N49 B21

B Bestellbeispiel / ordering example / exemple de commande:

PS5X 19-49 R/F

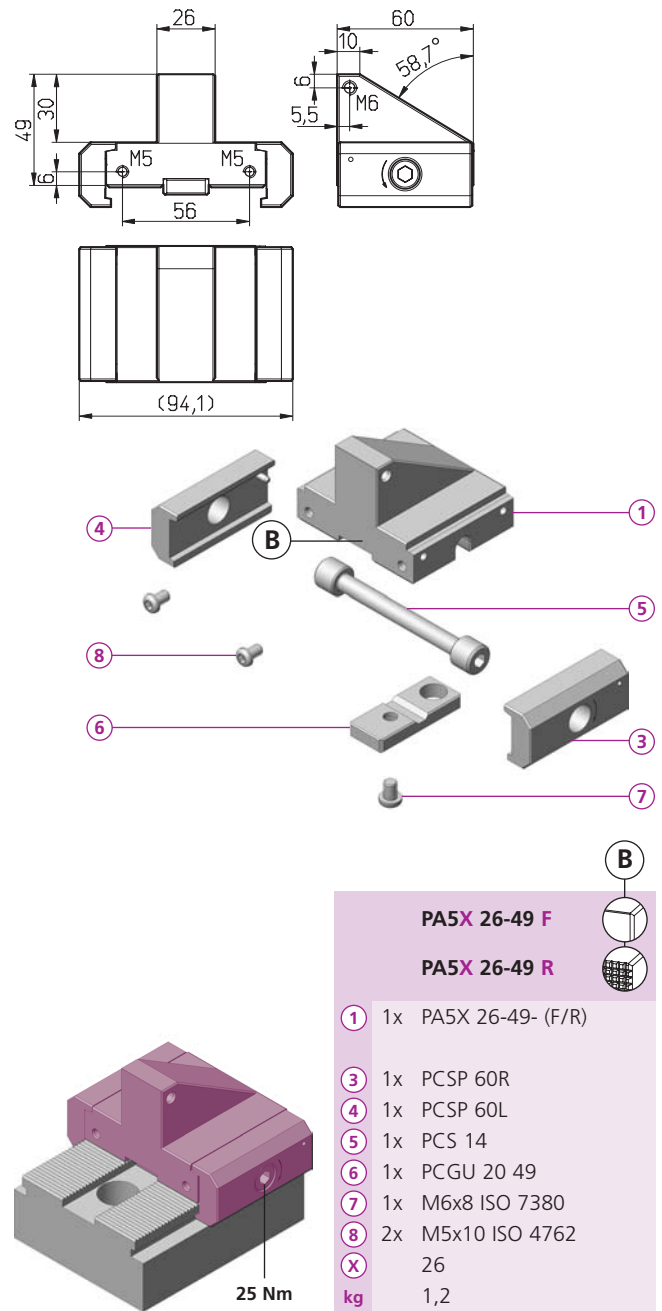
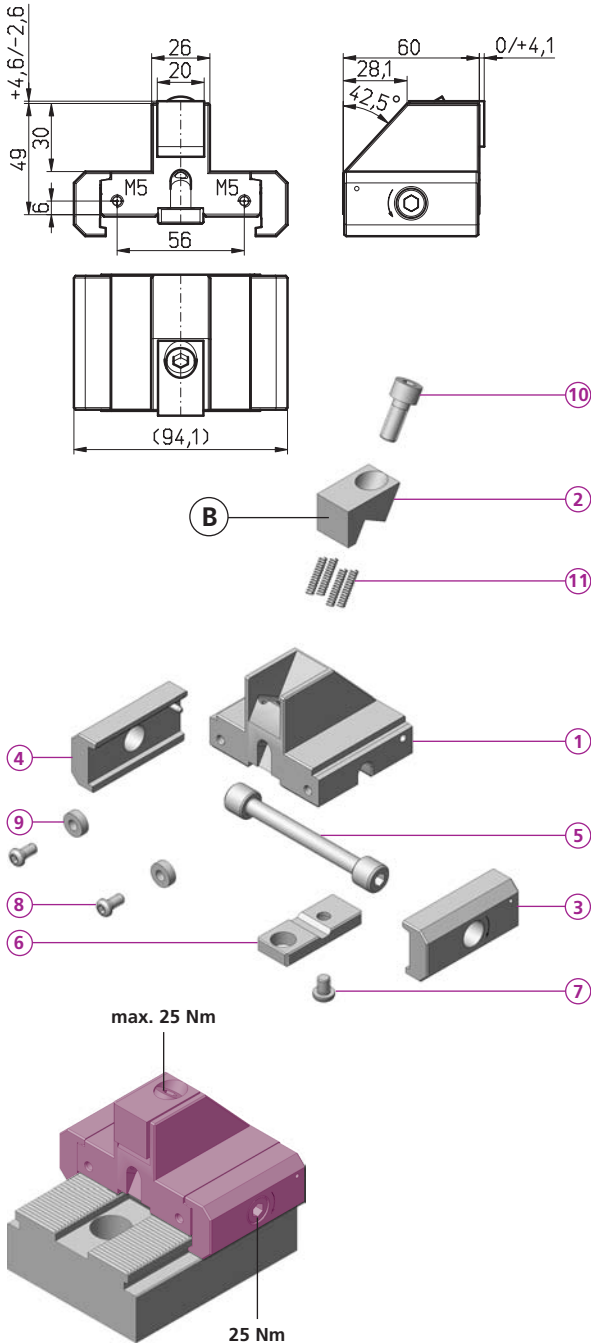
PS5X 19N49 -20		B20	B21	B22
1	1x PS5X 19N49 -20	C 16	16	16
2	1x _____	H 20	20	20
3	1x PCSP 60R	L 19	19	19
4	1x PCSP 60L	D 6,5	6,5	6,5
5	1x PCS 14	o 12	12	12
6	1x PCGU 20 49	i HV700xHV700x	*	*
7	1x M6x8 ISO 7380		0,2mm	0,2mm
8	2x M5x14 ISO 4762			
9	2x PCD 005			
10	1x M6x20 ISO 4762			
11	2x FED 0418			
kg	1,2			





* = weich / soft / doux

PS5X 26N49 -26
PA5X 26-49 R/F

5axesCLAMP



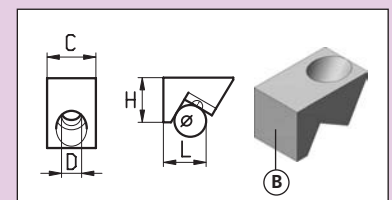
- PA5X 26-49 F** 
- PA5X 26-49 R** 
- 1** 1x PA5X 26-49- (F/R)
 - 3** 1x PCSP 60R
 - 4** 1x PCSP 60L
 - 5** 1x PCS 14
 - 6** 1x PCGU 20 49
 - 7** 1x M6x8 ISO 7380
 - 8** 2x M5x10 ISO 4762
 - X** 26
 - kg** 1,2

PS5X 26N49 B26

B Bestellbeispiel / ordering example / exemple de commande:

PS5X 26-49 R/F

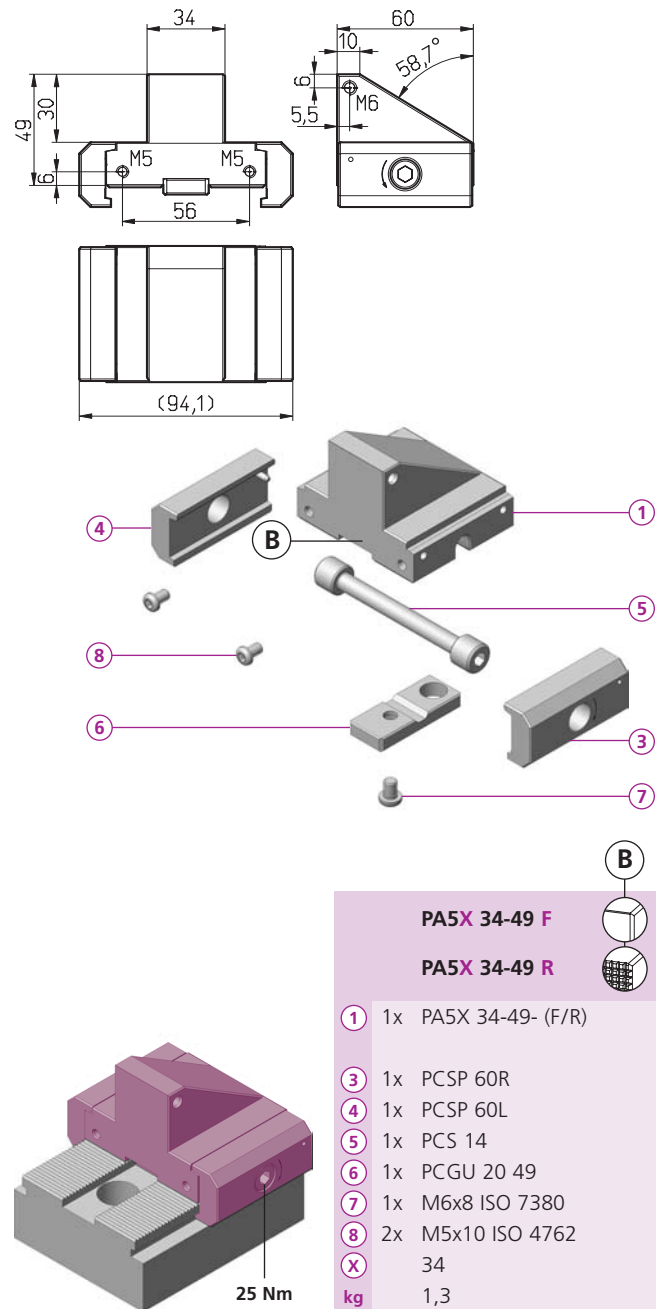
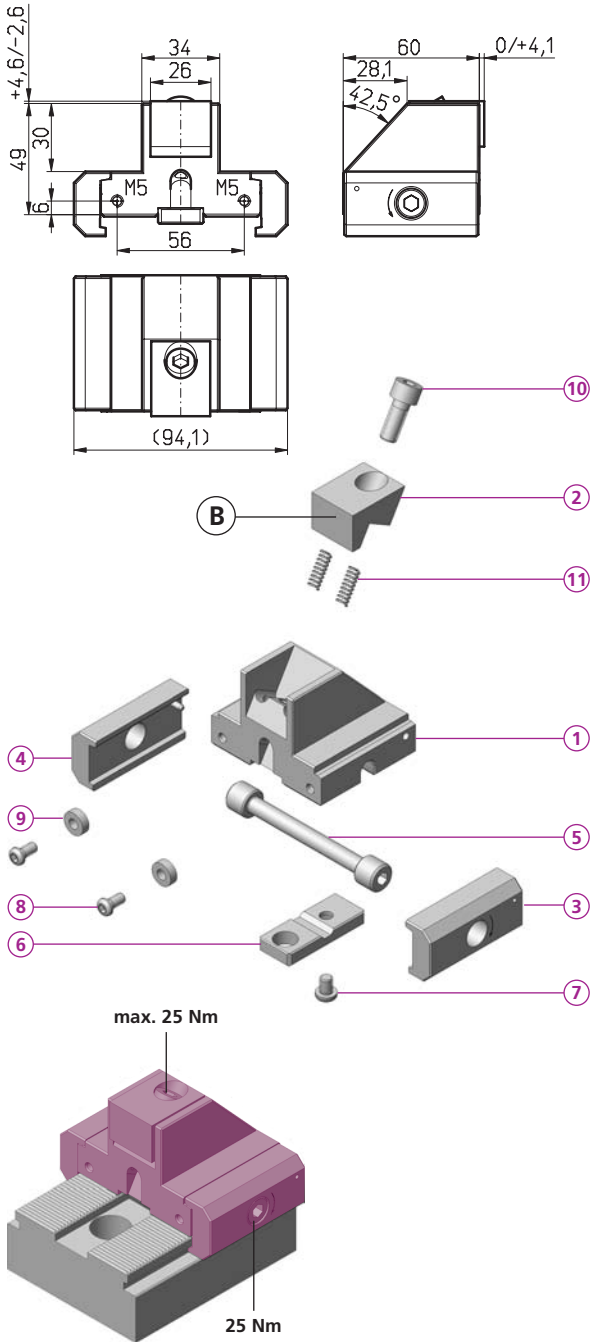
PS5X 26N49 -26		B26	B27	B28
1	1x PS5X 26N49 -26	C 20	20	20
2	1x _____	H 20	20	20
3	1x PCSP 60R	L 19	19	19
4	1x PCSP 60L	D 9	9	9
5	1x PCS 14	o 12	12	12
6	1x PCGU 20 49	i 56HRc	56HRc	*
7	1x M6x8 ISO 7380			
8	2x M5x14 ISO 4762			
9	2x PCD 005			
10	1x M8x20 ISO 4762			
11	4x FED 0418			
kg	1,2			





* = weich / soft / doux

PS5X 34N49 -45
PA5X 34-49 R/F

5axesCLAMP






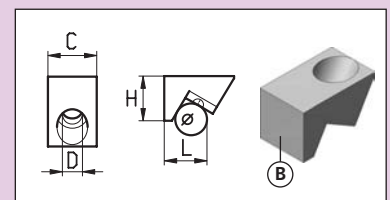
- PA5X 34-49 F** 
- PA5X 34-49 R** 
- 1** 1x PA5X 34-49- (F/R)
 - 3** 1x PCSP 60R
 - 4** 1x PCSP 60L
 - 5** 1x PCS 14
 - 6** 1x PCGU 20 49
 - 7** 1x M6x8 ISO 7380
 - 8** 2x M5x10 ISO 4762
 - X** 34
 - kg** 1,3

PS5X 34N49 B46

B Bestellbeispiel / ordering example / exemple de commande:

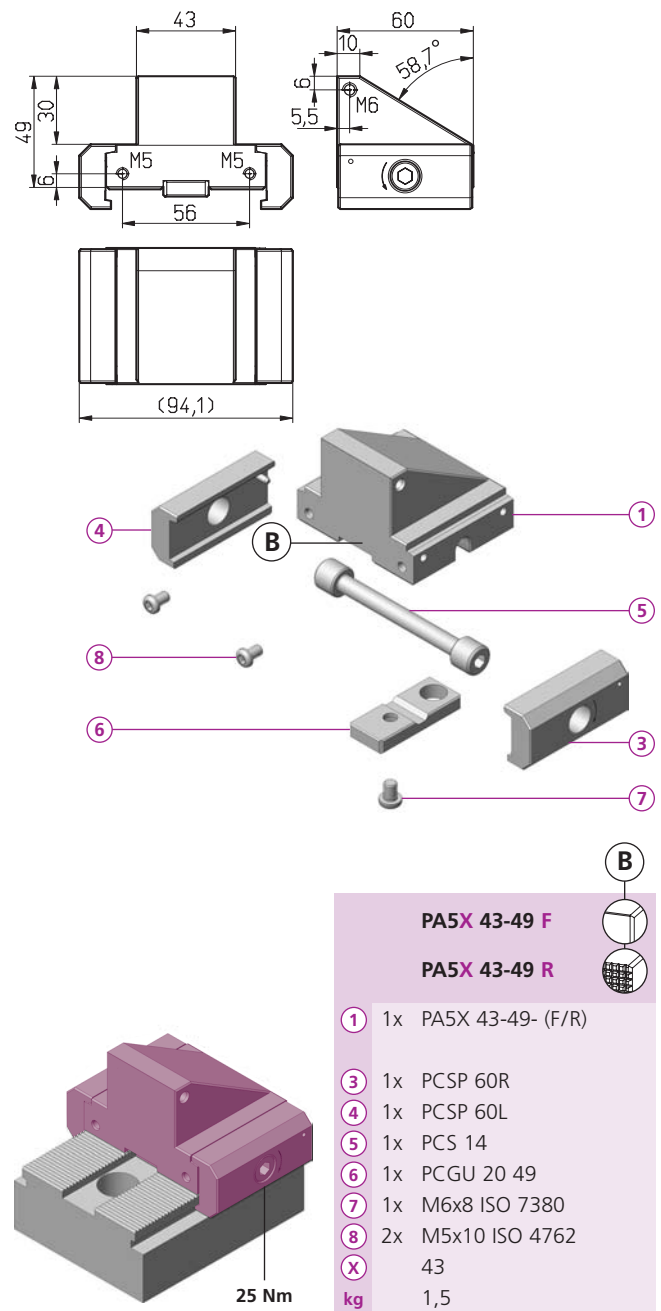
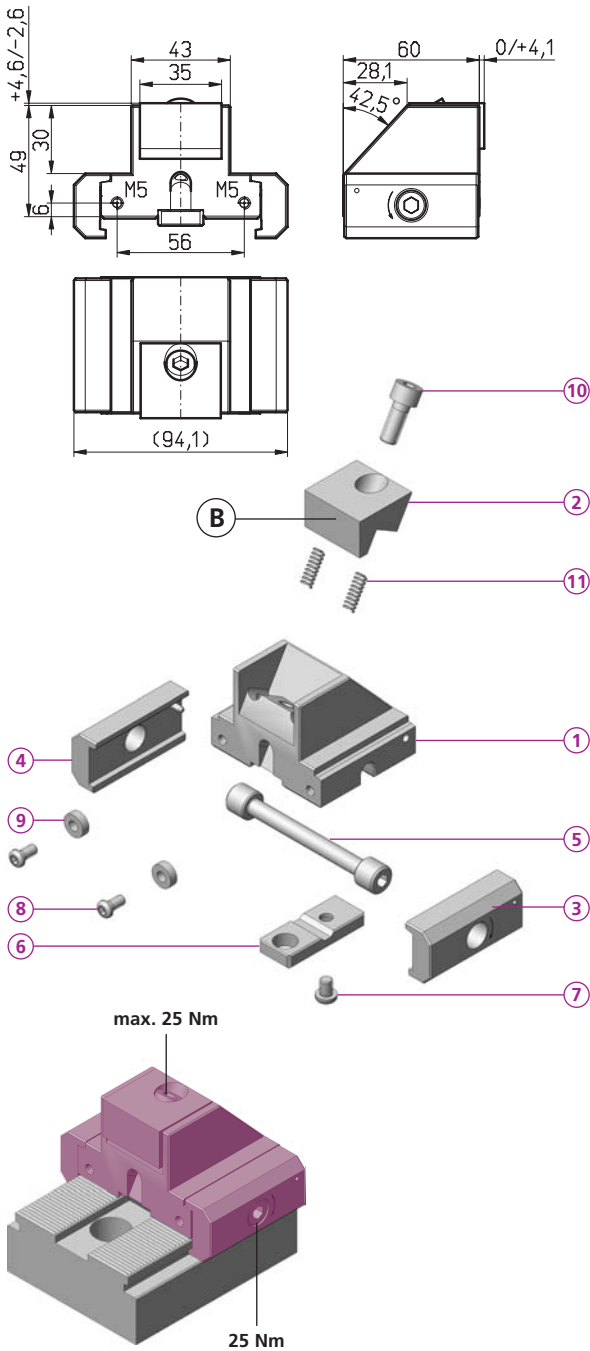
PS5X 34-49 R/F



PS5X 34N49 -45				
		B45	B46	B47
1	1x PS5X 34N49 -45	C 26	26	26
2	1x _____	H 20	20	20
3	1x PCSP 60R	L 19	19	19.1
4	1x PCSP 60L	D 9	9	9
5	1x PCS 14	o 12	12	12
6	1x PCGU 20 49	i 56HRc	56HRc	*
7	1x M6x8 ISO 7380			
8	2x M5x14 ISO 4762			
9	2x PCD 005			
10	1x M8x20 ISO 4762			
11	2x FED 0618			
kg	1,4			



PS5X 43N49 -60
PA5X 43-49 R/F

5axesCLAMP














- PA5X 43-49 F** 
- PA5X 43-49 R** 
- 1 1x PA5X 43-49- (F/R)
 - 3 1x PCSP 60R
 - 4 1x PCSP 60L
 - 5 1x PCS 14
 - 6 1x PCGU 20 49
 - 7 1x M6x8 ISO 7380
 - 8 2x M5x10 ISO 4762
 - X 43
 - kg 1,5

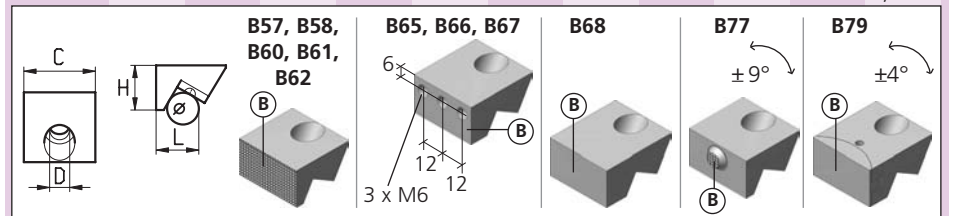
PS5X 43N49 B60

- PS5X 43N49 -60**
- 1 1x PS5X 43N49 -60
 - 2 1x _____
 - 3 1x PCSP 60R
 - 4 1x PCSP 60L
 - 5 1x PCS 14
 - 6 1x PCGU 20 49
 - 7 1x M6x8 ISO 7380
 - 8 2x M5x14 ISO 4762
 - 9 2x PCD 005
 - 10 1x M8x20 ISO 4762
 - 11 2x FED 0618
- kg 1,4

Bestellbeispiel / ordering example / exemple de commande:

PS5X 34-49 R/F

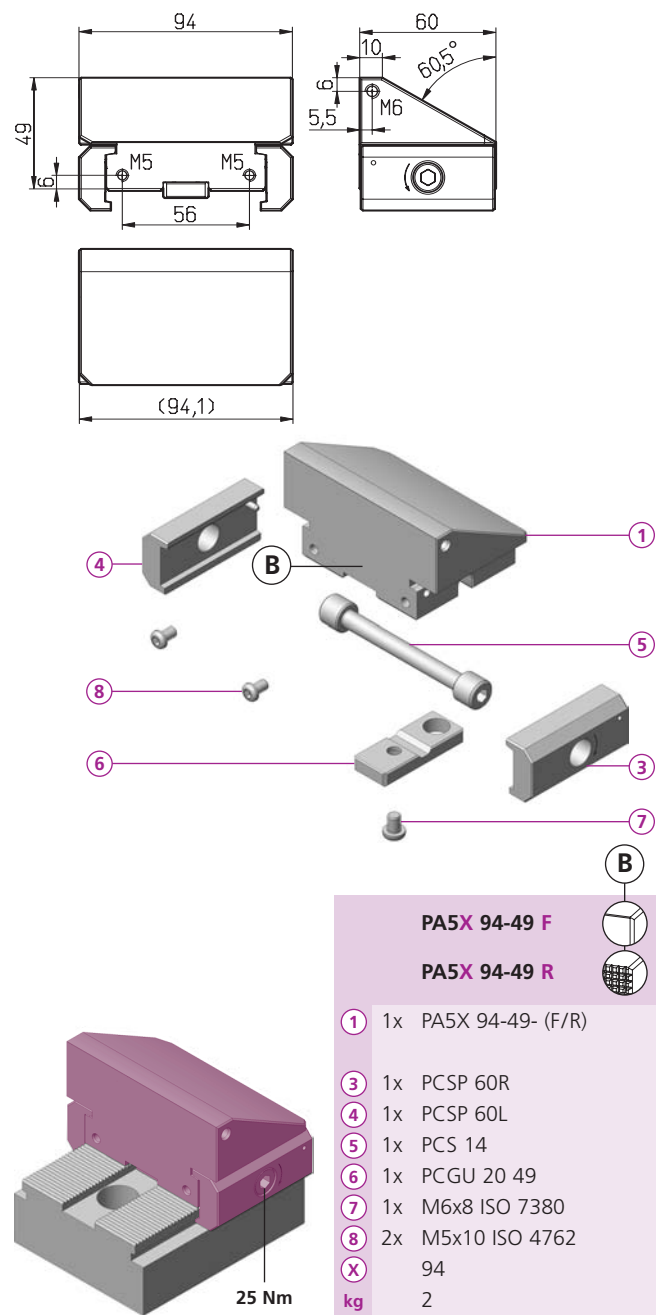
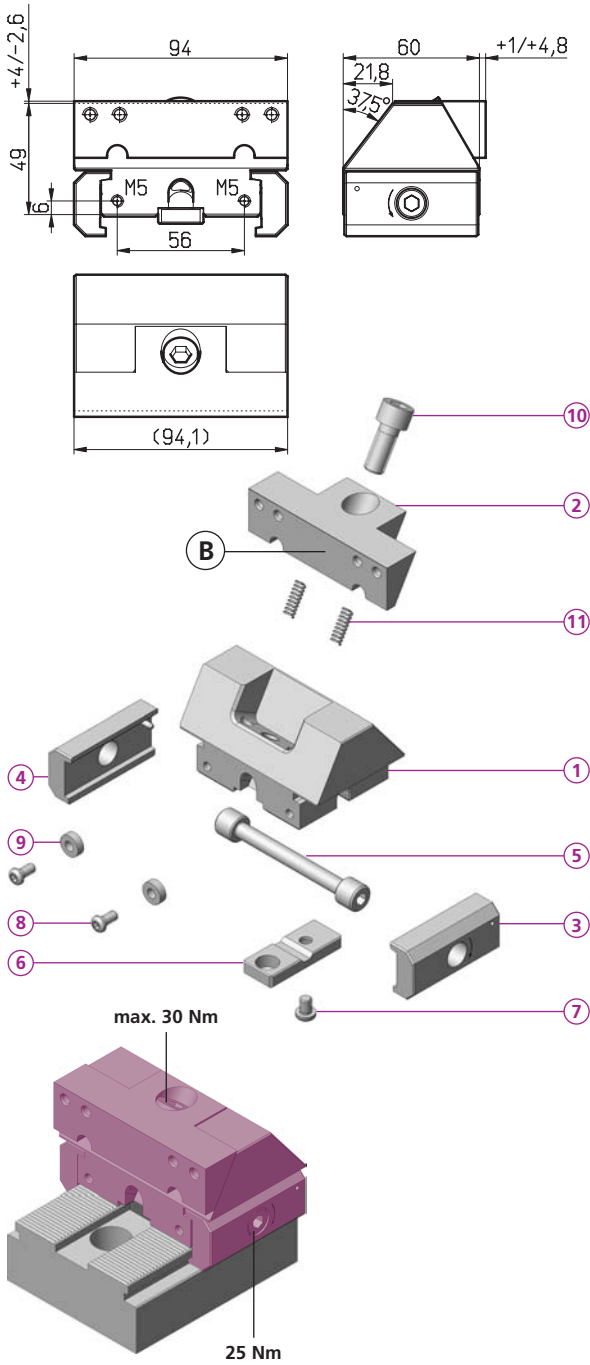
											
	B57	B58	B60	B61	B62	B65	B66	B67	B68	B77	B79
C	35	35	35	35	35	35	35	35	35	35	35
H	20	20	20	20	20	20	20	20	20	20	20
L	19	24	19	19	19	19	19	24	26	22	25
D	9	9	9	9	9	9	9	9	9	9	9
o	12	12	12	12	12	12	12	12	12	12	12
i	ALU *	ALU *	56 HRc	56 HRc	*	56 HRc	56 HRc	56 HRc	*	56 HRc	HV700x 0,2mm





* = weich / soft / doux

PS5X 94N49 -90
PA5X 94-49 R/F

5axesCLAMP








- PA5X 94-49 F** 
PA5X 94-49 R 
- 1** 1x PA5X 94-49- (F/R)
 - 3** 1x PCSP 60R
 - 4** 1x PCSP 60L
 - 5** 1x PCS 14
 - 6** 1x PCGU 20 49
 - 7** 1x M6x8 ISO 7380
 - 8** 2x M5x10 ISO 4762
 - X** 94
 - kg** 2

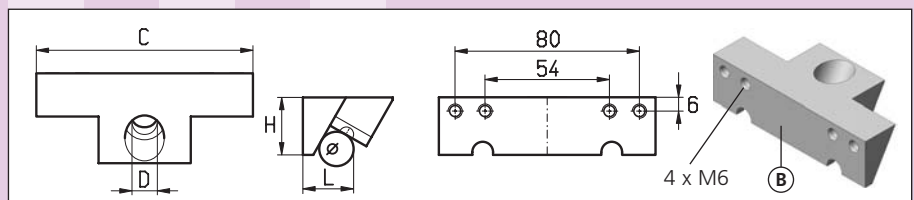
PS5X 94N49 B92

Bestellbeispiel / ordering example / exemple de commande:

PS5X 94-49 R/F

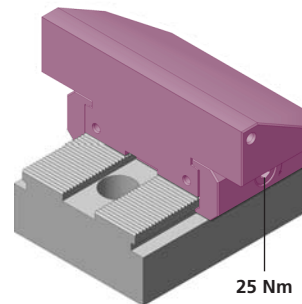
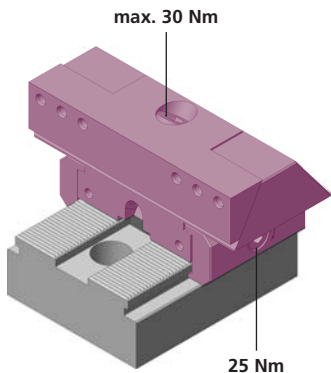
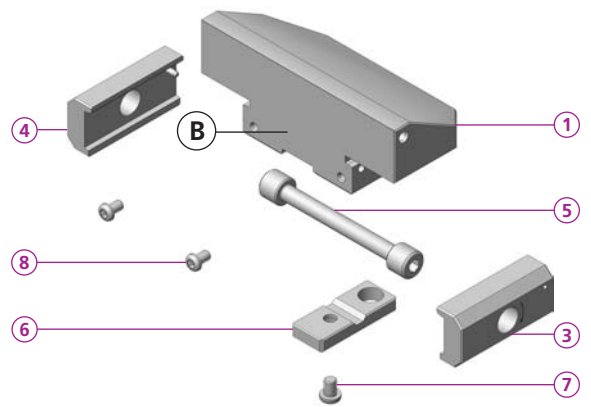
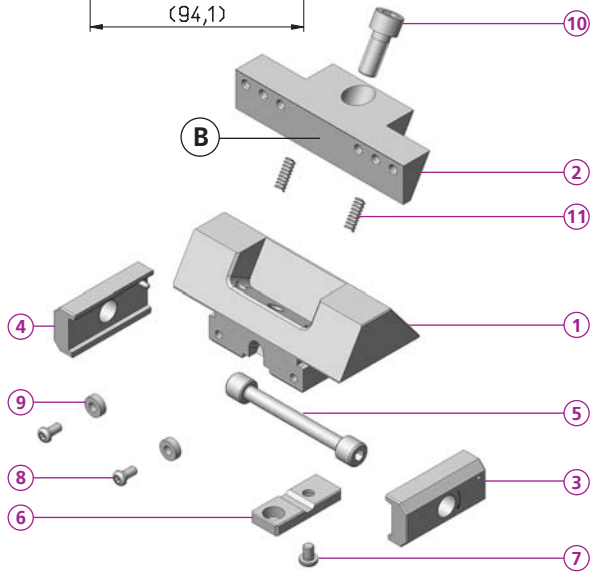
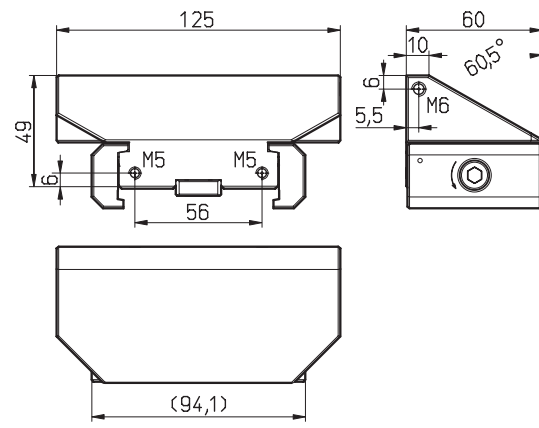
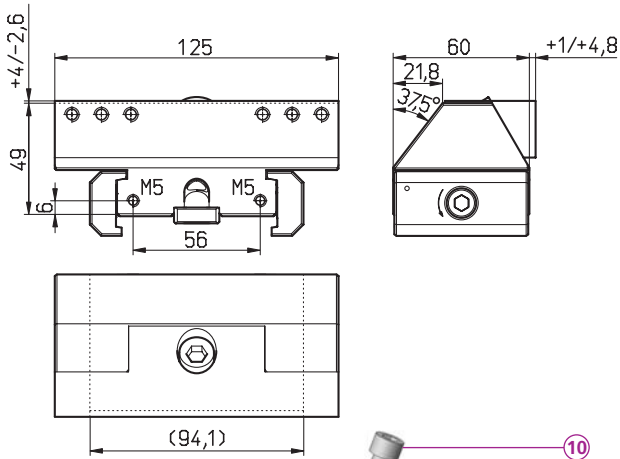
- PS5X 94N49 -90**
- 1** 1x PS5X 94N49 -90
 - 2** 1x _____
 - 3** 1x PCSP 60R
 - 4** 1x PCSP 60L
 - 5** 1x PCS 14
 - 6** 1x PCGU 20 49
 - 7** 1x M6x8 ISO 7380
 - 8** 2x M5x14 ISO 4762
 - 9** 2x PCD 005
 - 10** 1x M10x25 ISO 4762
 - 11** 2x FED 0618
 - kg** 2

	 B90	 B91	 B92	 B93	 B94
C	94	94	94	94	94
H	25	25	25	25	25
L	23	23	23	23	23
D	11	11	11	11	11
ø	15	15	15	15	15
i	HV700xHV700x 0,2mm 0,2mm	*		HV700x 0,2mm	*



PS5X 125N49 -95
PA5X 125-49 R/F

5axesCLAMP



	PA5X 125-49 F	
	PA5X 125-49 R	
1	1x PA5X 125-49- (F/R)	
3	1x PCSP 60R	
4	1x PCSP 60L	
5	1x PCS 14	
6	1x PCGU 20 49	
7	1x M6x8 ISO 7380	
8	2x M5x10 ISO 4762	
X	125	
kg	2,7	

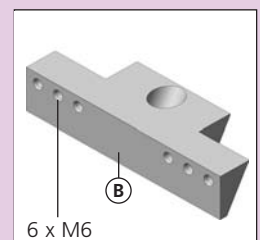
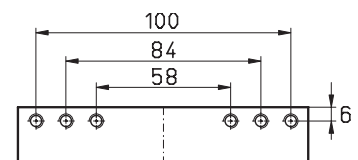
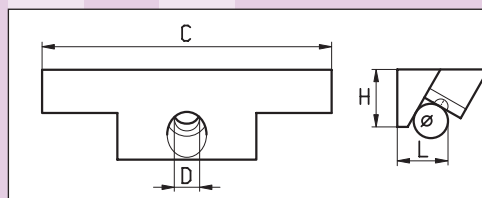
PS5X 125N49 B95

Bestellbeispiel / ordering example / exemple de commande:

PS5X 125-49 R/F

	PS5X 125N49 -95
1	1x PS5X 125N49 -95
2	1x _____
3	1x PCSP 60R
4	1x PCSP 60L
5	1x PCS 14
6	1x PCGU 20 49
7	1x M6x8 ISO 7380
8	2x M5x16 ISO 4762
9	2x PCD 005
10	1x M10x25 ISO 4762
11	2x FED 0618
kg	2,4

B			
	B95	B96	B97
C	125	125	125
H	25	25	25
L	22	22	22,2
D	11	11	11
ø	15	15	15
i	HV700xHV700x 0,2mm 0,2mm	*	



* = weich / soft / doux



powerCLAMP

Das schnellstverstellbare Mehrfachspannsystem! Die Positionierung erfolgt mittels einer Verzahnung auf der Schiene. Befestigung mit einer Schraube!

powerCLAMP

The quickest multiple workholding system for easy set up! Positioning by means of ground teeth on the base rail. Repositioning by opening one single screw!

powerCLAMP

Le système de serrage multiple le plus rapide à régler! Le positionnement du module s'effectue grâce à une denture rectifiée sur le rail de base. Le positionnement du module est garanti par une seule vis.



compactCLAMP

Das flexible Mehrfachspannsystem! Die Positionierung erfolgt mittels Präzisionsbohrungen in Noniusanordnung. Die Spannelemente werden mit der Basis verstiftet und können daher nicht verschieben.

compactCLAMP

the flexible multiple workholding system! Positioning by bores arranged in vernier type layout. The workholding modules are pinned down to the base and thus can't move.

compactCLAMP

Le système de serrage multiple le plus flexible. Le positionnement s'effectue avec des alésages de précision disposés en ordre Nonius. Les modules de serrage sont fixés sur la base avec des goupilles et de ce fait ne peuvent se déplacer.



microCLAMP

Kleinste Module für den Vorrichtungsbau. Sie haben eine grosse Spannkraft (bis 21'000N), der benötigte Abstand zwischen den Werkstücken ist im Optimalfall nur 15 mm.

microCLAMP

Smallest modules for dedicated fixtures. Having a high clamping force (up to 21'000N) the distance between workpieces is only 15mm in optimum set up.

microCLAMP

Le plus petit module de serrage pour la construction de gabarits. Les modules de serrage Micro Clamp ont une grande force de serrage (jusqu'à 21.000 N) la distance nécessaire entre les pièces à usiner est dans le cas optimal de 15 mm.



tripoxyMINERAL

Spanntürme aus Mineralguss. Die Vibrationsdämpfung ist zehn mal besser als bei Grauguss. Das spezifische Gewicht ist hingegen kleiner als bei Aluminium. Erhältlich in vielen verschiedenen Formen.

tripoxyMINERAL

Tombstones made of composite concrete. Vibration damping effect is ten times better than with cast iron. Specific weight on the other hand is less than aluminum. Available in many different shapes.

tripoxyMINERAL

Les tourelles de serrage en fonte minérale. L'atténuation des vibrations est dix fois supérieur à la fonte grise. Le poids spécifique est plus petit que l'aluminium. Elles sont livrables en diverses formes.



mivaCLAMP

Vakuumspannsystem: Bestens geeignet für plattenförmige Werkstücke (auch nicht magnetische). Es können sowohl Druckstellen als auch Deformatoren an labilen Teilen vermieden werden.

mivaCLAMP

Workholding by vacuum: Suited for plateshaped workpieces (also for non magnetical). Pressure marks as well as deformations on soft parts can be avoided.

mivaCLAMP

La meilleure solution pour la fixation de pièces plates (aussi non magnétique) Pas de marques ou blessures sur des matières tendres et pas de déformation avec des pièces instables.



triGEL

Unser Gefrierspannsystem. Sehr gut geeignet für unförmige Teile. Das Haftvermögen ist sehr gross, wobei die Gefrier- und Auftauzeiten sehr gering sind.

triGEL

Workholding by freezing: Well suited for strandely shaped parts. Holding effects are very strong whereas freezing and defrosting times are very short.

triGEL

Notre système de fixation par gel. Recommandé pour des pièces difformes. La force de fixation est très grande et le temps de prise et de dégel est très court.



oppSystem

Unser Nullpunkt-Palettiersystem ermöglicht ein genaues Positionieren von Mehrfachspannsystemen, Schraubstöcken und Vorrichtungen auf Maschinentischen oder Spanntürmen.

oppSystem

Our zero-point palleting system allows exact positioning of multiple workholding systems, vices and dedicated fixtures on machining tables or tombstones.

oppSystem

Notre système de palettisation point zéro garanti un positionnement précis du système de serrage multiple, des étaux, gabarits, constructions spéciales sur la table de la machine ou sur la tourelle de fixation.



5axesCLAMP

Dieses modulare Spannsystem wurde speziell für 5-Achsen-Maschinen entwickelt. Es ermöglicht ein freies zukommen der Maschinenspindel zum Werkstück. Sowohl kleine wie grosse Werkstücke können damit problemlos gespannt werden.

5axesCLAMP

This modular workholding system was especially developed for 5-axes machines. It allows the machine spindle to access freely to the workpiece. Both small and large workpieces can be clamped without difficulties.

5axesCLAMP

Ce système de serrage modulaire a été développé spécialement pour les machines à 5 axes. Ce système autorise un libre accès avec la broche de la machine vers la pièce à usiner. Ce système garanti le serrage de petites et de grandes pièces à usiner.