



TOOL TECHNOLOGIES

Bit Manufacture





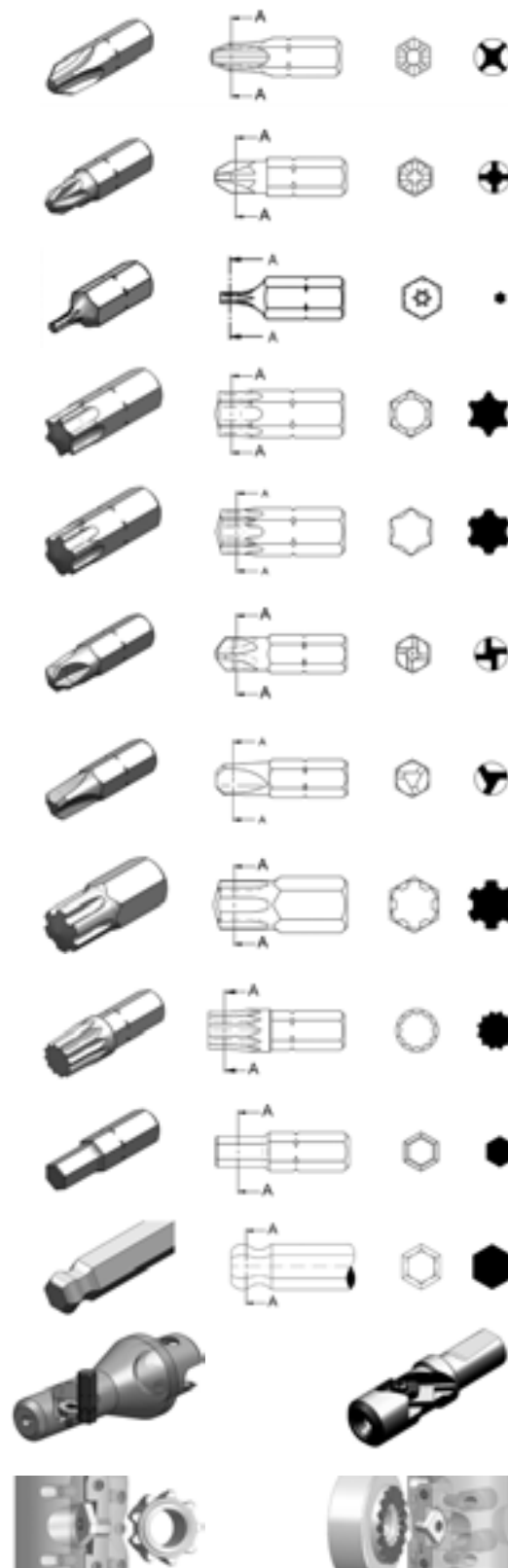
Tooling Manufacture

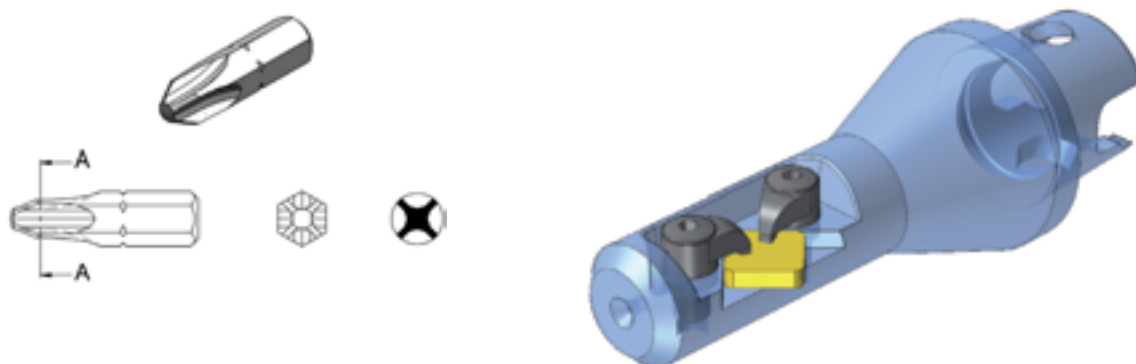
The manufacture of bits and blades with its multitude of shapes and functions requires a broad spectrum of different tools. These have to be adapted to meet the technical demands on the machine and the workpieces that are to be machined.

In response to these needs, we are manufacturing the bits along with the corresponding tool holding systems. The following examples show how these can be adapted to suit the most different machines. On the one hand, adapters may be utilised ranging from UTS (cylindrical shank) and HSK (hollow shank taper) or CAPTO to special tool holding systems. On the other hand, it has to be easy to adjust the distance between the tool and the workpiece spindle as is required with Torq-Sets, Tri-Wing-Bits and blades for instance.



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Four-edge SPCX 0903



Order Designation	Design	Grade of Cutting Material								
		P25MX			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
SPCX 0903 PH0	PHILIPPS sz. 0									
SPCX 0903 PH1	PHILIPPS sz. 1									
SPCX 0903 PH2	PHILIPPS sz. 2									
SPCX 0903 PH3	PHILIPPS sz. 3									

Eight-edge SNCX 0903

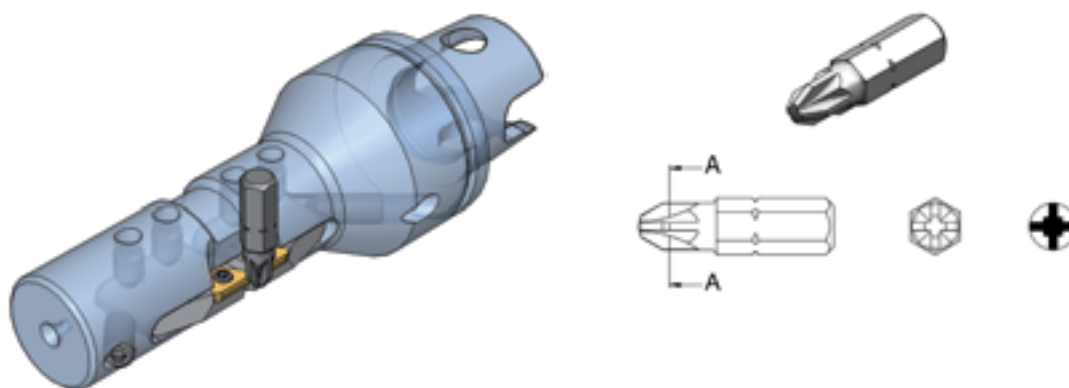


Order Designation	Design	Grade of Cutting Material								
		P25MX			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
SNCX 0903 PH0	PHILIPPS sz. 0									
SNCX 0903 PH1	PHILIPPS sz. 1									
SNCX 0903 PH2	PHILIPPS sz. 2									
SNCX 0903 PH3	PHILIPPS sz. 3									
SNCX 0903 PH4	PHILIPPS sz. 4									

Eight-edge SNCX 1203

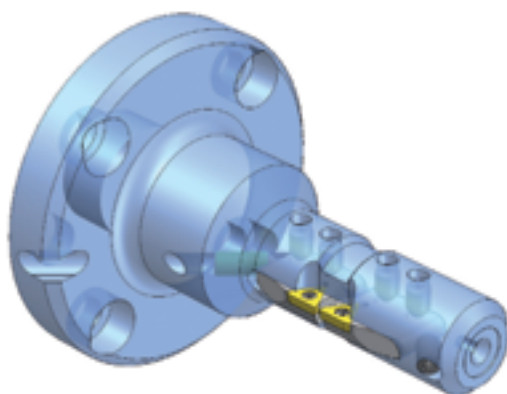
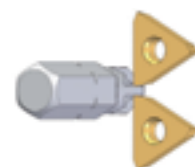


Order Designation	Design	Grade of Cutting Material								
		P25MX			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
SNCX 1203 PH0	PHILIPPS sz. 0									
SNCX 1203 PH1	PHILIPPS sz. 1									
SNCX 1203 PH2	PHILIPPS sz. 2									
SNCX 1203 PH3	PHILIPPS sz. 3									
SNCX 1203 PH4	PHILIPPS sz. 4									



Triple-edge TCEX 1102

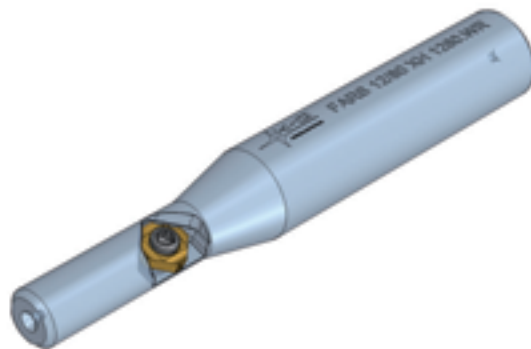
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		P25MF			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
TCEX 1102 PZ0 R	POZI sz. 0 r.h.									
TCEX 1102 PZ0 L	POZI sz. 0 l.h.									
TCEX 1102 PZ1 R	POZI sz. 1 r.h.									
TCEX 1102 PZ1 L	POZI sz. 1 l.h.									
TCEX 1102 PZ2 R	POZI sz. 2 r.h.									
TCEX 1102 PZ2 L	POZI sz. 2 l.h.									
TCEX 1102 PZ3 R	POZI sz. 3 r.h.									
TCEX 1102 PZ3 L	POZI sz. 3 l.h.									
TCEX 1102 PZ4 R	POZI sz. 4 r.h.									
TCEX 1102 PZ4 L	POZI sz. 4 l.h.									



Triple-edge TPCN 1103

Order Designation	Design	Grade of Cutting Material								
		P25MF			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.			
TPCN 1103015	POZI sz. 0-1									
TPCN 110302	POZI sz. 1-2									
TPCN 110303	POZI sz. 3									
TPCN 110304	POZI sz. 4									





Four-edge TORX MICRO

Order Designation	Design	Grade of Cutting Material								
		P25MF			KTALS			CE40		
					10 pc.	20 pc.	50 pc.			
SCHX 05T1 TX01	TORX 1									
SCHX 05T1 TX02	TORX 2									
SCHX 05T1 TX03	TORX 3									
SCHX 05T1 TX04	TORX 4									
SCHX 05T1 TX05	TORX 5									
SCHX 05T1 TX06	TORX 6									



Four-edge TORX plus (IP) MICRO

Order Designation	Design	Grade of Cutting Material								
		P25MF			KTALS			CE40		
					10 pc.	20 pc.	50 pc.			
SCHX 05T1 TX01IP	TORX IP sz. 1									
SCHX 05T1 TX02IP	TORX IP sz. 2									
SCHX 05T1 TX03IP	TORX IP sz. 3									
SCHX 05T1 TX04IP	TORX IP sz. 4									
SCHX 05T1 TX05IP	TORX IP sz. 5									
SCHX 05T1 TX06IP	TORX IP sz. 6									

Single-edge TORX MICRO

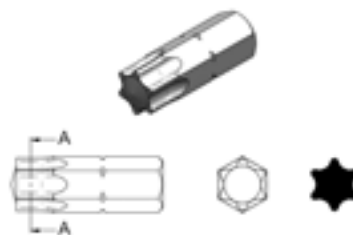
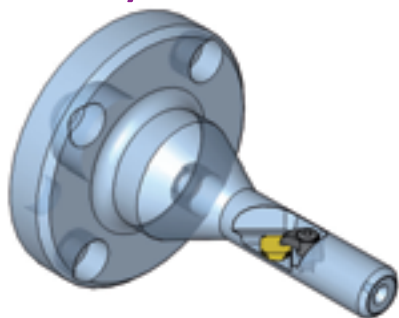
Order Designation	Design	Grade of Cutting Material								
		P25MF			KTALS			CE40		
					10 pc.	20 pc.	50 pc.			
SCHX 05T1 TX07	TORX 7									
SCHX 05T1 TX08	TORX 8									
SCHX 05T1 TX09	TORX 9									
SCHX 05T1 TX10	TORX 10									
SCHX 05T1 TX15	TORX 15									
SCHX 05T1 TX20	TORX 20									



Single-edge TORX plus (IP) MICRO

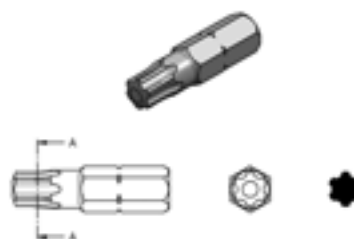
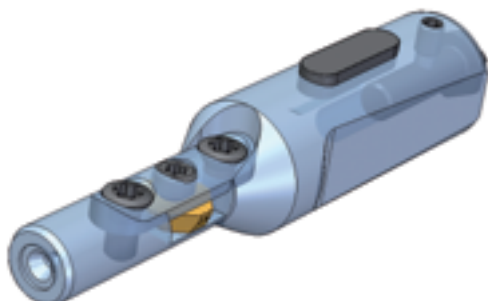
Order Designation	Design	Grade of Cutting Material								
		P25MF			KTALS			CE40		
					10 pc.	20 pc.	50 pc.			
SCHX 05T1 TX07IP	TORX IP sz. 7									
SCHX 05T1 TX08IP	TORX IP sz. 8									
SCHX 05T1 TX09IP	TORX IP sz. 9									
SCHX 05T1 TX10IP	TORX IP sz. 10									
SCHX 05T1 TX15IP	TORX IP sz. 15									
SCHX 05T1 TX20IP	TORX IP sz. 20									

TORX/TORX plus (IP)



Four-edge SPCX 0903 TORX

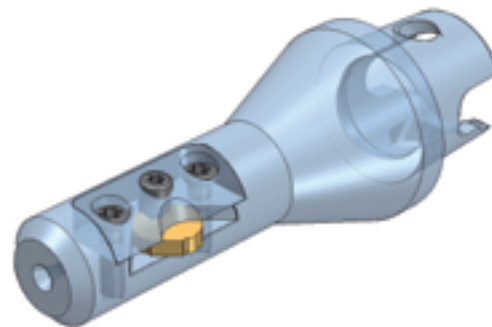
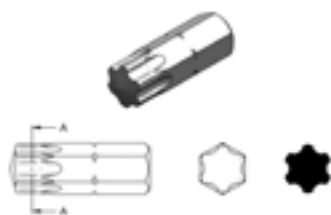
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		P25MX			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
SPCX 0903 TX01	TORX sz. 1									
SPCX 0903 TX02	TORX sz. 2									
SPCX 0903 TX03	TORX sz. 3									
SPCX 0903 TX04	TORX sz. 4									
SPCX 0903 TX05	TORX sz. 5									
SPCX 0903 TX06	TORX sz. 6									
SPCX 0903 TX07	TORX sz. 7									
SPCX 0903 TX08	TORX sz. 8									
SPCX 0903 TX09	TORX sz. 9									
SPCX 0903 TX10	TORX sz. 10									
SPCX 0903 TX15	TORX sz. 15									
SPCX 0903 TX20	TORX sz. 20									
SPCX 0903 TX25	TORX sz. 25									
SPCX 0903 TX27	TORX sz. 27									
SPCX 0903 TX30	TORX sz. 30									



Four-edge SPCX 0903 TORX plus (IP)

Order Designation	Design	Grade of Cutting Material								
		P25MX			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
SPCX 0903 TX01IP	TORX IP sz. 1									
SPCX 0903 TX02IP	TORX IP sz. 2									
SPCX 0903 TX03IP	TORX IP sz. 3									
SPCX 0903 TX04IP	TORX IP sz. 4									
SPCX 0903 TX05IP	TORX IP sz. 5									
SPCX 0903 TX06IP	TORX IP sz. 6									
SPCX 0903 TX07IP	TORX IP sz. 7									
SPCX 0903 TX08IP	TORX IP sz. 8									
SPCX 0903 TX09IP	TORX IP sz. 9									
SPCX 0903 TX10IP	TORX IP sz. 10									
SPCX 0903 TX15IP	TORX IP sz. 15									
SPCX 0903 TX20IP	TORX IP sz. 20									





Eight-edge SNCX 1203 TORX



Order Designation	Design	Grade of Cutting Material								
		P25MX			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
SNCX 1203 TX09	TORX sz. 9									
SNCX 1203 TX10	TORX sz. 10									
SNCX 1203 TX15	TORX sz. 15									
SNCX 1203 TX20	TORX sz. 20									
SNCX 1203 TX25	TORX sz. 25									
SNCX 1203 TX27	TORX sz. 27									
SNCX 1203 TX30	TORX sz. 30									
SNCX 1203 TX40	TORX sz. 40									
SNCX 1203 TX45	TORX sz. 45									
SNCX 1203 TX50	TORX sz. 50									

Eight-edge SNCX 1203 TORX plus (IP)



Order Designation	Design	Grade of Cutting Material								
		P25MX			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.			
SNCX 1203 TX25IP	TORX IP sz. 25									
SNCX 1203 TX27IP	TORX IP sz. 27									
SNCX 1203 TX30IP	TORX IP sz. 30									
SNCX 1203 TX40IP	TORX IP sz. 40									
SNCX 1203 TX45IP	TORX IP sz. 45									
SNCX 1203 TX50IP	TORX IP sz. 50									

Four-edge SNCX 1203 TORX



Order Designation	Design	Grade of Cutting Material								
		P25MX			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
SNCX 1203 TX55	TORX sz. 55									
SNCX 1203 TX60	TORX sz. 60									
SNCX 1203 TX70	TORX sz. 70									

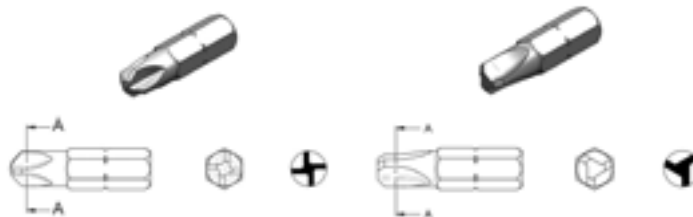
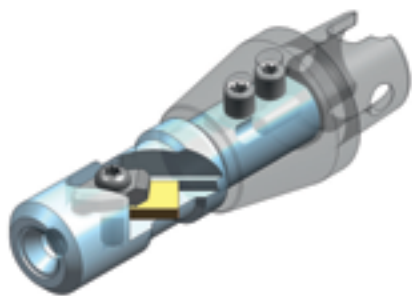
Double-edge SNCX 1203 TORX



Order Designation	Design	Grade of Cutting Material								
		P25MX			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.			
SNCX 1203 TX80	TORX sz. 80									
SNCX 1203 TX90	TORX sz. 90									
SNCX 1203 TX100	TORX sz. 100									

TORQ-SET

TRI-WING



Eight-edge SNCX 1203 TORQ-SET

Order Designation	Design	Grade of Cutting Material								
		P25MX			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.			
SNCX 1203 TQ0-3	TORQ-SET 0-3									
SNCX 1203 TQ4-5	TORQ-SET 4-5									
SNCX 1203 TQ6-8	TORQ-SET 6-8									
SNCX 1203 TQ10	TORQ-SET 10									



Four-edge SNCX 1203 TRI-WING

Order Designation	Design	Grade of Cutting Material								
		P25MF			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.			
SNCX 1203 TW0	TRI-WING 0									
SNCX 1203 TW1	TRI-WING 1									
SNCX 1203 TW2	TRI-WING 2									
SNCX 1203 TW3	TRI-WING 3									
SNCX 1203 TW4	TRI-WING 4									
SNCX 1203 TW5	TRI-WING 5									



RIBE Spline Bits

Four-edge SNCX 1203 RIBE Spline Bits

Order Designation	Design	Grade of Cutting Material								
		P25MF			PTALS			CE40		
					10 pc.	20 pc.	50 pc.			
SNCX 1203 RIBE05	RIBE sz. 5									
SNCX 1203 RIBE06	RIBE sz. 6									
SNCX 1203 RIBE07	RIBE sz. 7									
SNCX 1203 RIBE08	RIBE sz. 8									
SNCX 1203 RIBE09	RIBE sz. 9									
SNCX 1203 RIBE10	RIBE sz. 10									
SNCX 1203 RIBE12	RIBE sz. 12									

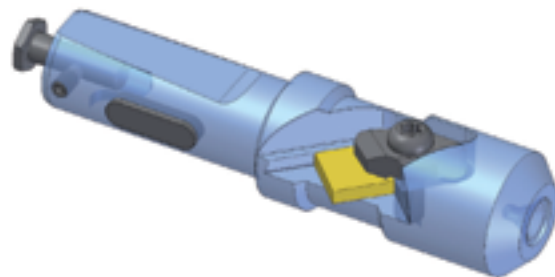


Double-edge SNCX 1203 RIBE Spline Bits

Order Designation	Design	Grade of Cutting Material								
		P25MF			PTALS			CE40		
					10 pc.	20 pc.	50 pc.			
SNCX 1203 RIBE13	RIBE sz. 13									
SNCX 1203 RIBE14	RIBE sz. 14									
SNCX 1203 RIBE16	RIBE sz. 16									
SNCX 1203 RIBE18	RIBE sz. 18									
SNCX 1203 RIBE20	RIBE sz. 20									
SNCX 1203 RIBE22	RIBE sz. 22									



XZN 12-point Bits

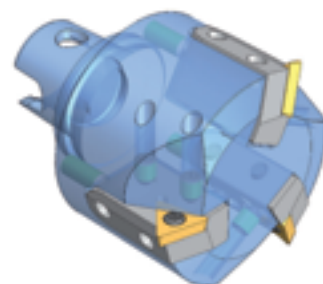


Eight-edge SNCX 1203 XZN 12-point Bits

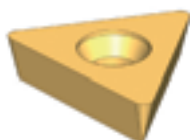


Order Designation	Design	Grade of Cutting Material								
		P25MX			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
SNCX 1203 XZN05-10	XZN sz. 5 – 10									
SNCX 1203 XZN12-18	XZN sz. 12 – 18									

Polygon Inserts

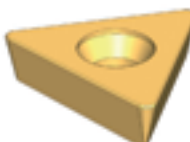


TPHW 16T3, Triple-edge Cut without Protective Chamfer



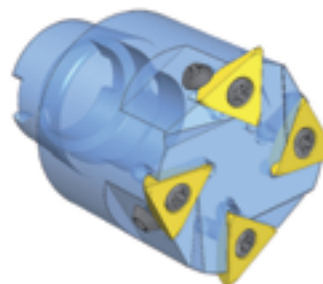
Order Designation	Design	Grade of Cutting Material								
		P25MF			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
TPHW 16T304	Without chamfer									
TPHW 16T308	Without chamfer									

TPHW 16T3, Triple-edge Cut with Protective Chamfer



Order Designation	Design	Grade of Cutting Material								
		P25MF			PTALS			CE40		
		10 pc.	20 pc.	50 pc.	10pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
TPHW 16T304 S	Chamfer: 0.1x20°									
TPHW 16T308 S	Chamfer: 0.1x20°									

Polygon Ball Head

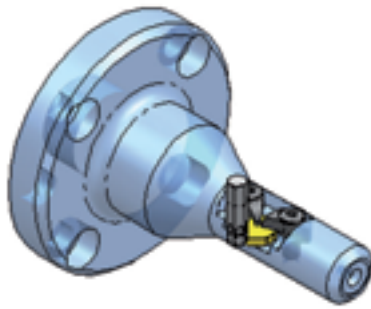


TNEX 1603, Vertical Triple-edge Cut



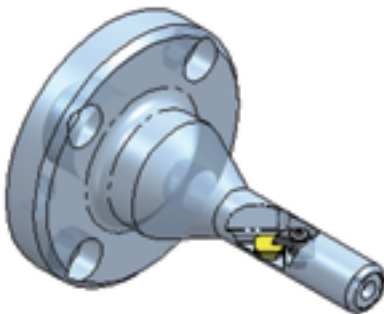
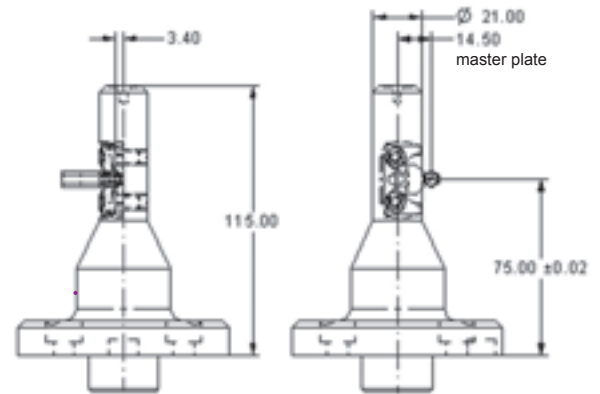
Order Designation	Design	Grade of Cutting Material								
		P25MF			KTALS			CE40		
					10pc.	20 pc.	50 pc.	10 pc.	20 pc.	50 pc.
TNEX 1603 HR03 R	Radius: 0.3									
TNEX 1603 HR05 R	Radius: 0.5									
TNEX 1603 HR07 R	Radius: 0.7									
TNEX 1603 HR11 R	Radius: 1.1									

Tool Examples



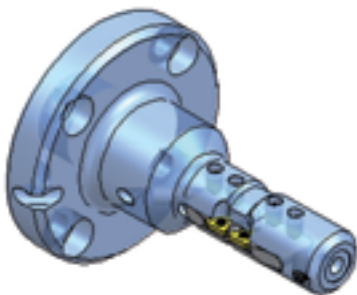
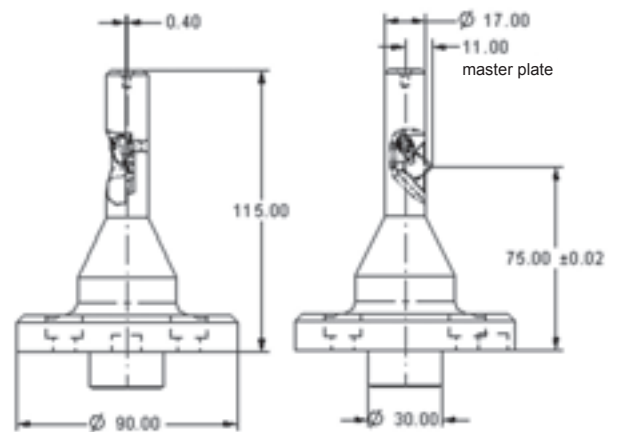
Profile Insert Milling Cutter FALC WERA XH 1260.H

Spare part	
Toe dogs	SFS 6/6
Inserts	SNCX 1203 XF ...
Profiles	TORX 9-50 PHILIPPS 0-4 VIELZAHN XZN 5-18
Machine	WERA Profilator R..60



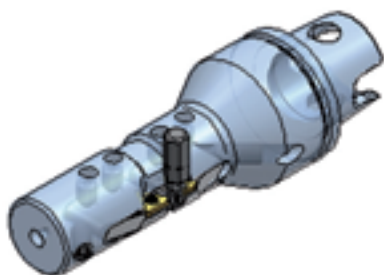
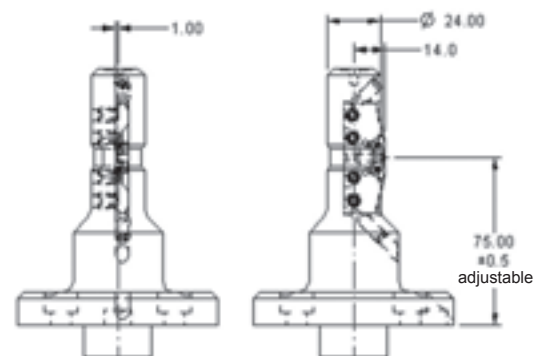
Profile Insert Milling Cutter FALC WERA XH 1260.I

Spare part	
Toe dogs	SFS 5/5
Inserts	SPCX 0903 XF ...
Profiles	TORX 1-30 PHILIPPS 0-3
Machine	WERA Profilator R..60



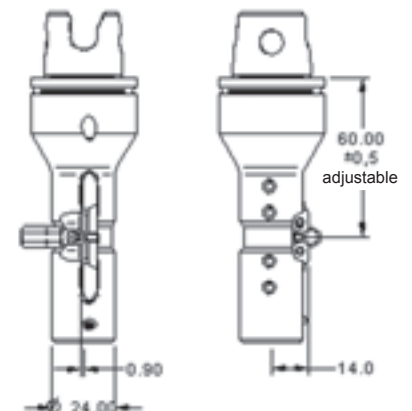
Cartridge-type Milling Cutter for Profile Inserts FALK WERA XH 1901.B

Spare parts	
Cartridge R	FKR 2306 XK 1901.A10
Cartridge L	FKL 2306 XK 1901.A11
Ball screw	TNK M6F
Adjustment screw	ESD M6.05/10
Insert screw	TXB 2.5/5.9
Inserts	TCEX 1102 PZ*R TCEX 1102 PZ*L
POZIDRIVE 1-4	*Indexable inserts according to Pozidrive size
Machine	WERA Profilator R..60

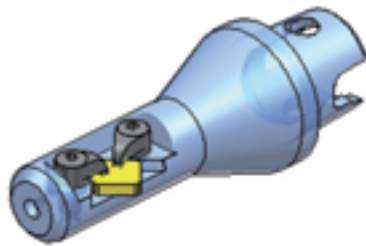


Cartridge-type Milling Cutter for Profile Inserts FARK UTS40 XH 1901.I

Spare parts	
Cartridge R	FKR 2306 XK 1901.A10
Cartridge L	FKL 2306 XK 1901.A11
Ball screw	TNK M6F
Adjustment screw	ESD M6.05/10
Insert screw	TXB 2.5/5.9
Inserts	TCEX 1102 PZ*R TCEX 1102 PZ*L
POZIDRIVE 1-4	*Indexable inserts according to Pozidrive size
Machine	WERA Profilator RM80

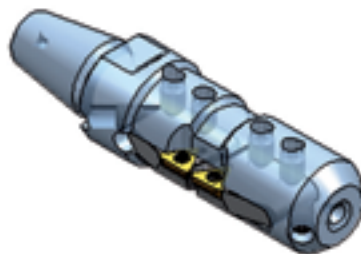
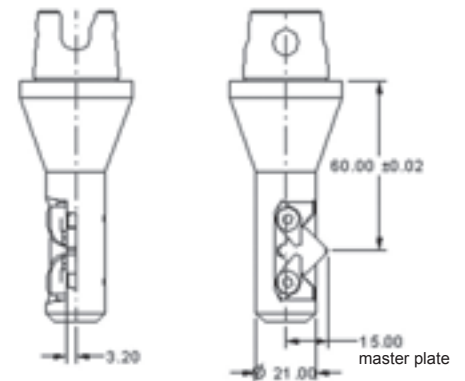


Tool Examples



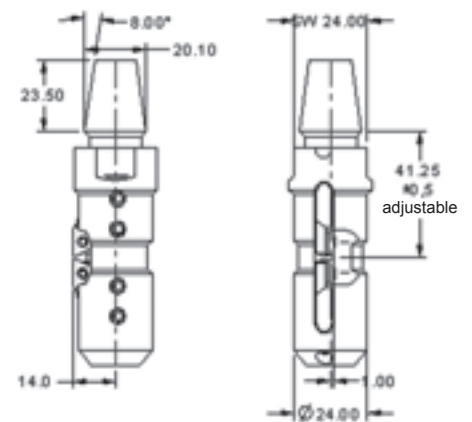
Profile Insert Milling Cutter FARC UTS40 XH 1260.M

Spare part Toe dogs	SFS 6/6
Inserts	SNXC 1203 XF ...
Profiles	TORX 9-50 PHILIPPS 0-4 VIELZAHN XZN 5-18
Machine	WERA Profilator RM80



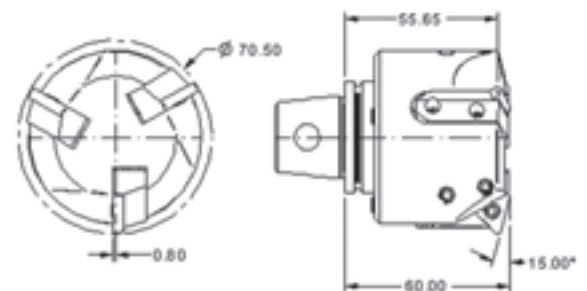
Cartridge-type Milling Cutter for Profile Inserts FALK ER20 XH 1901.N

Spare parts	
Cartridge R	FKR 2306 XK 1901.A10
Cartridge L	FKL 2306 XK 1901.A11
Ball screw	TNK M6F
Adjustment screw	ESC M6.05/8 ESD M6.05/10 TXB 2.5/5.9
Insert screw	
Inserts	TCEX 1102 PZ*R TCEX 1102 PZ*L
POZIDRIVE 1- 4	*Indexable inserts according to Pozidrive size
Machine	Many with collet



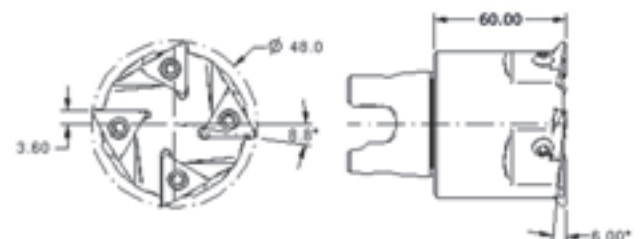
Polygon Cartridge-type Milling Cutter FALK UTS40 XH 1215.IB

Spare parts	
Cartridge	FKLE 3312 XK 1215.G01
Ball screw	TNK M6F
Adjustment screw	ESA M6.05/16 TXB 3.5/9
Insert screw	
Insert	TPHW 16T3 ...
Machine	WERA Profilator RM80

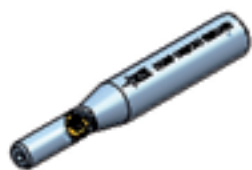


Ball Head Miller FALS UTS40 XH 2311.DL

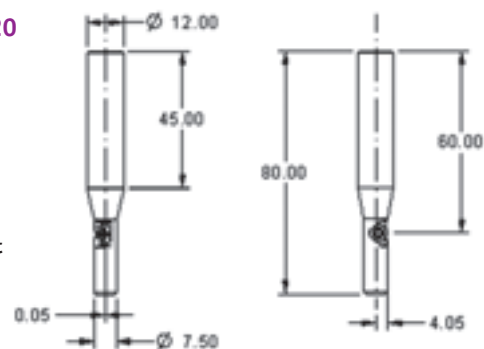
Spare parts	
Insert screw	TX 3.5/9
Clamp bolt	SSR 4/6
Insert	TNHX 1603 HR ...
Machine	WERA Profilator RM80



Milling Cutter for TORX and TORX plus sz. 1 – 20 FARS 12/80 XH 1260.WR



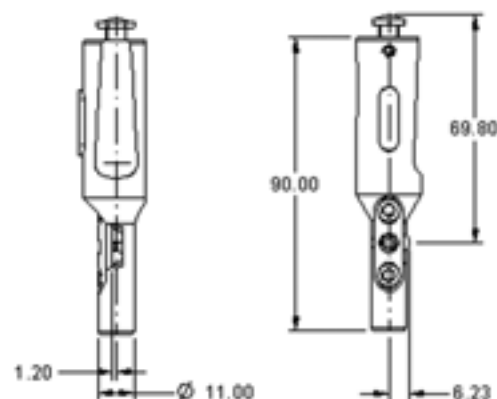
Spare part	
Insert screw	TXB 2.5/5
Inserts	SCHX 05T1 TX01-TX06, four-edge cut SCHX 05T1 TX01IP-TX06IP SCHX 05T1 TX07-TX20, single-edge cut SCHX 05T1 TX07IP-TX20IP
Machine	Various



Milling Cutter for Ball Head TORX sz. 5 – 30 FARC WL20 XH 1260.VA

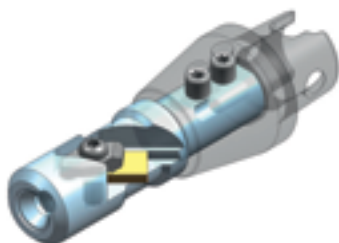


Spare parts	
Clamping piece	KLS 080430 XZ 1260.VA1
Clamp bolt	TX 4.5/10.5
Thrust bolt	ESC M6.05/4
Fitting key	DIN 6885 6x4x20
Adjustment screw	AES M6.05/20
Inserts	SPCX 0903 TX5-TX30
Machine	Various

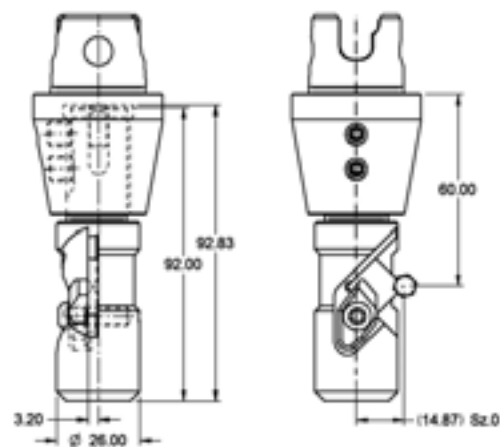


Production of TORQ-SET 0-10 Adapter and Cutter Combination

* adjustable for all sizes according to table

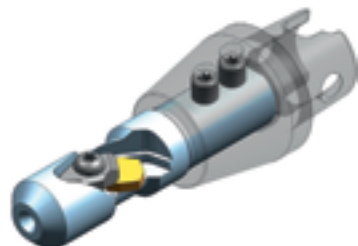


Adapter	UTS40 40/38 XZ 2800.N03
Spare part	
Clamp bolt	M8x1x12 DIN 913
Milling cutter	FARC WLK20 XH 1260.ARW
Spare parts	
Adjustment screw	ESC 6.05/13
Toe dog complete	KRS 200812 XZ 2826.B06
Inserts	SNCX 1203 TQ0-TQ10
Machine e. g.	WERA PROFILATOR RM80

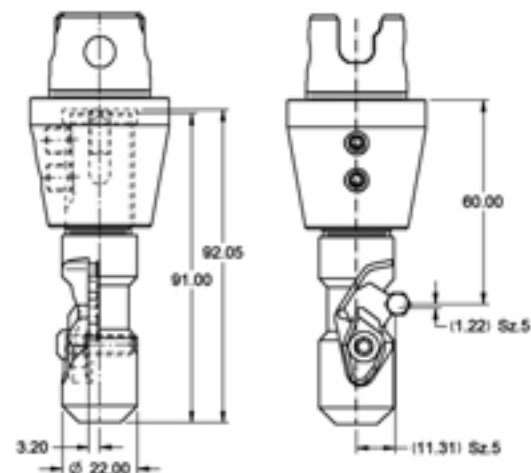


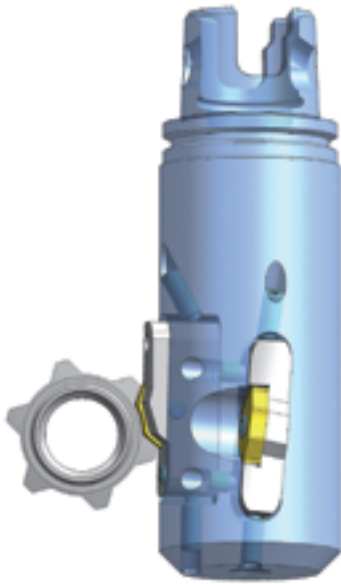
Production of TRI-WING 0-5 Adapter and Cutter Combination

* pre-set, identical for all sizes



Adapter	UTS40 40/38 XZ 2800.N03
Spare part	
Clamp bolt	M8x1x12 DIN 913
Milling cutter	FARC WLK20 XH 2993.ARW
Spare parts	
Adjustment screw	ESC 6.05/13
Toe dog complete	KRS 200812 XZ 2826.B06
Inserts	SNCX 1203 TW0-TW5
Machine e. g.	WERA PROFILATOR RM80



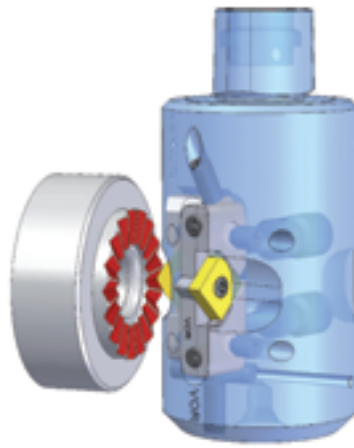
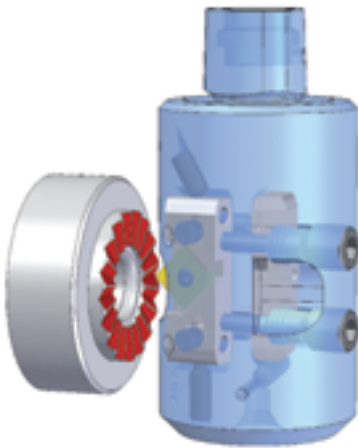


Plug-in gear tooth machining with rough and finishing cutters

Figure on left
The rough cutter in its shaping position.

Figure on right
Same procedure with the finishing cutter turned by 90°.

The adaptation is UTS 40

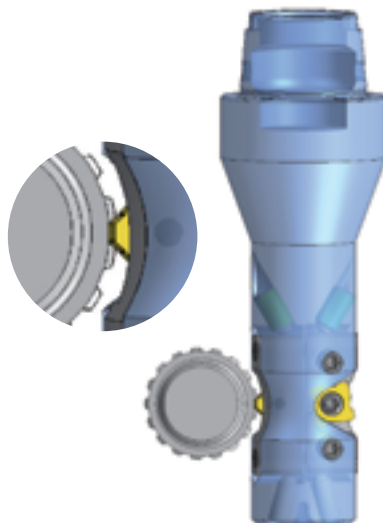
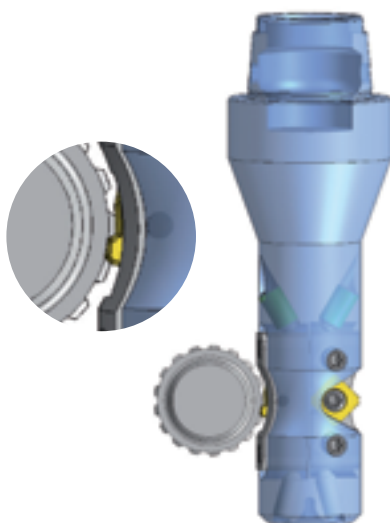


Spur gear machining with rough and finishing cutters

Figure on left
The rough cutter merely cuts the base of the tooth clear.

Figure on right
The finishing cutter profiles the gap of the tooth with the run-out in the workpiece axis.

The adaptation is CAPT0 4



Plug-in gear tooth machining with rough and finishing cutters

Figure on left
The rough cutter in its shaping position whereby the outer diameter is calibrated.

Figure on right
The finishing cutter profiles the gearing (turned by 180°).

The adaptation is HSK 40

Indexable inserts of the same basic shape and design can be combined in terms of pricing to benefit from the following quantity discounts:

min. 100 pcs. = 5 % | min. 200 pcs. = 7 % | min. 300 pcs. = 10 % | min. 500 pcs. = 15 %

We will gladly inform you on the prices for carrier tools and differing designs on request.

All dimensions in mm / All prices in EUR

General Terms and Conditions of Business

1. Conclusion of Contract / Content of Contract

These General Terms and Conditions of Sale shall apply to any and all contracts, present and future, with companies for deliveries of goods and other services. Customer's terms and conditions of purchase will not be accepted even if we have not raised express objection to them upon their receipt. The minimum order value per contract shall be EUR 100.00 net, excluding VAT. A handling fee of EUR 10.00 will be charged otherwise. 10 is the minimum order for each type of insert of the same design, size and type of carbide. Excess and shortfall deliveries of as much as 10% of the ordered quantity are permissible.

2. Order Confirmation

The placement of an order shall be deemed tacit acceptance of the Terms and Conditions. Deviating terms and conditions on Customer's order forms will not be accepted even if the order is accepted; objection is hereby expressly raised to their application. Subsidiary agreements shall not be legally binding unless confirmed in writing. The invoice shall serve in lieu of the order confirmation if the latter is not sent separately in advance.

3. Design

Special designs of indexable inserts and carrier tools and interconnection systems will be designed and manufactured in offer and delivery according to best technical knowledge. Any and all warranties of function and lifetime are excluded – however, legal warranty rights shall not be affected (Clause 6). Our offer drawing or the drawing with the most recent revision date shall be binding for dimensions and tolerances. The tolerance limits determined by our production procedures shall apply. Offer drawings will, upon placement of an order, be assigned a special number in the order confirmation or invoice; this special number shall be referred to in any further orders and shall be the sole criterion for clear identification.

4. Delivery

Delivery periods shall commence on the date of the order confirmation. They are non-binding and are only approximate. In the event of non-compliance with delivery dates, the Customer shall not be entitled to damage compensation. Partial deliveries are permissible. Unforeseen hindrances to the delivery causing major difficulty in performing the delivery or make it impossible and which are not merely temporary, such as delayed receipt of materials, operational disruption, strike, force majeure, etc., shall entitle us to postpone the delivery for the duration of the hindrance or to cancel the contract. If and when the Seller is accountable for the failure to comply with periods and deadlines which have been promised as binding or is in default, the Buyer shall have a claim to default compensation in the amount of 0.5% for each and every full week of default, limited, however, to 5% in the aggregate, of the invoice value of the consignments and services affected by the default. Any further claims are excluded unless the default is the consequence of gross negligence as a minimum on the part of the Seller. Blanket agreements shall have a maximum term of one year. Any quantities for which release orders have not been given shall be EUR 250.00. Lower release quantities are not permitted. The drawings with the modification status at the point in time of the order shall be authoritative. Retroactive modifications shall be made at the Buyer's expense.

5. Transfer of Risks/Packaging and Shipping Costs

Unless otherwise expressly agreed, the Buyer shall collect the goods at our place of business. The risk of accidental loss or deterioration shall be transferred to the Buyer when the goods are surrendered to him. Goods shall be shipped only at the Buyer's express request. In this case, the risk of accidental loss or deterioration shall be transferred to the Buyer when the goods are surrendered to the shipping agent. The Buyer shall bear the costs of packaging and shipping from the site of our branch business, unless these costs exceed a reasonable ratio to the value of the delivered objects.

6. Complaint of Defects/Material Defects/Liability

Complaints of defects must be submitted to us in writing within 8 days. We will recognise them solely to the extent that they are related to the scope of delivery

or services which we have confirmed. The risk of grinding technique and material type or coating type, the usability of any and all processed, converted or subsequently processed plates and workpieces shall be borne by the Customer. In the event of a legitimate complaint of defects which has been submitted in due time, we may, at our discretion, remedy the defect or deliver goods which are free of defects (subsequent performance). If subsequent performance fails or is refused, the Customer may, after the expiration of a reasonable period which he has set, cancel the contract or reduce the purchase price. If the Customer does not immediately give us the opportunity to determine the material defect, if in particular he does not immediately upon request make available the goods about which complaint has been made or samples thereof, any and all rights related to the material defect shall lapse. We will be liable in accordance with legal provisions in cases of intent or gross negligence on our part or on the part of one of our representatives or vicarious agents. In all other cases, we will be liable solely pursuant to the Product Liability Act, owing to injury to life, body or health or owing to culpable breach of essential contractual obligations. However, the damage compensation claim for breach of essential contractual obligations shall be limited to the foreseeable loss or damage typical of the contract, provided that none of the exceptional cases described in Sentence 2 of this Clause are present. However, liability for loss or damage to the Customer's legal goods caused by the object of the delivery, e.g., damage to other objects, shall be excluded completely. This provision shall not apply in cases of intent or gross negligence or of liability owing to injury to life, body or health. These regulations shall also extend to damage compensation in addition to performance and damage compensation in lieu of performance, irrespective of the legal reason, in particular owing to defects, the breach of obligations from the debt relationship or actions in tort. They shall also apply to the claim for reimbursement of fruitless expenditures. However, the liability for default shall be regulated pursuant to Clause 4; the liability for impossibility shall not be affected. The above regulations do not entail a change in the burden of proof to the Customer's disadvantage.

7. Payment

The invoice amount shall be paid without deductions within 30 days of the invoice date, irrespective of any complaints of defects. Request will be made for payment of any cash discounts which may be deducted. It is prohibited for the Buyer to retain payment related to any counterclaims. The Customer is permitted to set off only those claims which are undisputed or which have been finally determined by a court of law. The first dunning notice for default of payment will be a reminder at no charge. Each further dunning notice shall be subject to a charge and will contain a dunning fee of EUR 10.00. In the event of default of payment, we are entitled, without prejudice for the assertion of further loss, to charge default interest of 5% above the current basic interest rate (Section 247 BGB (German Civil Code)). We will not be obligated to perform any further deliveries pursuant to any current contracts until invoice amounts which are due, including default interest, have been paid.

8. Retention of Title

We retain title to any and all goods and services which we have delivered until payment of all of our claims from the business relationship has been effected, even if the purchase price for specially designated claims has been paid. This retention of title shall also apply to any goods for which we have merely processed the raw materials which have been provided to us.

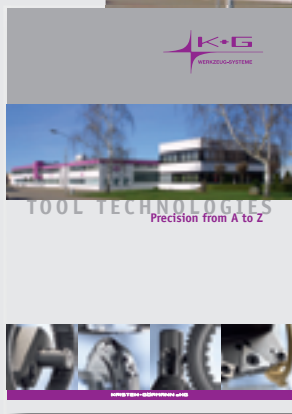
9. Proper Law/Place of Performance/Jurisdiction

Proper law governing any and all legal relationships between us and our Customer shall be the law of Germany. Place of performance shall be 77871 Renchen. Place of jurisdiction for both Parties shall be 77704 Oberkirch.

10. Partial Invalidity

If individual provisions of the supply contract, in whole or in part, should prove to be legally ineffective or impossible to perform, the effectiveness of the remaining provisions shall not be affected thereby.

Request our Brochure.



Precision from A to Z

Find out who we are and what we're good at and how we can assist you with solutions tailored to your requirements, and see why so many of our customers have been delighted with our services.

Explore our know-how, our philosophy and our bandwidth of individual services, and all our production divisions, which fully meet all technical requirements.



Grooving

Precise grooving cuts in virtually any common grooving configuration. Our solutions with inserts in single-, double-, or package-holders with cartridges, or directly fitted, leave nothing to be desired for your production processes. We cover a broad range of applications, from simple, straight grooving cuts to profile configuration tasks, so that you are guaranteed a customised solution tailored to your requirements. Let us convince you, too!

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Robert-Bosch-Str. 6
77871 Renchen
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Fax +49(0)7843-9927-66
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