

P92 - Parting off, grooving and turning

A great variety of applications

- ▶ ***Grooving***
- ▶ ***Turning***
- ▶ ***Parting off***



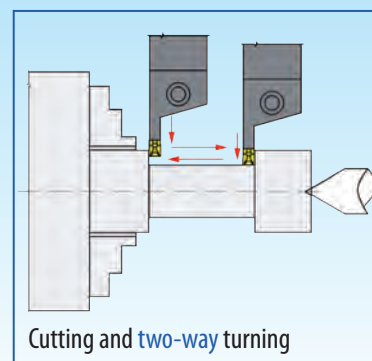
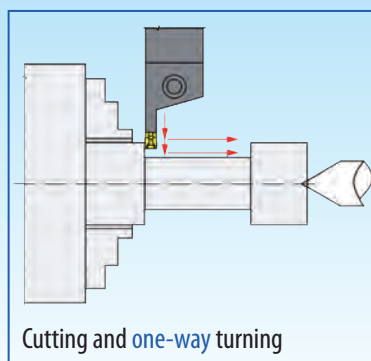
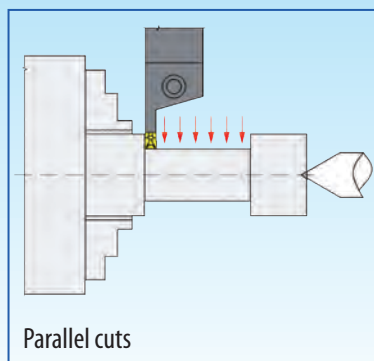
P92 - Parting off, grooving and turning

A great variety of applications

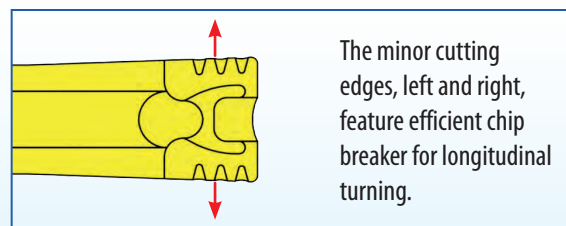
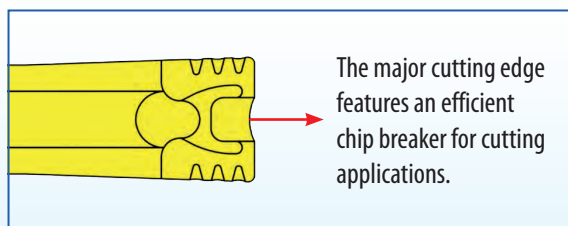
Cutting and turning machining

The major cutting edge cuts a groove and then the minor edge turns in longitudinal direction

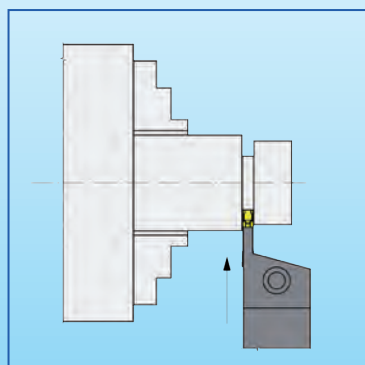
Different methods of cutting and turning



The cutting edges

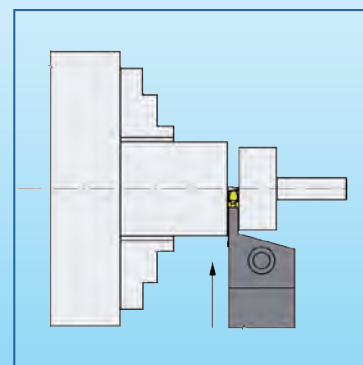


Grooving



The major cutting edge cuts a groove.

Parting off



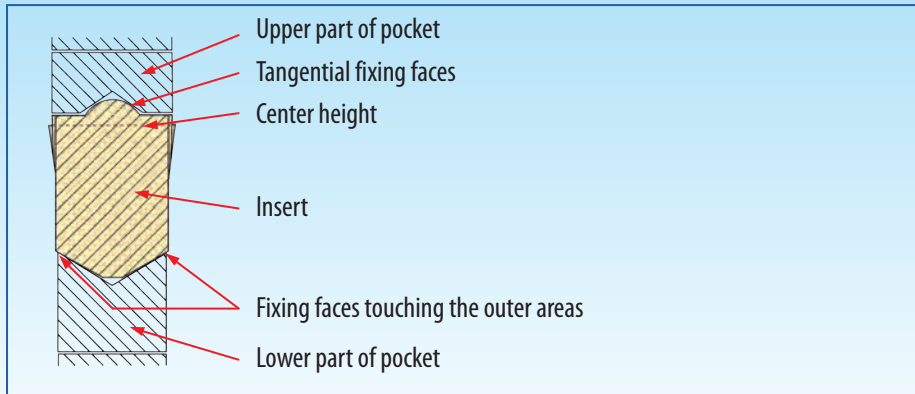
The major edge parts off a component from the bar.

P92 - Parting off, grooving and turning

A great variety of applications

Team work: Insert and holder

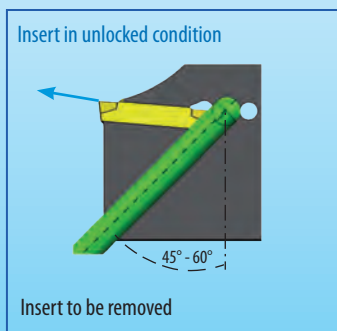
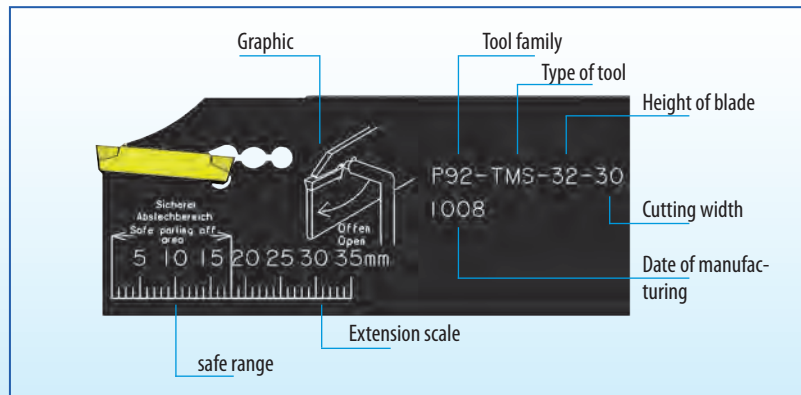
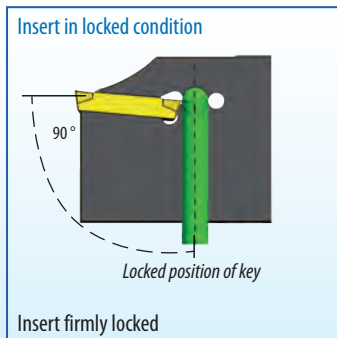
The insert has to fit perfectly into the pocket for all machining operations.



Cross section of insert pocket

TWIN blade P92-TMS

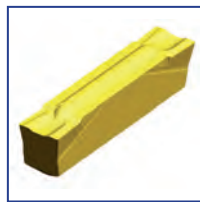
on page 74



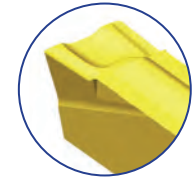
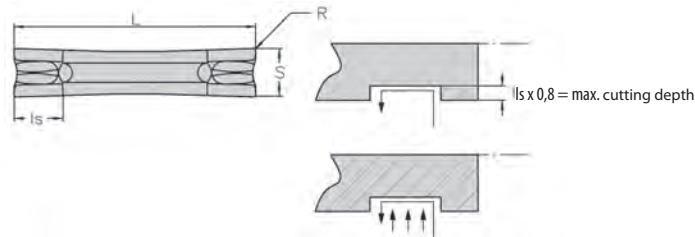
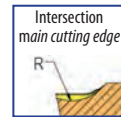
Advantages

- ✓ Increased profitability compared to blades holding 1-edge inserts
- ✓ Reinforced solidity
- ✓ Perfect clamping
- ✓ Easy handling
- ✓ Marking for easy understanding
- ✓ Excellent tool life together with parting off inserts BTNN and A BTNN
- ✓ Steady run

Inserts for grooving and turning



BTNG
System P92



Enlarged view

WG260 Ref.	GF110 ID-Nr.	GF110 NANOSPEED ID-Nr.	GF110 TILOX ID-Nr.	(C)	L	Is	R	S ±0,025
BTNG 202	32649	34264	34263	N	20,00	2,00	0,2	2,00
BTNG 2,5	32652	34005	34004	N	20,00	2,00	0,2	2,50
BTNG 302	13403	13404	-	N	20,00	3,50	0,2	3,00
BTNG 304	13405	13406	-	N	20,00	3,50	0,4	3,00
BTNG 402	13407	13408	-	N	20,00	3,50	0,2	4,00
BTNG 404	13409	13410	-	N	20,00	3,50	0,4	4,00
BTNG 408	13411	13412	-	N	20,00	3,50	0,8	4,00
BTNG 504	13402	13124	-	N	25,00	4,20	0,4	5,00
BTNG 508	13396	13395	-	N	25,00	4,20	0,8	5,00
BTNG 604	19292	20502	-	N	30,00	4,90	0,4	6,00
BTNG 608	19293	20503	-	N	30,00	4,90	0,8	6,00
BTNG 808	19294	20504	-	N	30,00	6,40	0,8	8,00
BTNG 812	19295	20505	-	N	30,00	6,40	1,2	8,00
BTNG 1008	19296	20506	-	N	30,00	8,10	0,8	10,00
BTNG 1012	19297	20507	-	N	30,00	8,10	1,2	10,00

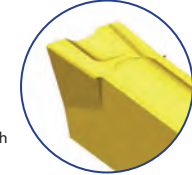
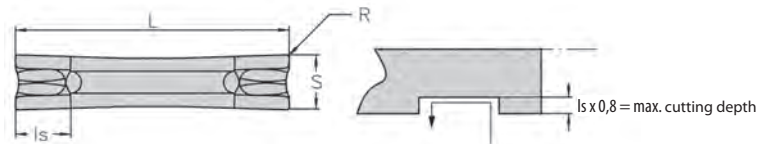
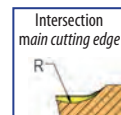
BTNG-Finishing

Fitting tool holders at the bottom

Grooved cutting edge. Horizontal turning edges with parallel chip breakers. The **precision ground micrograin insert** is recommended especially for heat resistant alloys.



BTNX
System P92



Enlarged view

WG300 Ref.	GS 530 NANOSPEED ID-Nr.	KM TILOX ID-Nr.	(C)	L	Is	R	S
BTNX 202	32658	38825	N	20,10	2,00	0,2	2,05 +0,10
BTNX 2,5	32661	38824	N	20,10	2,00	0,2	2,62 +0,10
BTNX 302	12669	38826	N	20,00	3,50	0,2	3,05 +0,15
BTNX 304	12687	38827	N	20,00	3,50	0,4	3,05 +0,15
BTNX 404	12691	38828	N	20,00	3,50	0,4	4,05 +0,15
BTNX 408	12686	38829	N	20,00	3,50	0,8	4,05 +0,15
BTNX 504	12692	38830	N	25,00	4,20	0,4	5,05 +0,25
BTNX 508	12685	38831	N	25,00	4,20	0,8	5,05 +0,25

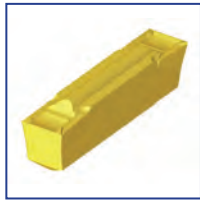
BTNX-Semi finishing

Grooved cutting edge. Horizontal turning edges with parallel chip breakers. The TIN-coated **cermet insert** is recommended for high speed finishing. The insert can be used universally. The grade KM TILOX is recommended for semi finishing to roughing machining.

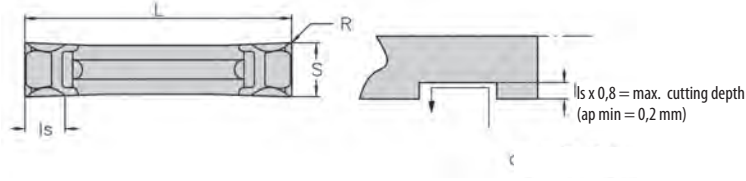
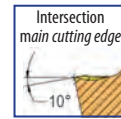
Fitting tool holders



Inserts for grooving and turning



CTDS
System P92



Enlarged view

WG300 Ref.	PM NANOSPEED	PM TILOX	KM TILOX	(C)	L	ls	R	S ±0,10
	ID-Nr.	ID-Nr.	ID-Nr.					
CTDS 302	10418	10417	15318	N	20 ±0,15	3,0	0,2	3,08
CTDS 402	10422	10421	21412	N	20 ±0,15	3,0	0,2	4,08
CTDS 502	10426	10425	-	N	25 ±0,20	3,0	0,2	5,13

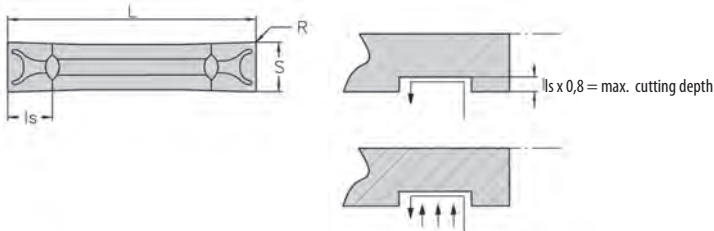
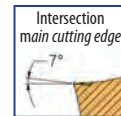
CTDS-Super finishing

Fitting tool holders at the bottom

Chamfered cutting edge and sharply ground turning edges. Excellent chip control even on turning with small cutting depths.



MTNS
System P92



Enlarged view

WG300 Ref.	PM NANO- SPEED	KM NANO- SPEED	PM ALOX	KM TILOX	PM TILOX	GF110 TILOX	GF110 ALOX	KM CARBO- SPEED	(C)	L	ls	R	S
	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.					
MTNS 202	54647	33879	54917	33878	54918	54925	54929	43918	N	20,10	2,0	0,2	2,05 +0,10
MTNS 2,5	54649	33889	54916	33888	54919	30851	54928	43919	N	20,10	2,0	0,2	2,62 +0,10
MTNS 302	11011	54618	11008	38482	11010	26719	44290	43920	N	20,00	3,5	0,2	3,0 +0,15
MTNS 304	11015	54619	11012	38541	11014	26720	36063	43921	N	20,00	3,5	0,4	3,0 +0,15
MTNS 402	11019	54620	11016	38542	11018	26721	44291	43922	N	20,00	3,5	0,2	4,0 +0,20
MTNS 404	11023	54621	11020	38543	11022	26722	44275	43923	N	20,00	3,5	0,4	4,0 +0,20
MTNS 408	21555	54622	21344	13170	43814	43815	44292	43816	N	20,00	3,5	0,8	4,0 +0,15
MTNS 504	11031	54623	11028	38544	11030	25964	39451	43817	N	25,00	4,2	0,4	5,0 +0,25
MTNS 508	43821	54624	43822	13413	43823	24807	44293	40998	N	25,00	4,2	0,8	5,05 +0,25
MTNS 604	43827	54625	43828	19268	43829	26723	44294	43836	N	30,00	4,9	0,4	6,05 +0,25
MTNS 608	21557	54626	32197	19269	40340	20861	21022	43837	N	30,00	4,9	0,8	6,05 +0,25
MTNS 612	54651	54642	54912	19270	54920	54633	54930	43840	N	30,00	4,9	1,2	6,05 +0,25
MTNS 808	21559	54627	28346	19271	29875	54635	54927	43841	N	30,00	6,4	0,8	8,05 +0,25
MTNS 812	54653	54643	54915	19272	54921	54637	54931	43842	N	30,00	6,4	1,2	8,05 +0,25
MTNS 1008	54655	54644	54913	19274	54922	54639	54932	43843	N	30,00	8,1	0,8	10,05 +0,25
MTNS 1012	54657	54645	54914	19275	54923	54641	54933	43844	N	30,00	8,1	1,2	10,05 +0,25

MTNS-Roughing

Cutting edge with large parting off chip breakers. Excellent chip control in the range ls x 0,8. Especially recommended for carbon steels, low and high alloy steels.

Fitting tool holders



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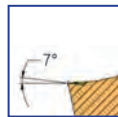
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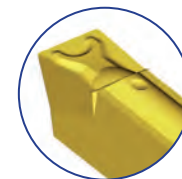
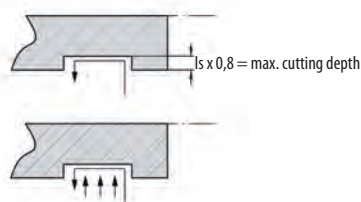
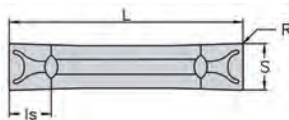
Inserts for grooving and turning



MTNSG
System P92



Intersection
main cutting edge



Vergrößerung

WG 260 Ref.	KM TILOX	()	L	Is	R	$\pm 0,025$
MTNSG 202	49957	N	20,00	2,0	0,2	1,95
MTNSG 2,5	49958	N	20,10	2,0	0,2	2,45
MTNSG 302	49959	N	19,95	3,5	0,2	2,95
MTNSG 304	49960	N	19,95	3,5	0,4	2,95
MTNSG 402	49961	N	19,85	3,5	0,2	3,95
MTNSG 404	49962	N	19,85	3,5	0,4	3,95
MTNSG 408	49963	N	19,85	3,5	0,8	3,95
MTNSG 504	49964	N	24,85	4,2	0,4	5,00
MTNSG 508	49965	N	24,85	4,2	0,8	5,00
MTNSG 604	49966	N	29,80	4,9	0,4	6,00
MTNSG 608	49967	N	29,80	4,9	0,8	6,00
MTNSG 612	49968	N	29,80	4,9	1,2	6,00
MTNSG 808	49969	N	29,65	6,4	0,8	7,95
MTNSG 812	49970	N	29,65	6,4	1,2	7,95
MTNSG 1008	49971	N	29,70	8,1	0,8	9,95
MTNSG 1012	49972	N	29,70	8,1	1,2	9,95

MTNSG Cutting and turning chip breaker...

Circumferentially ground cutting edges slightly honed with polished top-rake.
Recommended for stainless steels, titanium, nickel alloys and aluminium alloy steels.

Fitting tool holders



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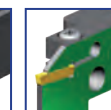
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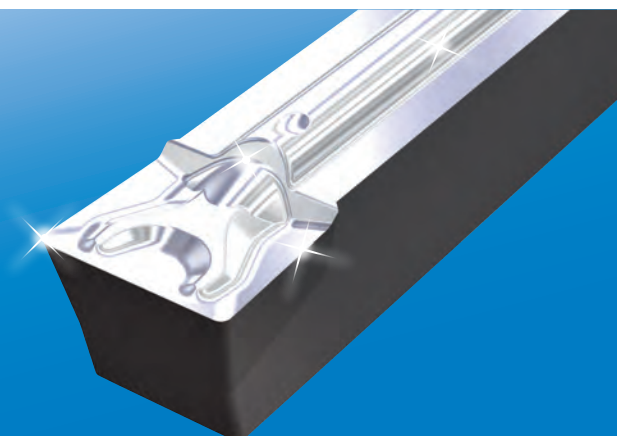


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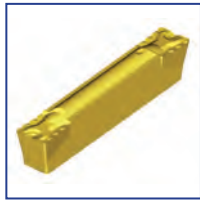


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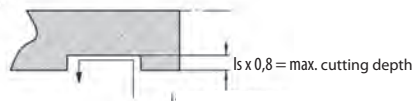
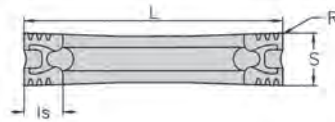
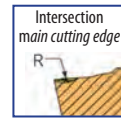
- Easy chip flow
- Low heat built-up reduces wear on the cutting edges.



Inserts for grooving and turning



MTNZ
System P92



Enlarged view

WG300 Ref.	PM NANOSPEED	KM NANOSPEED	PM ALOX	PM TILOX	KM TILOX	(C)	L	Is	R	S
	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.					
MTNZ 304	42791	42790	42793	42792	41018	N	20,00	3,5	0,4	3,075 ±0,075
MTNZ 3,5	11035	-	11032	11034	-	N	20,00	3,5	0,2	3,550 ±0,080
MTNZ 402	11039	15723	11036	11038	15724	N	20,00	3,5	0,2	4,000 ±0,200
MTNZ 404	42797	42796	42799	42798	41017	N	20,00	3,5	0,4	4,100 ±0,100
MTNZ 504	11043	54667	11040	11042	54668	N	25,00	4,2	0,4	5,000 ±0,250
MTNZ 508	42801	42800	42803	42802	41000	N	25,00	4,2	0,8	5,125 ±0,125
MTNZ 604	42805	42804	42807	42806	41019	N	30,00	4,9	0,4	6,125 ±0,125
MTNZ 608	42809	42808	42811	42810	41196	N	30,00	4,9	0,8	6,125 ±0,125
MTNZ 808	42814	42813	42816	42815	42812	N	30,00	6,4	0,8	8,125 ±0,125
MTNZ 812	42818	42817	42820	42819	41197	N	30,00	6,4	1,2	8,125 ±0,125

MTNZ-Roughing

Grooved cutting edge and wave shaped turning edges. Chip control even when machining high alloy steels and stainless steels.

Fitting tool holders



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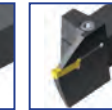
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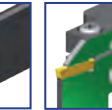
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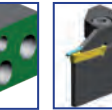
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How to write an order:

1 St. P92 CXCBL 1212 K30 10

or:

1 St. ID-Nr. 28189

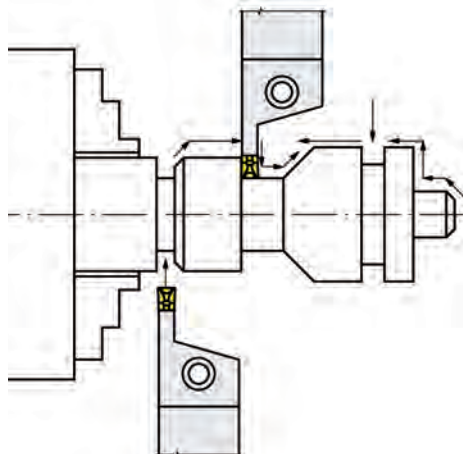
10 St. MTNZ 304 PM NANOSPEED

or:

10 St. ID-Nr. 42791



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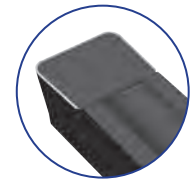
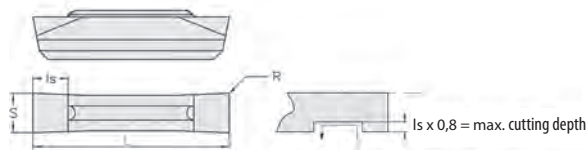
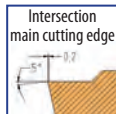
... all operations with 1 tool holder and 1 insert ...

- Face turning
- Profiling
- Grooving
- Large groove cutting
- Roughing
- Finishing
- Chamfering
- Parting-off

Inserts for grooving and turning



OTXC
System P92



Enlarged view

WG300 Ref.	KM CASTSPEED	()	L	Is	R	S ±0,10
ID-Nr.						
OTXC 304	52919	N	20 ±0,15	3,5	0,4	3,08
OTXC 402	52920	N	20 ±0,15	3,5	0,2	4,08
OTXC 404	52921	N	20 ±0,15	3,5	0,4	4,08
OTXC 504	52922	N	25 ±0,20	4,2	0,4	5,13
OTXC 508	52923	N	25 ±0,20	4,2	0,8	5,13
OTXC 604	52924	N	30 ±0,20	6,4	0,4	6,13
OTXC 608	52925	N	30 ±0,20	6,4	0,8	6,13
OTXC 808	52926	N	30 ±0,20	6,4	0,8	8,13
OTXC 812	52927	N	30 ±0,20	6,4	1,2	8,13

OTXC Cutting chip breaker...

CVD coated inserts especially recommended for cast materials

Fitting tool holders



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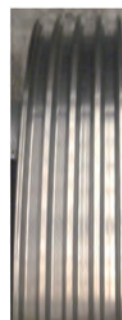
Dealer	Kemmer	
Customer	266	
Material	Cast GJS700	
Treatment	with inclusions	
Type of machine	Vertical CNC lathe	
Brand / Model	DOOSAN PUMA V550M	
Power	30 KW	
Machine stability	Standard	
DETAILS	KEMMER	
Insert	OTXC 812	
Grade	CASTSPEED	
Toolhor	Standard	
Vc [m/min]	120	Constant
UPM [rpm]	69	
f [mm/rev]	0,2	
Depth of groove [mm]	12,5	
Part diameter [mm]	547,75	
Max. width of groove [mm]	12,5	
Number of grooves	4	
RESULT	20 GROOVES	

The No. 1

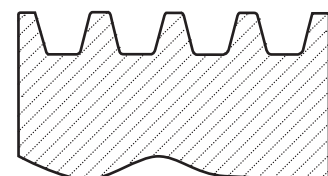
in competition testing
against the new
MT-CVD coating

Description on
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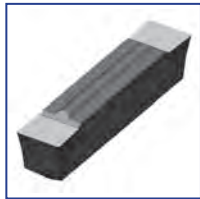
Pictures



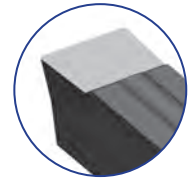
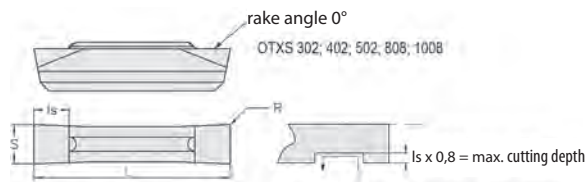
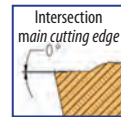
V-belt profile



Stechdrehplatten zum Einstecken und Längsdrehen



OTXS
System P92

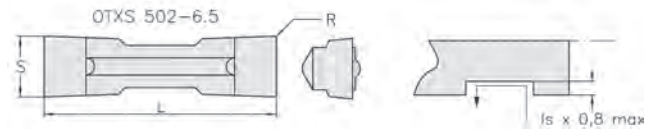


Enlarged view

WG300 Ref.	PM	KM	(C)	L	Is	R	S
	ID-Nr.	ID-Nr.					
OTXS 302	11199	11198	N	20	3,5	0,2	3,0 ^{+0,15}
OTXS 402	11201	11200	N	20	3,5	0,2	4,0 ^{+0,20}
OTXS 502	11203	11202	N	25	4,2	0,2	5,0 ^{+0,25}
OTXS 502 6,5	11205	11204	N	25	4,9	0,2	6,5 ^{+0,25}
OTXS 808	-	20544	N	30	6,4	0,8	8,05 ^{+0,25}
OTXS 1008	-	20543	N	30	8,1	0,8	10,05 ^{+0,25}

OTXS-Semi finishing

Ground top rake with 0° rake angle. Recommended for cast materials and for **customers applications**.



Fitting tool holders



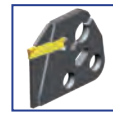
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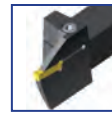
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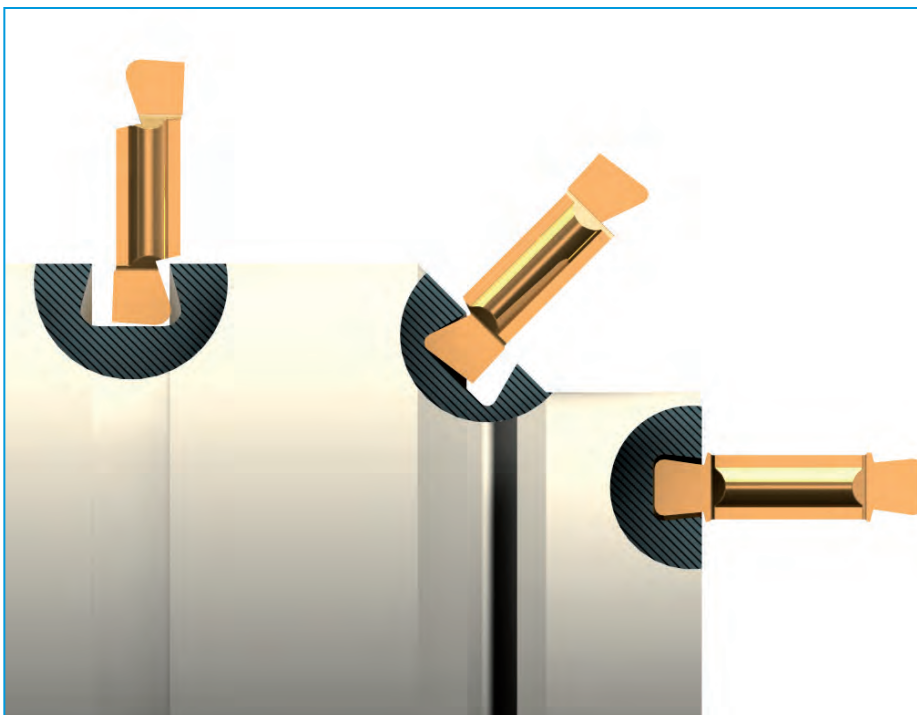
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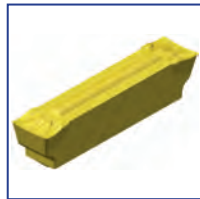
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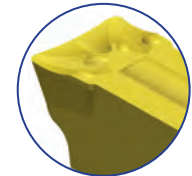
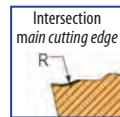
Examples for tailor made applications

Please find further applications on page 173 onwards.

Inserts for grooving and turning



STNZ / STNG
System P92



Enlarged view

WG300 Ref.	KM	KM Aluspeed	KM HYPERSPEED	KM TILOX	(C)	L	Is	R	S
	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.					
STNZ 504		45003	45009	45117	N	25,0	2,5	0,4	5,25 ±0,075
STNG 502	45014	45004	45010	45118	N	25,0	2,5	0,2	5,10 -0,050
STNG 504	45015	45005	45011	45119	N	25,0	2,5	0,4	5,10 -0,050

Comment:

STNZ/STNG has been developed, to machine materials, which are difficult to cut, like:

- nonferrous heavy metals
- nickel alloys
- plastic materials
- composite materials
- aluminum alloys

STNZ = polished surfaces, honed edges

STNG = polished surfaces, sharp cutting edges

Fitting tool holders



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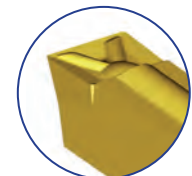
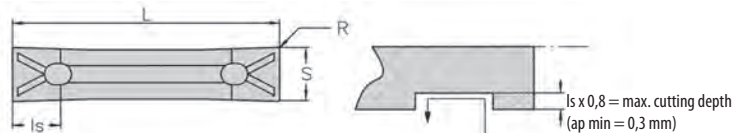
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VTNS
System P92



Enlarged view

WG300 Ref.	PM NANOSPEED	PM ALOX	PM TILOX	GF110 TILOX	KM TILOX	(C)	L	Is	R	S
	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.					
VTNS 302	11445	11442	11444	54743	30668	N	20	3,0	0,2	3,0 +0,15
VTNS 3,5	11449	11446	11448	54686	54674	N	20	3,0	0,2	3,55 ±0,035
VTNS 402	11453	11450	11452	54689	54677	N	20	3,5	0,2	4,0 +0,20
VTNS 502	11457	11454	11456	54692	54682	N	25	4,2	0,2	5,0 +0,25

VTNS-Roughing to finishing

Horizontal cutting edge with V-shaped chip breaker. Horizontal turning edges with large chip spaces to allow deep cuts. Especially recommended for carbon steels, low alloy steels and free cutting materials.

Fitting tool holders



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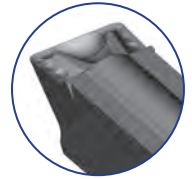
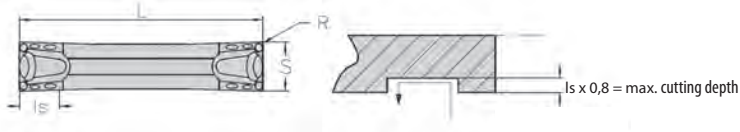
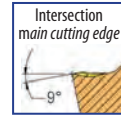
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Inserts for copying and turning



XTNS
System P92



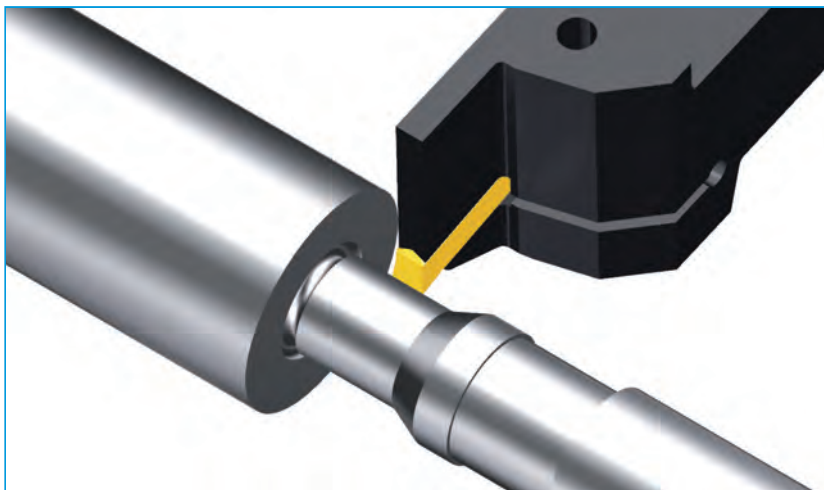
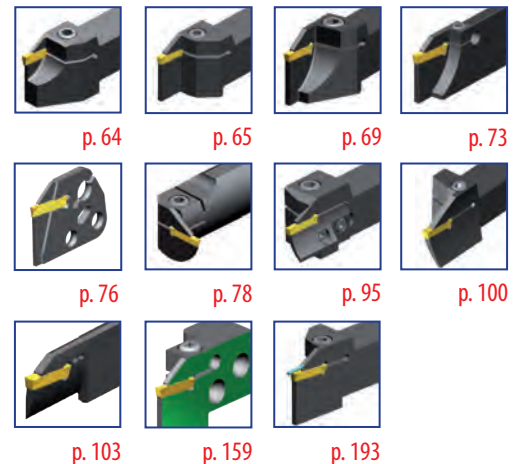
Enlarged view

WG300 Ref.	KM TILOX	GF110 TILOX	(C)	L	Is	R	S
	ID-Nr.	ID-Nr.					
XTNS 202	14268	38917	N	20,15	2,00	0,2	2,05 ^{+0,10}
XTNS 302	14055	38918	N	20,15	3,00	0,2	3,05 ^{+0,15}
XTNS 304	14053	38919	N	20,15	3,00	0,4	3,05 ^{+0,15}
XTNS 404	38903	38920	N	20,15	3,40	0,4	4,05 ^{+0,15}
XTNS 408	38904	38921	N	20,15	3,40	0,8	4,05 ^{+0,15}
XTNS 504	38905	54696	N	25,15	4,20	0,4	5,05 ^{+0,25}
XTNS 508	38906	54699	N	25,15	4,20	0,8	5,05 ^{+0,25}
XTNS 604	38910	54701	N	30,10	4,50	0,4	6,05 ^{+0,25}
XTNS 608	38911	54702	N	30,10	4,50	0,8	6,05 ^{+0,25}
XTNS 612	38912	54703	N	30,10	4,50	1,2	6,05 ^{+0,25}
XTNS 808	38913	54704	N	30,10	6,00	0,8	8,05 ^{+0,25}
XTNS 812	38914	54705	N	30,10	6,00	1,2	8,05 ^{+0,25}
XTNS 1008	38915	54706	N	30,10	6,00	0,8	10,05 ^{+0,25}
XTNS 1012	38916	54669	N	30,10	6,10	1,2	10,05 ^{+0,25}

XTNS - Roughing to finishing

A 9° declining major cutting edge with a reinforcing chamfer and a 24° positive entry to the chip former, achieve excellent chip control especially on difficult to cut materials. The minor cutting edges with 16° positive entry angle achieve efficient profile turning creating clean surfaces. Although the insert has been developed for universal cutting and turning, parting off tests with KM TILOX proved excellent tool life on stainless steels, e.g. 1.4404 (X2 CrNiMo1810). Therefore the insert is also recommended for stainless steel parting off. The best tool life on parting off hexagon material 1.4571 Ø 38 has been 409 pcs so far. This could be increased to an amazing 678 pcs with the same speeds. (Vc: 60 m/min; f: 0,05 mm/Rev.)

Fitting tool holders



Recommendation: Overhead positioning

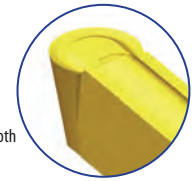
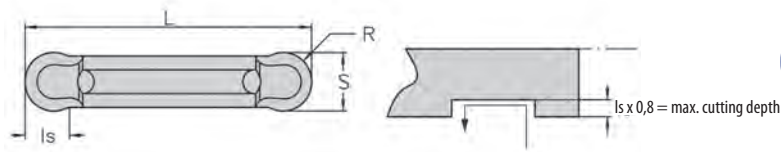
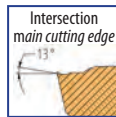
- Avoiding chip build-up
- Reducing danger of tool fracturing caused by chip build-up
- Fine surfaces



Inserts for copying and turning



RTNG
System P92



Enlarged view

WG260 Ref.	GF 110 ID-Nr.	GF 110 NANOSPEED ID-Nr.	()	L	ls	R	S ±0,025
RTNG 210	34649	34650	N	20,00	1,71	1,0	2,00
RTNG 315	19302	20471	N	20,00	2,60	1,5	3,00
RTNG 420	13415	12681	N	20,00	3,40	2,0	4,00
RTNG 525	13416	13417	N	25,00	4,10	2,5	5,00
RTNG 630	19303	20508	N	30,00	4,90	3,0	6,00
RTNG 840	19304	20509	N	30,00	6,50	4,0	8,00
RTNG 1050	19310	20510	N	30,00	8,10	5,0	10,00

RTNG-Finishing

Precision ground full radius insert. Horizontal cutting edge with parallel chip breaker. The **micrograin** insert is especially recommended for heat resistant alloys.

Fitting tool holders



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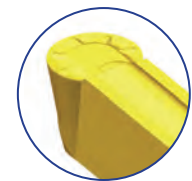
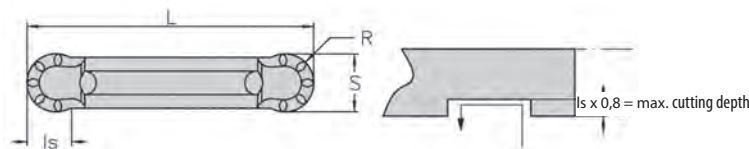
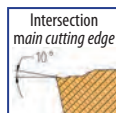
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RTNX
System P92



Enlarged view

WG300 Ref.	KM TILOX ID-Nr.	()	L	ls	R	S
RTNX 210	31706	N	20,10	1,76	1,1	2,05 ^{+0,10}
RTNX 315	19298	N	20,00	2,60	1,5	3,05 ^{+0,15}
RTNX 420	13067	N	20,00	3,40	2,0	4,05 ^{+0,15}
RTNX 525	13414	N	25,00	4,10	2,5	5,05 ^{+0,25}
RTNX 630	19299	N	30,00	4,90	3,0	6,05 ^{+0,25}
RTNX 840	19300	N	30,00	6,50	4,0	8,05 ^{+0,25}
RTNX 1050	19301	N	30,00	8,10	5,0	10,05 ^{+0,25}

RTNX-Roughing

Full radius insert. The horizontal cutting edge with its chip breaker rips makes short chips on almost all materials.

Fitting tool holder



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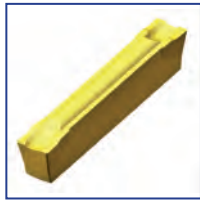
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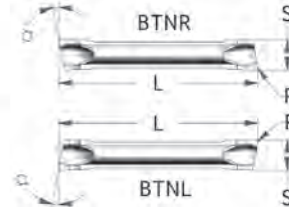
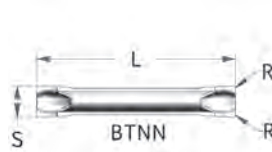
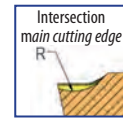
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Parting off and grooving inserts with 2 edges



BTNN/R/L
System P92



Enlarged view

WG300 Ref.	KM NANO SPEED	PM NANO SPEED	KM TILOX	PM TILOX	KM CARBO SPEED	GS 530 NANO SPEED	()	L ±0,10	R	S ±0,10	α°
ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.					
BTNN 1,5	-	45058	30595	-	43845	43561	N	15,50	0,2	1,58	0
BTNN 2	34208	45059	30944	-	43846	-	N	20,00	0,2	2,08	0
BTNN 2,5	33999	45060	30850	-	43847	-	N	20,00	0,2	2,58	0
BTNN 3	-	20532	12689	20917	43848	-	N	20,00	0,2	3,08	0
BTNN 4	-	20533	15843	30597	43849	-	N	20,00	0,2	4,08	0
BTNR 1,5 6D	-	45061	30576	-	43850	-	R	15,50	0,2	1,58	6
BTNR 1,5 10D	-	45062	30666	-	43852	-	R	15,50	0,2	1,58	10
BTNR 1,5 16D	-	45063	30667	-	43854	-	R	15,50	0,2	1,58	16
BTNR 2 6D	34210	45064	34209	-	43855	-	R	20,00	0,2	2,08	6
BTNR 2 10D	34207	45065	34206	-	43856	-	R	20,00	0,2	2,08	10
BTNR 2,5 6D	34003	45066	34002	-	43857	-	R	20,00	0,2	2,58	6
BTNR 2,5 10D	34001	45067	34000	-	43858	-	R	20,00	0,2	2,58	10
BTNR 3 6D	-	20534	12690	-	43859	-	R	20,00	0,2	3,08	6
BTNR 3 10D	-	20536	19665	-	43860	-	R	20,00	0,2	3,08	10
BTNR 4 6D	-	20538	15844	-	43861	-	R	20,00	0,2	4,08	6
BTNR 4 10D	-	20540	19667	-	43864	-	R	20,00	0,2	4,08	10
BTNL 1,5 6D	-	45068	30665	-	43866	-	L	15,50	0,2	1,58	6
BTNL 1,5 10D	-	45069	30663	-	43867	-	L	15,50	0,2	1,58	10
BTNL 1,5 16D	-	45070	30664	-	43869	-	L	15,50	0,2	1,58	16
BTNL 2 6D	33994	45071	33993	-	43870	-	L	20,00	0,2	2,08	6
BTNL 2 10D	34205	45072	34204	-	43871	-	L	20,00	0,2	2,08	10
BTNL 2,5 6D	33996	45073	33995	-	43872	-	L	20,00	0,2	2,58	6
BTNL 2,5 10D	33998	45074	33997	-	43873	-	L	20,00	0,2	2,58	10
BTNL 3 6D	-	20535	12688	-	43874	-	L	20,00	0,2	3,08	6
BTNL 3 10D	-	20537	19666	-	43875	-	L	20,00	0,2	3,08	10
BTNL 4 6D	-	20539	15845	-	43877	-	L	20,00	0,2	4,08	6
BTNL 4 10D	-	20541	19668	-	43879	-	L	20,00	0,2	4,08	10

BTN Parting off chip breaker

Grooved parting off edge with reinforced flanks. The deep and spacious **chip-trough** gives excellent chip control. Efficient on almost all materials.

Fitting tool holders



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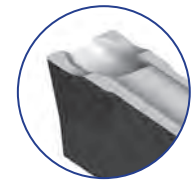
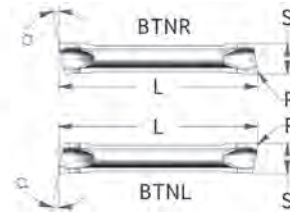
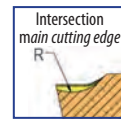
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Parting off and grooving inserts with special surface preparation and cutting edge honing



BTNN
System P92



Enlarged view

WG300 Ref.	GF110 CARBOSPEED	GF110 NANOSPEED	GF110 HYPER SPEED	GF110 HARDSPEED	()	L ±0,10	R	S ±0,10	α°
	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.					
BTNN 1,5	45075	45076	45077	47696	N	15,50	0,2	1,575	0
BTNN 2	45078	45079	45080	47697	N	20,00	0,2	2,075	0
BTNN 2,5	45081	45082	45083	47698	N	20,00	0,2	2,575	0
BTNN 3	42824	42825	42826	47699	N	20,00	0,2	3,075	0
BTNN 4	45085	45086	45087	47700	N	20,00	0,2	4,075	0
BTNL 1,5 7D	49098	49108	-	47711	L	15,50	0,2	1,575	7
BTNL 2 7D	49099	49109	-	47712	L	20,00	0,2	2,075	7
BTNL 2,5 7D	49100	49110	-	47713	L	20,00	0,2	2,575	7
BTNL 3 7D	49101	49111	-	47714	L	20,00	0,2	3,075	7
BTNL 4 7D	49102	49112	-	47715	L	20,00	0,2	4,075	7
BTNR 1,5 7D	49093	49103	-	47706	R	15,50	0,2	1,575	7
BTNR 2 7D	49094	49104	-	47707	R	20,00	0,2	2,075	7
BTNR 2,5 7D	49095	49105	-	47708	R	20,00	0,2	2,575	7
BTNR 3 7D	49096	49106	-	47709	R	20,00	0,2	3,075	7
BTNR 4 7D	49097	49107	-	47710	R	20,00	0,2	4,075	7

Fitting tool holders



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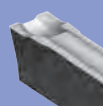
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The new high performance coatings

CARBOSPEED

A new generation of a heat- and wear resisting nitride coating

It has been developed especially to machine low and high alloy steels.



NANOSPEED

A super nitride coating

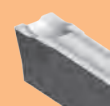
It has been developed especially to machine steels in general and stainless steels.



HYPER SPEED

A super nitride coating

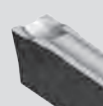
It has been developed especially to machine difficult to cut materials.



HARDSPEED

A super nitride coating

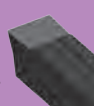
It has been developed to machine especially hard and difficult to cut materials.



CASTSPEED

MT-CVD Gasphasendeposition

It has been developed to machine cast iron, alloyed cast iron, ductile cast iron and malleable iron.

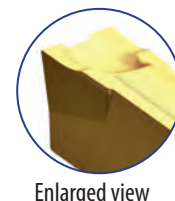
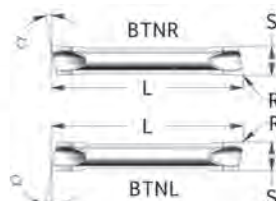
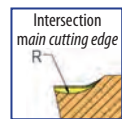


Complete information see page 214

Parting off and grooving inserts



BTNNF/RF/LF
System P92



Enlarged view

WG300 Ref.	GF 110 NANOSPEED	PM NANOSPEED	GF 110 CARBOSPEED	(C)	L ^{-0,1}	R	S ±0,1	α°
	ID-Nr.		ID-Nr.					
BTNNF1,5	48311	54586	49647	N	15,10	0,0	1,58	0
BTNNF 2	48312	54589	49648	N	19,60	0,0	2,08	0
BTNNF 2,5	new! 49633	54590	49649	N	19,60	0,0	2,58	0
BTNNF 3	new! 49634	54591	49650	N	19,60	0,0	3,08	0
BTNRF1,5 6D	48313	54592	49651	R	15,10	0,0	1,58	6
BTNRF1,5 10D	new! 49635	54593	49652	R	15,10	0,0	1,58	10
BTNRF 2 6D	48314	54594	49653	R	19,60	0,0	2,08	6
BTNRF 2 10D	new! 49636	54595	49654	R	19,60	0,0	2,08	10
BTNRF 2,5 6D	new! 49637	54596	49655	R	19,60	0,0	2,58	6
BTNRF 2,5 10D	new! 49638	54597	49656	R	19,60	0,0	2,58	10
BTNRF 3 6D	new! 49639	54598	49657	R	19,60	0,0	3,08	6
BTNRF 3 10D	new! 49640	54599	49658	R	19,60	0,0	3,08	10
BTNLF 1,5 6D	48315	54600	49659	L	15,10	0,0	1,58	6
BTNLF 1,5 10D	new! 49641	54601	49660	L	15,10	0,0	1,58	10
BTNLF 2 6D	48316	54602	49661	L	19,60	0,0	2,08	6
BTNLF 2 10D	new! 49642	54603	49662	L	19,60	0,0	2,08	10
BTNLF 2,5 6D	new! 49643	54604	49663	L	19,60	0,0	2,58	6
BTNLF 2,5 10D	new! 49644	54605	49664	L	19,60	0,0	2,58	10
BTNLF 3 6D	new! 49645	54606	49665	L	19,60	0,0	3,08	6
BTNLF 3 10D	new! 49646	54607	49666	L	19,60	0,0	3,08	10

Remark:

Sharply ground cutting edge without corner radius. Recommended for automatic lathe cutting jobs.

Fitting tool holder



Typ BTNN

Corner Radius

Typ BTNNF

Sharp edge without radius

The difference BTNN and BTNNF:
F marks an especially sharp edge.
This is recommended for hard and tough materials and also for machining steels.

The way towards the center isn't easy at all:

When beginning the operation all conditions are ideal:

- cutting speed (Vc)
- cooling and
- chip removal

In the end of the operation:

- cutting speed 0!
- cooling inefficient!
- chip removal: may stick!

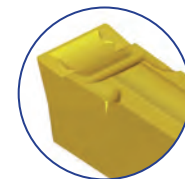
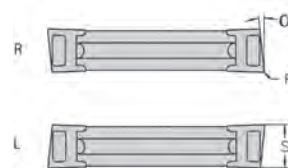
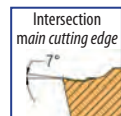
BTN Parting off chip breaker

Grooved parting off edge with reinforced flanks. The deep and spacious **chip-trough** gives excellent chip control. Efficient on almost all materials.

Parting off and grooving inserts with 2 edges



CTD/R/L-ALU
System P92



Enlarged view

WG300 Ref.		GF110	KM	PM NANOSPEED	KM ALUSPEED	GF110 ALUSPEED	()	L	R	S ±0,10	α°
		ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.						
CTD 1,5 ALU	new!	54954	-	54957	-	54960	N	15,5 ±0,15	0,2	1,58	0
CTD 2 ALU	new!	54955	-	54958	-	54983	N	20 ±0,15	0,2	2,08	0
CTD 2,5 ALU	new!	54956	-	54959	-	54984	N	20 ±0,15	0,2	2,58	0
CTD 3 ALU		-	10400	10402	10709	-	N	20 ±0,15	0,2	3,08	0
CTD 4 ALU		-	10405	10407	30661	-	N	20 ±0,15	0,2	4,08	0
CTD 5 ALU		-	10410	10412	38483	-	N	25 ±0,20	0,2	5,13	0
CTL 3 6D ALU		-	10428	10432	30662	-	L	20 ±0,15	0,2	3,08	6
CTL 4 6D ALU		-	10440	10444	36195	-	L	20 ±0,15	0,2	4,08	6
CTL 5 6D ALU		-	10452	10456	10454	-	L	25 ±0,20	0,2	5,13	6
CTR 3 6D ALU		-	10427	10431	30598	-	R	20 ±0,15	0,2	3,08	6
CTR 4 6D ALU		-	10439	10443	38484	-	R	20 ±0,15	0,2	4,08	6
CTR 5 6D ALU		-	10451	10455	10453	-	R	25 ±0,20	0,2	5,13	6

ALU chip breaker...

Horizontal ground cutting edge. The flat chip chamber conveys chips at high speed.

Recommended for: Nonferrous heavy metals, Machining steels, Thinwalled parts, Unstable components and Pipes.

Fitting tool holders



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p. 65



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p. 76



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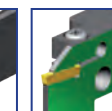
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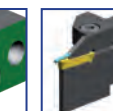
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p. 103



p. 159

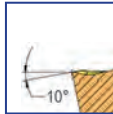


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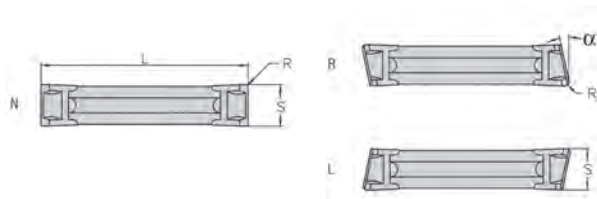
Parting off and grooving inserts with 2 edges



CTD R/L-IT
System P92



Intersection
main cutting edge



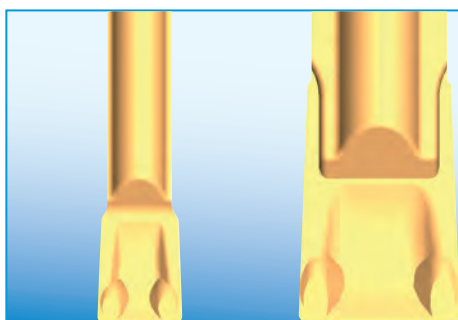
Enlarged view

WG300 Ref.		GF110 NANOSPEED	PM NANOSPEED	PM TILOX	KM TILOX	GF110 CARBO- SPEED	PM CARBO- SPEED	KM CARBO- SPEED	(C)	L	R	S ±0,10	α°
		ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.					
CTD 1,5	new!	49973	49974	50204	-	49975	49976	-	N	15,5 ±0,15	0,15	1,58	0
CTD 2	new!	49977	49978	50207	-	49979	49980	-	N	20 ±0,15	0,2	2,08	0
CTD 2,5	new!	49981	49982	50209	-	49983	49984	-	N	20 ±0,15	0,2	2,58	0
CTD 3		54827	10404	10403	23613	54828	50210	43880	N	20 ±0,15	0,2	3,08	0
CTD 4		54829	10409	10408	18387	54830	50211	43881	N	20 ±0,15	0,2	4,08	0
CTD 5		54832	10414	10413	43883	54833	50212	43882	N	25 ±0,20	0,2	5,13	0
CTL 1,5 6D	new!	49985	49986	50213	-	49987	49988	-	L	15,5 ±0,15	0,15	1,58	6
CTL 2 6D	new!	49989	49990	50214	-	49991	49992	-	L	20 ±0,15	0,2	2,08	6
CTL 2,5 6D	new!	49993	49994	50215	-	49995	49996	-	L	20 ±0,15	0,2	2,58	6
CTL 3 6D		54834	10438	10436	21757	54835	50219	54612	L	20 ±0,15	0,2	3,08	6
CTL 4 6D		54836	10450	10448	54608	54837	50220	54613	L	20 ±0,15	0,2	4,08	6
CTL 5 6D		54838	10462	10460	54609	54839	50221	54614	L	25 ±0,20	0,2	5,13	6
CTR 1,5 6D	new!	49997	49998	50216	-	49999	50000	-	R	15,5 ±0,15	0,15	1,58	6
CTR 2 6D	new!	50001	50002	50217	-	50003	50004	-	R	20 ±0,15	0,2	2,08	6
CTR 2,5 6D	new!	50005	50006	50218	-	50007	50008	-	R	20 ±0,15	0,2	2,58	6
CTR 3 6D		54840	10437	10435	28953	54841	50222	54615	R	20 ±0,15	0,2	3,08	6
CTR 4 6D		54842	10449	10447	54610	54843	50223	54616	R	20 ±0,15	0,2	4,08	6
CTR 5 6D		54844	10461	10459	54611	54845	50224	54617	R	25 ±0,20	0,2	5,13	6

IT Classic chip breaker...

Horizontal, chamfered parting off edge with reinforced flanks and large chip breaker. To be used universally and especially on interrupted cuts. Alloy steels, stainless steels, interrupted cuts.

Fitting tool holders



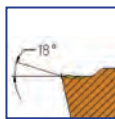
The cost cutters

Application of small width safe an enormous amount of material, costs and energy.

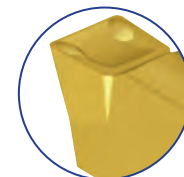
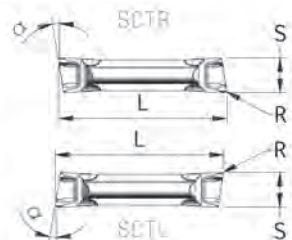
Parting off and grooving inserts with 2 edges



SCTD
System P92



Intersection
main cutting edge



Enlarged view

WG300 Ref.	GF110 NANO- SPEED ID-Nr.	KM NANO- SPEED	PM NANO- SPEED ID-Nr.	GF110 CARBO- SPEED ID-Nr.	KM CARBO- SPEED	PM CARBO- SPEED ID-Nr.	(C)	L	R	S ±0,10	α°
SCTD 1,5	50009	-	50010	50011	-	50012	N	15,5 ±0,15	0,2	1,58	0
SCTD 2	50013	-	50014	50015	-	50016	N	20 ±0,15	0,2	2,08	0
SCTD 2,5	50017	-	50018	50019	-	50020	N	20 ±0,15	0,2	2,58	0
SCTD 3,0	-	53868	53869	-	53870	53871	N	20 ±0,15	0,2	3,08	0
SCTD 4,0	-	53875	53876	-	53877	53878	N	20 ±0,15	0,2	4,08	0
SCTD 5,0	-	53879	53880	-	53881	53882	N	25 ±0,20	0,2	5,13	0
SCTL 1,5 6D	50021	-	50022	50023	-	50024	L	15,5 ±0,15	0,2	1,58	6
SCTL 2 6D	50025	-	50026	50027	-	50028	L	20 ±0,15	0,2	2,08	6
SCTL 2,5 6D	50029	-	50030	50031	-	50032	L	20 ±0,15	0,2	2,58	6
SCTL 3,0 6D	-	53883	53884	-	53885	53886	L	20 ±0,15	0,2	3,08	6
SCTR 1,5 6D	50033	-	50034	50035	-	50036	R	15,5 ±0,15	0,2	1,58	6
SCTR 2 6D	50037	-	50038	50039	-	50040	R	20 ±0,15	0,2	2,08	6
SCTR 2,5 6D	50041	-	50042	50043	-	50044	R	20 ±0,15	0,2	2,58	6
SCTR 3,0 6D	-	53887	53888	-	53889	53890	R	20 ±0,15	0,2	3,08	6

SUPERNOVA Parting off geometry...

Slightly honed cutting edge with reinforced flanks and large chip through.

Fitting tool holders



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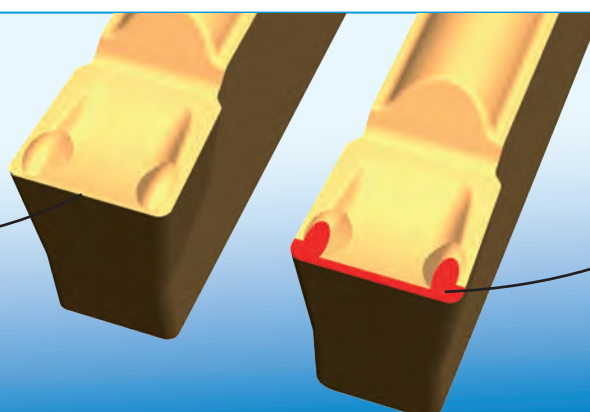
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SCTD

with precision sintered
cutting edge

CTD

with ground chamfer

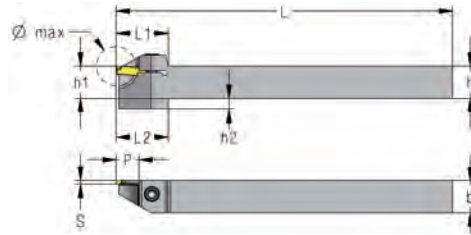


Holders for parting off, grooving and turning for cutting width 1,5 mm

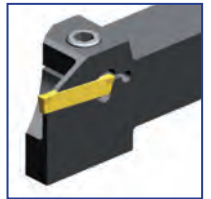


P92 CXCB L
System P92

LH holder



P92 CXCB R
System P92



RH holder

WG380 Ref.	ID-Nr.	()	Ø max	h	h1	h2	b	P	S	L	L1	L2	
P92 CXCB L 0808 K15 08	33450	L	16	8	8	4	8	8	1,5	125	19	19	10
P92 CXCB L 1010 K15 08	30110	L	16	10	10	6	10	8	1,5	125	19	19	10
P92 CXCB L 1010 K15 14	44738	L	28	10	10	6	10	14	1,5	125	25	22	10
P92 CXCB L 1212 K15 08	30109	L	16	12	12	4	12	8	1,5	125	19	19	10
P92 CXCB L 1212 K15 14	44739	L	28	12	12	4	12	14	1,5	125	25	22	10
P92 CXCB L 1616 K15 08	30100	L	16	16	16	-	16	8	1,5	125	19	-	10
P92 CXCB L 1616 K15 14	44740	L	28	16	16	-	16	14	1,5	125	25	-	10
P92 CXCB L 2020 K15 14	44741	L	28	20	20	-	25	14	1,5	125	25	-	10
P92 CXCB L 2525 M15 14	33460	L	28	25	25	-	25	14	1,5	150	30	-	1
P92 CXCB R 0808 K15 08	33449	R	16	8	8	4	8	8	1,5	125	19	19	10
P92 CXCB R 1010 K15 08	30124	R	16	10	10	6	10	8	1,5	125	19	19	10
P92 CXCB R 1010 K15 14	44733	R	28	10	10	6	10	14	1,5	125	25	22	10
P92 CXCB R 1212 K15 08	30125	R	16	12	12	4	12	8	1,5	125	19	19	10
P92 CXCB R 1212 K15 14	44734	R	28	12	12	4	12	14	1,5	125	25	22	10
P92 CXCB R 1616 K15 08	30126	R	16	16	16	-	16	8	1,5	125	19	-	10
P92 CXCB R 1616 K15 14	44735	R	28	16	16	-	16	14	1,5	125	25	-	10
P92 CXCB R 2020 K15 14	44736	R	28	20	20	-	25	14	1,5	125	25	-	10
P92 CXCB R 2525 M15 14	33459	R	28	25	25	-	25	14	1,5	150	30	-	1

Bemerkung

Holder and inserts with the same "S" dimension fit together.

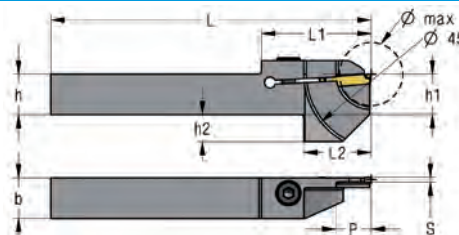
Fitting inserts see below

Holders for parting off, grooving and turning for Traub TR12 for cutting width 1,5 mm



P92 CXCB R
System P92

RH holder



P92 CXCB R
System P92



RH holder

WG380 Ref.	ID-Nr.	()	Ø max	h	h1	h2	b	P	S	L	L1	L2	
P92 CXCB R 1212 K15 10 TR12	54546	R	20	12	12	8	12	10	1,5	95	32,5	20	18

Fitting inserts



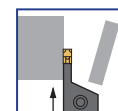
Abrasion by cutting action

Information about plasma-nitrided boring bars on page 217



Torque

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Hard machining

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Hard machining

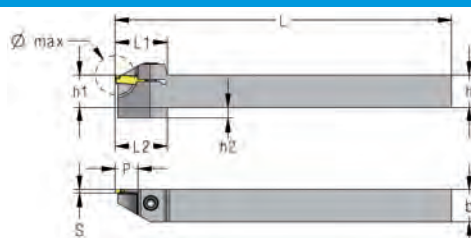
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HOLDERS for parting off, grooving and turning for cutting width 2 and 2,5 mm

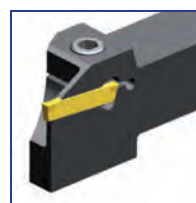


P92 CXCB L
System P92

LH holder



P92 CXCB R
System P92



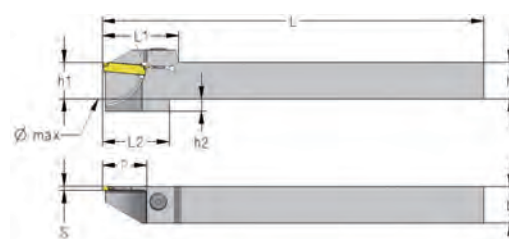
RH holder

WG380 Ref.	ID-Nr.	()	Ø max	h	h1	h2	b	P	S	L	L1	L2	
P92 CXCB L 0808 K20+25 11	33444	L	22	8	8	4	8	11	2+2,5	125	19,5	19,5	10
P92 CXCB L 1010 K20+25 11	33445	L	22	10	10	6	10	11	2+2,5	125	19,5	19,5	10
P92 CXCB L 1212 K20+25 11	33448	L	22	12	12	4	12	11	2+2,5	125	19,5	19,5	10
P92-CXCB L 1212 K20+25 14	44742	L	28	12	12	4	12	14	2+2,5	125	25	22	10
P92 CXCB L 1616 K20+25 11	33452	L	22	16	16	-	16	11	2+2,5	125	19,5	-	10
P92 CXCB L 1616 K20+25 17	33473	L	34	16	16	5	16	17	2+2,5	125	34	26	1
P92 CXCB L 2020 K20+25 14	33454	L	28	20	20	-	20	14	2+2,5	125	30	-	1
P92 CXCB L 2020 K20+25 17	33474	L	34	20	20	-	20	17	2+2,5	125	34	-	1
P92 CXCB L 2525 M20+25 14	33455	L	28	25	25	-	25	14	2+2,5	150	30	-	1
P92 CXCB L 2525 M20+25 17	33475	L	34	25	25	-	25	17	2+2,5	150	34	-	1
P92 CXCB R 0808 K20+25 11	33336	R	22	8	8	4	8	11	2+2,5	125	19,5	19,5	10
P92 CXCB R 1010 K20+25 11	33446	R	22	10	10	6	10	11	2+2,5	125	19,5	19,5	10
P92 CXCB R 1212 K20+25 11	33447	R	22	12	12	4	12	11	2+2,5	125	19,5	19,5	10
P92-CXCB R 1212 K20+25 14	44737	R	28	12	12	4	12	14	2+2,5	125	25	22	10
P92 CXCB R 1616 K20+25 11	33451	R	22	16	16	-	16	11	2+2,5	125	19,5	-	10
P92 CXCB R 1616 K20+25 17	33470	R	34	16	16	5	16	17	2+2,5	125	34	26	1
P92 CXCB R 2020 K20+25 14	33453	R	28	20	20	-	20	14	2+2,5	125	30	-	1
P92 CXCB R 2020 K20+25 17	33471	R	34	20	20	-	20	17	2+2,5	125	34	-	1
P92 CXCB R 2525 M20+25 14	33456	R	28	25	25	-	25	14	2+2,5	150	30	-	1
P92 CXCB R 2525 M20+25 17	33472	R	34	25	25	-	25	17	2+2,5	150	34	-	1

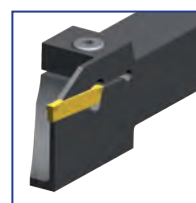


P92 CXCB L...14
System P92

LH holder



P92 CXCB R...14
System P92



RH holder

Comment

Tool holders with an extension of 17 mm offer an enlarged range for parting off. When used for turning, morate feeds should be applied.

Holder and inserts with the same "S" dimension fit together.

Advantage!

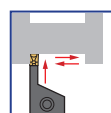
In these tool holders 2 different insert fit: width 2,0 mm or 2,5 mm.

Fitting inserts

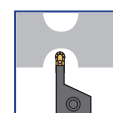


Torque

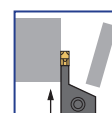
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p. 57-62

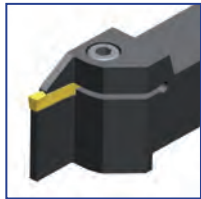


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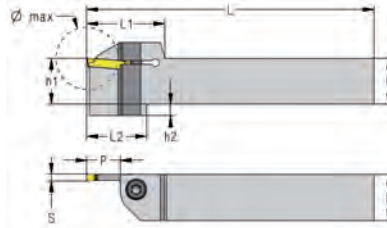
Tailor made hi pressure cooling
system available.
More information at page192

Holders for parting off, grooving and turning for cutting width range 3 to 3,5 mm



P92 CXCB L
System P92

LH holder



P92 CXCB R
System P92



RH holder

WG380 Ref.	ID-Nr.	()	Ø max	h	h1	h2	b	P	S	L	L1	L2	
P92 CXCB L 1212 K30 10	28189	L	20	12	12	5	12	10	3,0	125	21,0	22	11
P92 CXCB L 1212 K30 14	19698	L	28	12	12	5	12	14	3,0	125	34,0	26	1
P92 CXCB L 1616 K30 10	38514	L	20	16	16	5	16	10	3,0	125	28,0	22	1
P92 CXCB L 1616 K30 14	10092	L	28	16	16	5	16	14	3,0	125	34,0	26	1
P92 CXCB L 1616 K30 17	10094	L	34	16	16	5	16	17	3,0	125	37,0	29	1
P92 CXCB L 2020 K30 10	38515	L	20	20	20	5	20	10	3,0	125	30,0	26	1
P92 CXCB L 2020 K30 14	10096	L	28	20	20	5	20	14	3,0	125	34,0	26	1
P92 CXCB L 2020 K30 17	10098	L	34	20	20	5	20	17	3,0	125	37,0	29	1
P92 CXCB L 2020 K35 17	10100	L	34	20	20	5	20	17	3,5	125	37,0	29	1
P92 CXCB L 2525 M30 10	31254	L	20	25	25	-	25	10	3,0	150	30,0	-	2
P92 CXCB L 2525 M30 14	10108	L	28	25	25	-	25	14	3,0	150	34,0	-	2
P92 CXCB L 2525 M30 17	10110	L	34	25	25	-	25	17	3,0	150	37,0	-	2
P92 CXCB L 2525 M35 17	10112	L	34	25	25	-	25	17	3,5	150	37,0	-	2
P92 CXCB R 1212 K30 10	28188	R	20	12	12	5	12	10	3,0	125	21,0	22	11
P92 CXCB R 1212 K30 14	19533	R	28	12	12	5	12	14	3,0	125	34,0	26	1
P92 CXCB R 1616 K30 10	38516	R	20	16	16	5	16	10	3,0	125	28,0	22	1
P92 CXCB R 1616 K30 14	10091	R	28	16	16	5	16	14	3,0	125	34,0	26	1
P92 CXCB R 1616 K30 17	10093	R	34	16	16	5	16	17	3,0	125	37,0	29	1
P92 CXCB R 2020 K30 10	38517	R	20	20	20	5	20	10	3,0	125	30,0	26	1
P92 CXCB R 2020 K30 14	10095	R	28	20	20	5	20	14	3,0	125	34,0	26	1
P92 CXCB R 2020 K30 17	10097	R	34	20	20	5	20	17	3,0	125	37,0	29	1
P92 CXCB R 2020 K35 17	10099	R	34	20	20	5	20	17	3,5	125	37,0	29	1
P92 CXCB R 2525 M30 10	36432	R	20	25	25	-	25	10	3,0	150	30,0	-	2
P92 CXCB R 2525 M30 14	10107	R	28	25	25	-	25	14	3,0	150	34,0	-	2
P92 CXCB R 2525 M30 17	10109	R	34	25	25	-	25	17	3,0	150	37,0	-	2
P92 CXCB R 2525 M35 17	10111	R	34	25	25	-	25	17	3,5	150	37,0	-	2

Comment

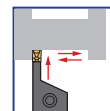
Tool holders with an extension of 17 mm offer an enlarged range for parting off. When used for turning, morate feeds should be applied.

Holder and inserts with the same "S" dimension fit together.

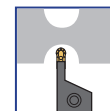
Fitting inserts



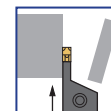
Torque
p.227-228,238



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p. 57-62

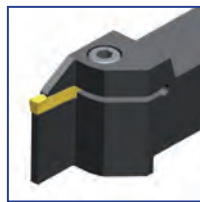


Hard machining
p. 189



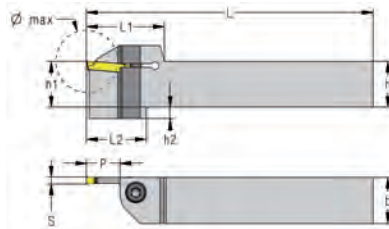
Tailor made hi pressure cooling
system available.
More information at page192

HOLDERS for parting off, grooving and turning for cutting width range 4 to 5 mm



P92 CXCB L
System P92

LH holder



P92 CXCB R
System P92



RH holder

WG380 Ref.	ID-Nr.	()	Ø max	h	h1	h2	b	P	S	L	L1	L2	
P92 CXCB L 1212 K40 10	28190	L	20	12	12	5	12	10	4	125	28,0	22	11
P92 CXCB L 1212 K40 14	19756	L	28	12	12	5	12	14	4	125	34,0	26	1
P92 CXCB L 1616 K40 10	38523	L	20	16	16	5	16	10	4	125	28,0	22	1
P92 CXCB L 1616 K40 14	19476	L	28	16	16	5	16	14	4	125	34,0	26	1
P92 CXCB L 1616 K40 17	28191	L	34	16	16	5	16	17	4	125	37,0	29	1
P92 CXCB L 2020 K40 10	38524	L	20	20	20	5	20	10	4	125	30,0	26	1
P92 CXCB L 2020 K40 14	10102	L	28	20	20	5	20	14	4	125	34,0	26	1
P92 CXCB L 2020 K40 17	10104	L	34	20	20	5	20	17	4	125	37,0	29	1
P92 CXCB L 2020 K50 10	19568	L	20	20	20	5	20	10	5	125	34,5	30	1
P92 CXCB L 2020 K50 20	44224	L	40	20	20	5	20	20	5	125	40,0	33	2
P92 CXCB L 2525 M40 10	38525	L	20	25	25	-	25	10	4	150	30,0	-	2
P92 CXCB L 2525 M40 14	10114	L	28	25	25	-	25	14	4	150	34,0	-	2
P92 CXCB L 2525 M40 17	10116	L	34	25	25	-	25	17	4	150	37,0	-	2
P92 CXCB L 2525 M50 10	38526	L	20	25	25	-	25	10	5	150	34,5	-	2
P92 CXCB L 2525 M50 20	10118	L	40	25	25	-	25	20	5	150	40,0	-	2
P92 CXCB R 1212 K40 10	25920	R	20	12	12	5	12	10	4	125	28,0	22	11
P92 CXCB R 1212 K40 14	19697	R	28	12	12	5	12	14	4	125	34,0	26	1
P92 CXCB R 1616 K40 10	20619	R	20	16	16	5	16	10	4	125	28,0	22	1
P92 CXCB R 1616 K40 14	19477	R	28	16	16	5	16	14	4	125	34,0	26	1
P92 CXCB R 1616 K40 17	23199	R	34	16	16	5	16	17	4	125	37,0	29	1
P92 CXCB R 2020 K40 10	38527	R	20	20	20	5	20	10	4	125	30,0	26	1
P92 CXCB R 2020 K40 14	10101	R	28	20	20	5	20	14	4	125	34,0	26	1
P92 CXCB R 2020 K40 17	10103	R	34	20	20	5	20	17	4	125	37,0	29	1
P92 CXCB R 2020 K50 10	16033	R	20	20	20	5	20	10	5	125	34,5	30	1
P92 CXCB R 2020 K50 20	44223	R	40	20	20	5	20	20	5	125	40,0	33	2
P92 CXCB R 2525 M40 10	38528	R	20	25	25	-	25	10	4	150	30,0	-	2
P92 CXCB R 2525 M40 14	10113	R	28	25	25	-	25	14	4	150	34,0	-	2
P92 CXCB R 2525 M40 17	10115	R	34	25	25	-	25	17	4	150	37,0	-	2
P92 CXCB R 2525 M50 10	38529	R	20	25	25	-	25	10	5	150	34,5	-	2
P92 CXCB R 2525 M50 20	10117	R	40	25	25	-	25	20	5	150	40,0	-	2

Comment

Tool holders with an extension of 17 mm offer an enlarged range for parting off. When used for turning, morate feeds should be applied.

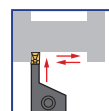
Holder and inserts with the same "S" dimension fit together.

Fitting inserts

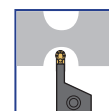


Torque

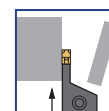
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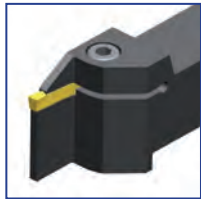


p. 57-62



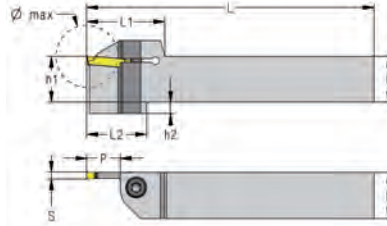
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Holders for parting off, grooving and turning for cutting width range 6 to 10 mm



P92 CXCB L
System P92

LH holder



P92 CXCB R
System P92



RH holder

WG380 Ref.	ID-Nr.	()	Ø max	h	h1	h2	b	P	S	L	L1	L2	
P92 CXCB L 2020 M60 10	21252	L	20	20	20	5	20	10	6	150	38	30	2
P92 CXCB L 2020 M60 20	19757	L	40	20	20	5	20	20	6	150	43	35	2
P92 CXCB L 2525 M60 10	38520	L	20	25	25	-	25	10	6	150	38	-	2
P92 CXCB L 2525 M60 20	19347	L	40	25	25	-	25	20	6	150	40	-	2
P92 CXCB L 3225 P60 26	19349	L	52	32	32	-	25	26	6	170	45	-	2
P92 CXCB L 2020 M80 10	21255	L	20	20	20	5	20	10	8	150	37	28	2
P92 CXCB L 2020 M80 14	30298	L	28	20	20	5	20	14	8	150	40	31	2
P92 CXCB L 2020 M80 20	21097	L	40	20	20	5	20	20	8	150	46	37	3
P92 CXCB L 2525 M80 10	38521	L	20	25	25	-	25	10	8	150	38	-	2
P92 CXCB L 2525 M80 20	19354	L	40	25	25	-	25	20	8	150	43	-	3
P92 CXCB L 3225 P80 26	19350	L	52	32	32	-	25	26	8	170	47	-	3
P92 CXCB L 3225 P100 26	19352	L	52	32	32	-	25	26	10	170	47	-	3
P92 CXCB R 2020 M60 10	21253	R	20	20	20	5	20	10	6	150	38	30	2
P92 CXCB R 2020 M60 20	19758	R	40	20	20	5	20	20	6	150	43	35	2
P92 CXCB R 2525 M60 10	20803	R	20	25	25	-	25	10	6	150	38	-	2
P92 CXCB R 2525 M60 20	19327	R	40	25	25	-	25	20	6	150	40	-	2
P92 CXCB R 3225 P60 26	19348	R	52	32	32	-	25	26	6	170	45	-	2
P92 CXCB R 2020 M80 10	21254	R	20	20	20	5	20	10	8	150	37	28	2
P92 CXCB R 2020 M80 14	30297	R	28	20	20	5	20	14	8	150	40	31	2
P92 CXCB R 2020 M80 20	21096	R	40	20	20	5	20	20	8	150	46	37	3
P92 CXCB R 2525 M80 10	38522	R	20	25	25	-	25	10	8	150	38	-	2
P92 CXCB R 2525 M80 20	19355	R	40	25	25	-	25	20	8	150	43	-	3
P92 CXCB R 3225 P80 26	19351	R	52	32	32	-	25	26	8	170	47	-	3
P92 CXCB R 3225 P100 26	19353	R	52	32	32	-	25	26	10	170	47	-	3

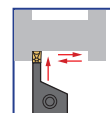
Comment

Holder and inserts with the same "S" dimension fit together.

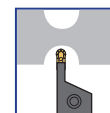
Fitting inserts



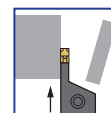
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p. 48-55



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p. 57-62



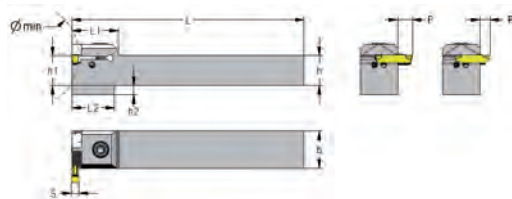
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90° - Holders for many different turning applications



P92 90 UNI
System P92

RH and LH pocket



WG380 Ref.	ID-Nr.	(C)	Ø min	h	h1	h2	b	P	S	L	L1	L2	
P92 90 CXCBRL 1616 K30 UNI	38485	R + L	>70	16	16	4	16	5	3	125	25	26	1+13
P92 90 CXCBRL 2020 K30 UNI	38486	R + L	>70	20	20	-	20	5	3	125	25	-	1+13
P92 90 CXCBRL 2525 M30 UNI	38487	R + L	>70	25	25	-	25	5	3	150	25	-	1+13
P92 90 CXCBRL 2020 K60 UNI	24260	R + L	>120	20	20	-	20	11,0	6	125	34	-	14+20
P92 90 CXCBRL 2525 M60 UNI	24261	R + L	>120	25	25	-	25	11,0	6	150	34	-	14+20
P92 90 CXCBRL 3232 P60 UNI	24262	R + L	>120	32	32	-	32	11,0	6	170	34	-	14+20
P92 90 CXCBRL 2020 K80 UNI	24263	R + L	>120	20	20	5	20	11,0	8	125	40	31	3+21
P92 90 CXCBRL 2525 M80 UNI	24264	R + L	>120	25	25	-	25	11,0	8	150	40	-	3+21
P92 90 CXCBRL 3232 P80 UNI	24265	R + L	>120	32	32	-	32	11,0	8	170	40	-	3+21

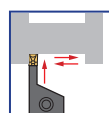
Remark

Holder and inserts with the same "S" dimension fit together.

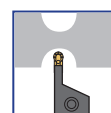
Fitting inserts



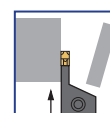
p.227-228,238



p. 48-55



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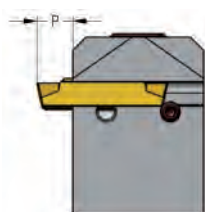
p. 57-62



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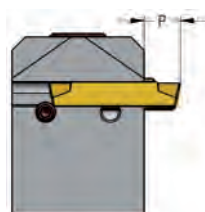
UNI-Holder for clockwise (CW) and counter clockwise (CCW) run

Insert positioned for clockwise (CW) run, face grooving
Insert positioned for counter clockwise (CCW) run, grooving



P92 inserts

Insert positioned for counter clockwise (CCW) run, face grooving
Insert positioned for clockwise (CW) run, grooving

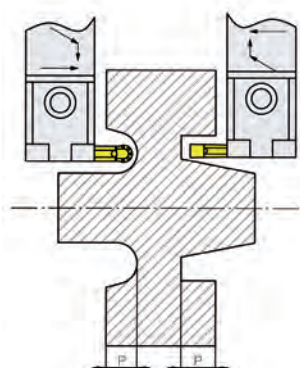


P92 inserts

2 tapped holes for a positioning pin permit the use of P92 inserts for CW and CCW run!



Face turning
with RTNX 840 TILOX



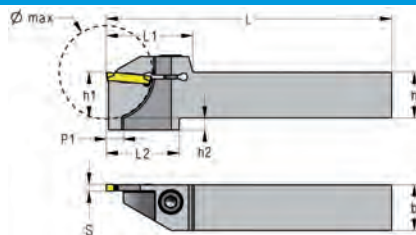
Face turning
with MTNS 812 TILOX

Holder for deep cuts from Ø 42 mm up to Ø 56 mm and deep grooving

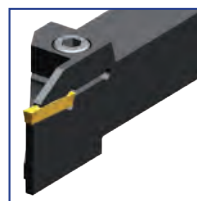


P92 A CXCB L
System P92

LH holder



P92 A CXCB R
System P92



RH holder

WG380 Ref.	ID-Nr.	()	Ø max	h	h1	h2	b	P1	S	L	L1	L2	
P92 A CXCB L 1616 K30 42	35158	L	42	16	16	5	16	7,0	3,0	125	39	31	1
P92 A CXCB L 2020 K30 42	35160	L	42	20	20	5	20	7,0	3,0	125	39	31	1
P92 A CXCB L 2020 K30 56	24890	L	56	20	20	5	20	20,5	3,0	125	46	38	1
P92 A CXCB L 2020 K40 56	28182	L	56	20	20	5	20	20,5	4,0	125	46	38	1
P92 A CXCB L 2525 M30 42	35163	L	42	25	25	-	25	-	3,0	150	39	-	1
P92 A CXCB L 2525 M30 56	24891	L	56	25	25	-	25	13,0	3,0	150	46	-	1
P92 A CXCB L 2525 M40 56	28181	L	56	25	25	-	25	13,0	4,0	150	46	-	1
P92 A CXCB R 1616 K30 42	35159	R	42	16	16	5	16	7,0	3,0	125	39	31	1
P92 A CXCB R 2020 K30 42	35161	R	42	20	20	5	20	7,0	3,0	125	39	31	1
P92 A CXCB R 2020 K30 56	25568	R	56	20	20	5	20	20,0	3,0	125	46	38	1
P92 A CXCB R 2020 K40 56	28184	R	56	20	20	5	20	20,0	4,0	125	46	38	1
P92 A CXCB R 2525 M30 42	35162	R	42	25	25	-	25	-	3,0	150	39	-	1
P92 A CXCB R 2525 M30 56	25685	R	56	25	25	-	25	13,0	3,0	150	46	-	1
P92 A CXCB R 2525 M40 56	28180	R	56	25	25	-	25	13,0	4,0	150	46	-	1

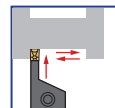
Remark

P92 A-inserts and P92 A CXCB...holder join together to form an extremely solid unit owing to long guide surfaces between insert and pocket and reinforced tool holders. A-type tools are therefore recommended for heavy duty cutting, deep cuts and to achieve clean faces.

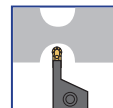
Fitting inserts



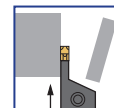
p.227-228,238



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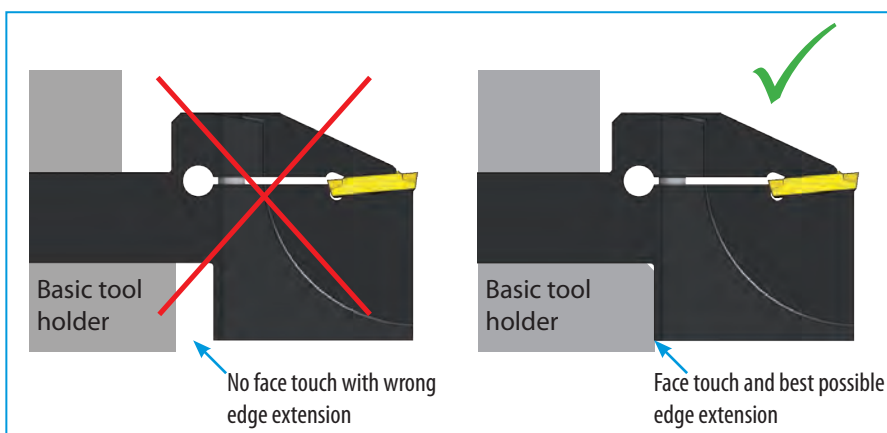


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Recommendation

For deep grooving inserts with 2-edges are recommended.

Holders and inserts with the same "S" dimension fit together.



Please note!

On parting off operations always select the **strongest tool holders**. This is a big advantage!
Make sure the holder's rear face **touches** the front face of the slide or basic tool holder firmly. If not, vibrations and fast edge wear will be the negative result of such improper set up.



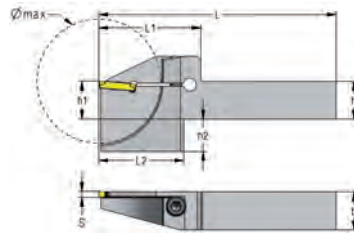
Tailor made hi pressure cooling system available.
More information at page 192

Holder for deep cuts from Ø 65 mm up to Ø 80 mm and deep grooving



P92 A CXCB L
System P92

LH holder



P92 A CXCB R
System P92



RH holder

WG380 Ref.	ID-Nr.	()	Ø max	h	h1	h2	b	S	L	L1	L2	
P92 A CXCB L 2020 K30	10136	L	65	20	20	17	20	3,0	125	54	45	12
P92 A CXCB L 2020 K35	10138	L	65	20	20	17	20	3,5	125	54	45	12
P92 A CXCB L 2020 K40	10140	L	65	20	20	17	20	4,0	125	54	45	12
P92 A CXCB L 2020 M50	10142	L	80	20	20	17	20	5,0	150	62	52	12
P92 A CXCB L 2525 M30	10144	L	65	25	25	12	25	3,0	150	54	45	12
P92 A CXCB L 2525 M35	10146	L	65	25	25	12	25	3,5	150	54	45	12
P92 A CXCB L 2525 M40	10148	L	65	25	25	12	25	4,0	150	54	45	12
P92 A CXCB L 2525 P50	10150	L	80	25	25	12	25	5,0	170	62	52	12
P92 A CXCB R 2020 K30	10135	R	65	20	20	17	20	3,0	125	54	45	12
P92 A CXCB R 2020 K35	10137	R	65	20	20	17	20	3,5	125	54	45	12
P92 A CXCB R 2020 K40	10139	R	65	20	20	17	20	4,0	125	54	45	12
P92 A CXCB R 2020 M50	10141	R	80	20	20	17	20	5,0	150	62	52	12
P92 A CXCB R 2525 M30	10143	R	65	25	25	12	25	3,0	150	54	45	12
P92 A CXCB R 2525 M35	10145	R	65	25	25	12	25	3,5	150	54	45	12
P92 A CXCB R 2525 M40	10147	R	65	25	25	12	25	4,0	150	54	45	12
P92 A CXCB R 2525 P50	10149	R	80	25	25	12	25	5,0	170	62	52	12

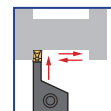
Remark

P92 A-inserts and P92 A CXCB...holder join together to form an extremely solid unit owing to long guide surfaces between insert and pocket and reinforced tool holders. A-type tools are therefore recommended for heavy duty cutting, deep cuts and to achieve clean faces.

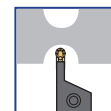
Fitting inserts



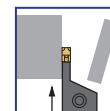
p.227-228,238



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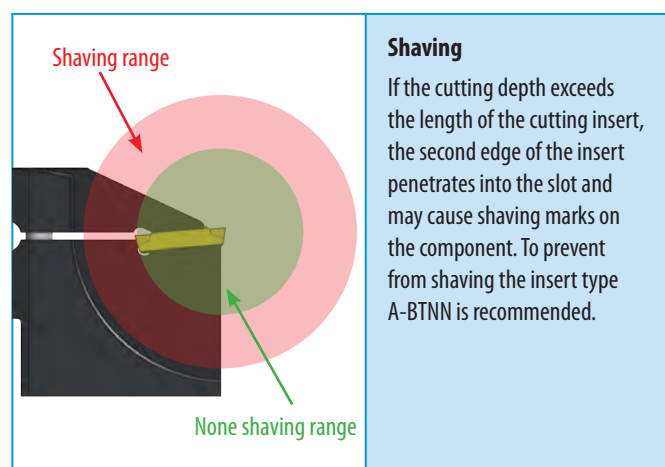


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Recommendation

For cutting deep chambers inserts with 2-edges are recommended.

Holders and inserts with the same "S" dimension fit together.



How to write an order:

1 St. P92 A CXCB R 2020 K30

or:

1 St. **ID-Nr. 10135**

10 St. A BTNN 3 KM TILOX

or:

10 St. **ID-Nr. 13953**

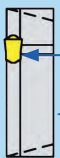
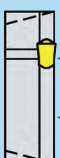
Designation Code

P92	CXCB	R	2608	X	20	R
Tool family						Right hand. The side of the dovetail with the smaller height
Cutting tool holder for inserts with 2 cutting edges. Screw clamping type					Cutting width in 1/10 mm	
Spindle rotation counterclockwise				With radial stiffening		
			Main tool dimensions			

How to select the blade to fit your machine tool

To select a fitting blade for your machine tool, you have to determine:

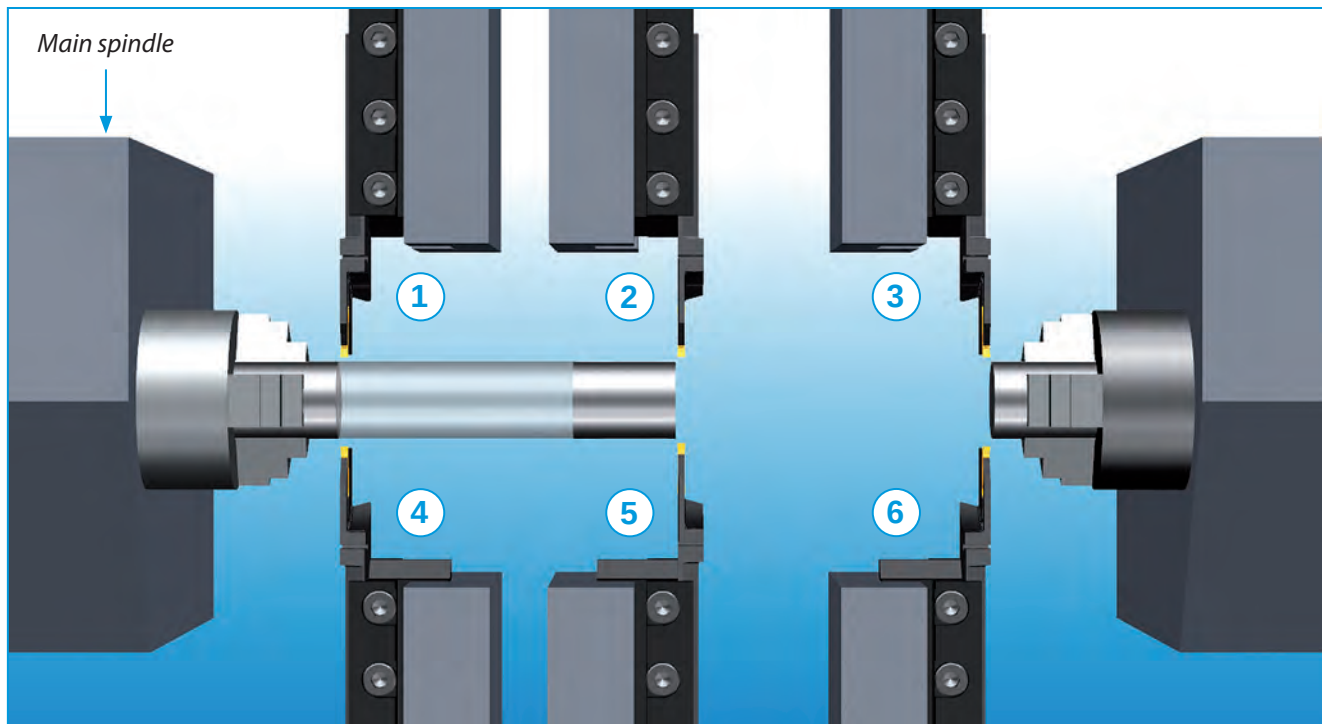
- ▶ Spindle rotation CW: LH blade is required
CCW: RH blade is required
- ▶ The dovetail's small side when looked from the front side of the blade.

 P92 CXCB^L 2608 X30^L Cutting edge left hand for clockwise rotation. Small side of the dovetail on the left side: LH.	Type 1
 P92 CXCB^L 2608 X30^R Cutting edge left hand for clockwise rotation. Small side of the dovetail on the right side: RH.	Type 2
 P92 CXCB^R 2608 X30^R Cutting edge right hand for clockwise rotation. Small side of the dovetail on the right side: RH.	Type 3
 P92 CXCB^R 2608 X30^L Cutting edge right hand for clockwise rotation. Small side of the dovetail on the left side: LH.	Type 4

Remarks:

- ▶ These dovetail tool blades fit into many basic tool holders of automatic lathes like Traub, EMCO, Tornos, Bechler etc. **AND they also fit into the tool blocks on page 149.**

Application field of dove-tail blades

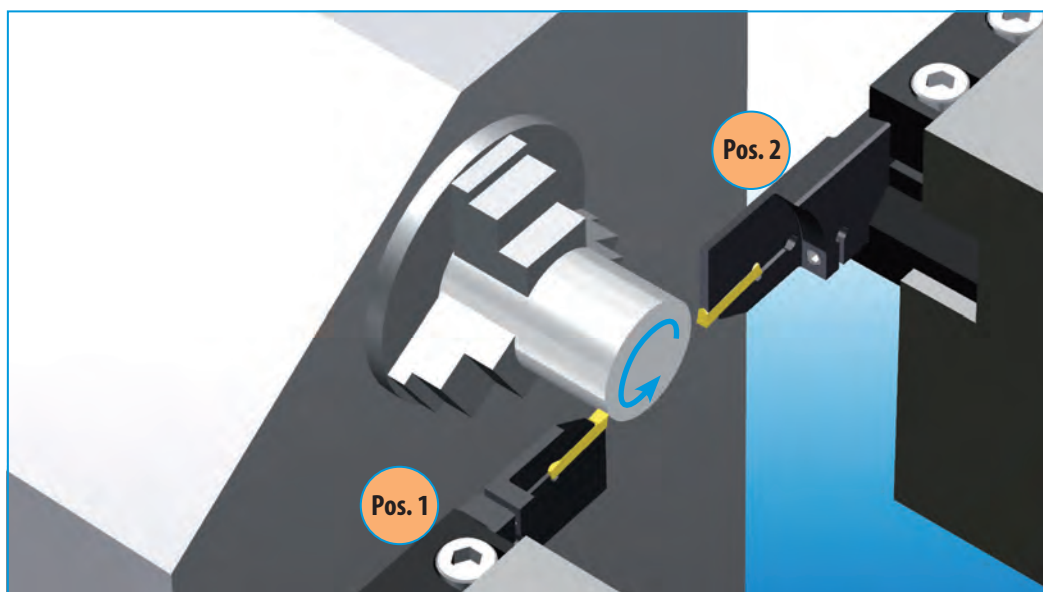


Nr.	Working position	Rotation		Type
1	Main spindle Behind center line	clockwise		LL (Type 1)
2	Main spindle Behind center line	clockwise		LR (Type 2)
3	Counter spindle Behind center line	counter clockwise (separate drive)		RR (Type 3)
4	Main spindle In front of center line	counter clockwise		RR (Type 3)
5	Main spindle In front of center line	counter clockwise		RL (Type 4)
6	Counter spindle In front of center line	clockwise (separate drive)		LL (Type 1)

A few application examples of dovetail blades on different machine tool positions.

Remark:

You'll find these blades on pages 73, 131, 139 and 140



Example for application

Counter clockwise rotation regular and overhead, machining with a BTNN 3 GF110 NANOSPEED insert.

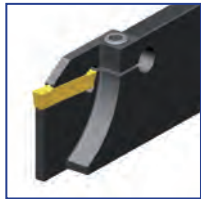
Pos. 1:

Blade R-R in front of bar

Pos. 2:

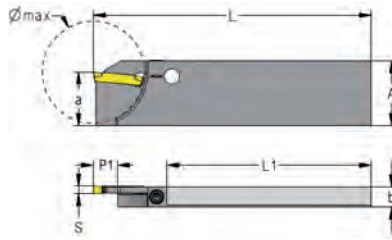
Blade R-R overhead behind the bar

Reinforced parting off blades with dovetail shank



**P92..CXCBL
2608X..R/L**
System P92

LH Blades



**P92 CXCBR
2608X..R/L**
System P92

RH Blades

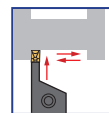


WG380 Ref.	ID-Nr.	()	A	a	Ø max	b	P1	S	L	L1	
P92 CXCBL 2608 X30R	19669	L	26	21,4	42	8	9,0	3,0	110	81,3	10
P92 CXCBL 2608 X30L	21614	L	26	21,4	42	8	9,0	3,0	110	81,3	10
P92 CXCBL 2608 X30R	21222	R	26	21,4	42	8	9,0	3,0	110	81,3	10
P92 CXCBL 2608 X30L	21613	R	26	21,4	42	8	9,0	3,0	110	81,3	10

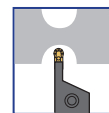
Fitting inserts and tool blocks



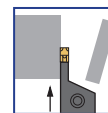
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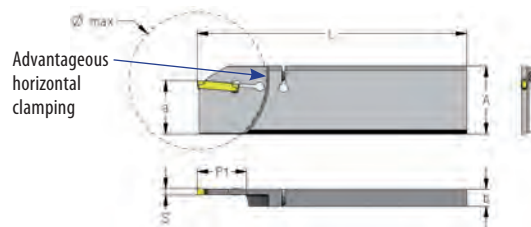


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**P92..CXCBL
3208X..R/L**
System P92

LH Blades



**P92 CXCBR
3208X..R/L**
System P92

RH Blades



WG380 Ref.	ID-Nr.	()	A	a	Ø max	b	P1	S	L	
P92 CXCBL 3208 X30R 65	31784	L	32	25,0	65	8	22,0	3,0	126	42
P92 CXCBL 3208 X30L 65	31788	L	32	25,0	65	8	22,0	3,0	126	42
P92 CXCBL 3208 X30R 65	31780	R	32	25,0	65	8	22,0	3,0	126	42
P92 CXCBL 3208 X30L 65	29826	R	32	25,0	65	8	22,0	3,0	126	42

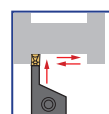
Comment

Blades and tool blocks with the same "A" dimension fit together.
Holder and inserts with the same "S" dimension fit together.

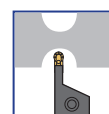
Fitting inserts and tool blocks



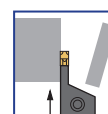
p.227-228,238



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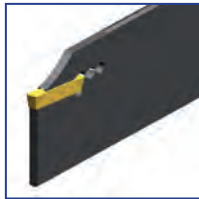
p. 189



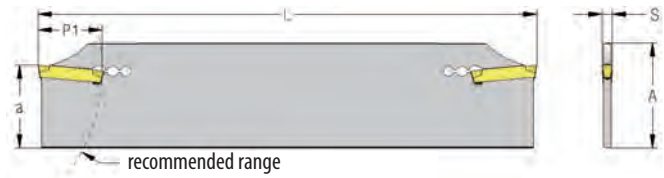
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Example for application you will find on page 72

TWIN blade parting off blade



P92 TMS
System P92



WG310 Ref.	ID-Nr.	()	A	a	P1	S	L	
P92 TMS 26 20+25	36644	N	26	21,4	18,5	2+2,5	110	28
P92 TMS 26 30	36645	N	26	21,4	18,5	3,0	110	28
P92 TMS 32 20+25	36643	N	32	25,0	18,5	2+2,5	150	28
P92 TMS 32 30	33429	N	32	25,0	18,5	3,0	150	28
P92 TMS 32 40	36642	N	32	25,0	18,5	4,0	150	28
P92 TMS 32 50	44524	N	32	25,0	23,5	5,0	150	28
P92 TMS 32 60	44537	N	32	25,0	28,5	6,0	150	28

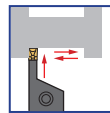
Remark

Blades and tool blocks with the same "A" dimension fit together.

If the cutting depth exceeds the length of the cutting insert, the second edge of the insert penetrates into the slot and may cause shaving marks on the components faces. To prevent from shaving the insert type A-BTNN is recommended.

Holders and inserts with the same "S" dimension fit together.

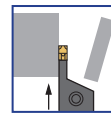
Fitting inserts and tool blocks



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P92 TMS 52
System P92



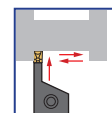
WG310 Ref.	ID-Nr.	()	A	a	S	L	
P92 TMS 52 80	31464	N	52,6	45,0	8,0	250	11
P92 TMS 52 100	44539	N	52,6	45,0	10,0	250	11

Remark

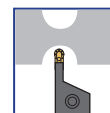
These blades fit in basic tool holders and tool blocks.

Holders and inserts with the same "S" dimension fit together.

Fitting inserts and tool blocks



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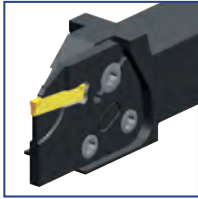


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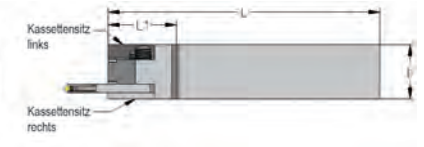
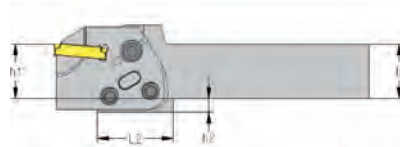
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HOLDERS with cartridges for parting off, grooving and turning



P92 C N...H
System P92

The Multi-Master-System



WG386 Ref.	ID-Nr.	()	h	h1	h2	b	L	L1	L2	
P92 C N 2020 H	44744	N	20	20	8	20	100	24	20	36+37
P92 C N 2525 H	44745	N	25	25	3	25	100	24	20	36+37

Comment:

On these tool holders, five different cartridges will fit. These holders can be used as left hand **and** right hand holders.

Fitting Cartridges



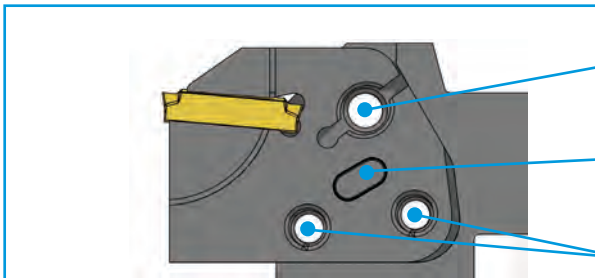
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Top clamping fixture with **screw, spare part 37**

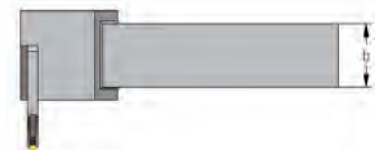
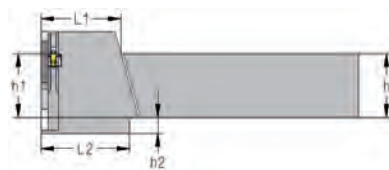
Additional fixing aid

Lower clamping fixture with **screw, spare part 36**



P92 C90 R/L
System P92

RH holder



WG386 Ref.	ID-Nr.	()	h	h1	h2	b	L	L1	L2	
P92 C90 L 2020 H	44748	L	20	20	8	20	100	20	20	36+37
P92 C90 L 2525 H	44749	L	25	25	3	25	100	20	20	36+37
P92 C90 R 2020 H	44746	R	20	20	8	20	100	20	20	36+37
P92 C90 R 2525 H	44747	R	25	25	3	25	100	20	20	36+37

Comment:

On these holders, seven different cartridges will fit.

Fitting Cartridges



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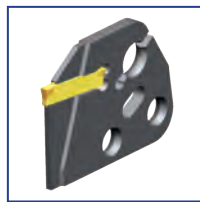


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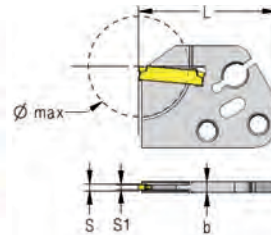
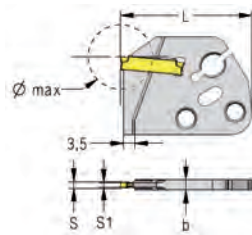


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Cartridges for holders for parting off, grooving and turning



**P92 C N
(Type A)**
System P92



**P92 C N
(Type B)**
System P92



WG386 Ref.	ID-Nr.	()	Ømax	b	S1	S	L	P1	Type
P92-CN 15 16	44750	N	16	3,2	1,0	1,5	36,8	12	A
P92-CN 15 20	44822	N	20	3,2	1,0	1,5	41,0	16	A
P92-CN 20+25 20	44751	N	20	3,2	1,6	2,0+2,5	41,0	16	A
P92-CN 20+25 32	44752	N	32	3,2*	1,6	2,0+2,5	41,0	16	B

Comment:

These reinforced cartridges allow to use very small inserts. An advantage, especially, when producing short components on multi spindle automatics.

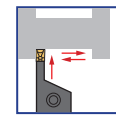
They fit on special basic tool holders, e.g. on:

- New Britain
- Conomatic
- Wickman
- Acme Gridley
- Tornos

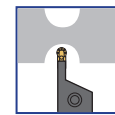
Fitting inserts



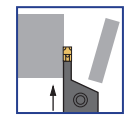
p.227-228,238



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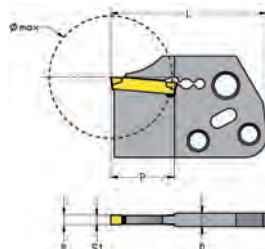
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P92 CT
System P92



WG386 Ref.	ID-Nr.	()	Ømax	b	S1	S	L	P	P1	ET
P92-CT N 15 28	44823	N	28	3,2	1	1,5	42,5	14	17,5	28
P92-CT N 20+25 32	44753	N	32	3,2	1,6	2,0+2,5	45,8	16	20,8	28
P92-CT N 30 32	44754	N	32	4,0	2,4	3,0	45,8	16	20,8	28

Comment:

These cartridges allow to use small inserts. An advantage, especially, when producing short components on multi spindle automatics.

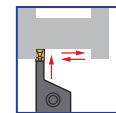
They fit on special basic tool holders, e.g. on:

- New Britain
- Conomatic
- Wickman
- Acme Gridley
- Tornos

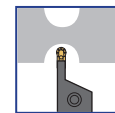
Fitting inserts



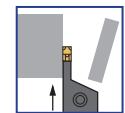
p.227-228,238



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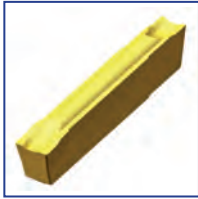


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Parting off inserts for deep cuts



A BTNN
System P92



Enlarged view

WG300 Ref.	PM NANOSPEED	KM TILOX	(C)	L	R	S +0,15
	ID-Nr.	ID-Nr.				
A BTNN 3	24050	13953	N	20,10	0,2	3,05
A BTNN 4	24051	20291	N	20,10	0,2	4,05

BTN-insert, reduced type with 1 cutting edge

Deep cutting depth and clean turning faces. **Reduces feed** while cutting depth increases.

Grooved parting off edge with reinforced flanks. The deep and spacious **chip-trough** gives excellent chip control. Efficient on almost all materials.

Remark

P92 A-inserts and P92 A CXCB...holder join together to form an extremely solid unit owing to long guide surfaces between insert and pocket and reinforced tool holders. A-type tools are therefore recommended for heavy duty cutting, deep cuts and to achieve clean faces.

Fitting Holder



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p. 100



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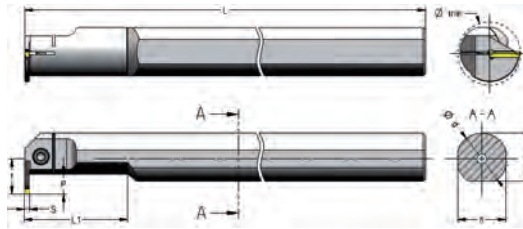
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Boring bars with internal cooling for grooving and turning



P92 CGL
System P92

LH boring bar



P92 CGR
System P92

RH boring bar



WG390 Ref.	ID-Nr.	()	Ømin	Ø d	h	b	f	P	S	L	L1	
P92 CGL 0016 P15	33461	L	20	16	15	15,5	11	7	1,5	170	26	7
P92 CGL 0020 R15	34954	L	25	20	18	18,5	13	7	1,5	200	40	6
P92 CGL 0020 R20+25	33463	L	25	20	18	18,5	13	7	2,0+2,5	200	40	6
P92 CGL 0020 R30	10066	L	25	20	18	18,5	13	7	3,0	200	40	6
P92 CGL 0020 R35	10068	L	25	20	18	18,5	13	7	3,5	200	40	6
P92 CGL 0020 R40	10070	L	25	20	18	18,5	13	7	4,0	200	40	6
P92 CGL 0025 R20+25	33465	L	32	25	23	23,0	17	10	2,0+2,5	200	50	14
P92 CGL 0025 R30	10072	L	32	25	23	23,0	17	10	3,0	200	50	14
P92 CGL 0025 R35	10074	L	32	25	23	23,0	17	10	3,5	200	50	14
P92 CGL 0025 R40	10076	L	32	25	23	23,0	17	10	4,0	200	50	14
P92 CGL 0032 S20+25	33467	L	40	32	30	30,0	22	12	2,0+2,5	250	64	14
P92 CGL 0032 S30	10078	L	40	32	30	30,0	22	12	3,0	250	64	14
P92 CGL 0032 S35	10080	L	40	32	30	30,0	22	12	3,5	250	64	14
P92 CGL 0032 S40	10082	L	40	32	30	30,0	22	12	4,0	250	64	14
P92 CGL 0032 S50	10084	L	44	32	30	30,0	26	16	5,0	250	64	14
P92 CGL 0040 T40	10086	L	52	40	38	38,0	30	16	4,0	300	80	2
P92 CGL 0040 T50	10088	L	52	40	38	38,0	30	16	5,0	300	80	2
P92 CGL 0040 T60	19357	L	52	40	38	38,0	30	16	6,0	300	80	2
P92 CGR 0016 P15	33337	R	20	16	15	15,5	11	7	1,5	170	26	7
P92 CGR 0020 R15	34953	R	25	20	18	18,5	13	7	1,5	200	40	6
P92 CGR 0020 R20+25	33462	R	25	20	18	18,5	13	7	2,0+2,5	200	40	6
P92 CGR 0020 R30	10065	R	25	20	18	18,5	13	7	3,0	200	40	6
P92 CGR 0020 R35	10067	R	25	20	18	18,5	13	7	3,5	200	40	6
P92 CGR 0020 R40	10069	R	25	20	18	18,5	13	7	4,0	200	40	6
P92 CGR 0025 R20+25	33464	R	32	25	23	23,0	17	10	2,0+2,5	200	50	14
P92 CGR 0025 R30	10071	R	32	25	23	23,0	17	10	3,0	200	50	14
P92 CGR 0025 R35	10073	R	32	25	23	23,0	17	10	3,5	200	50	14
P92 CGR 0025 R40	10075	R	32	25	23	23,0	17	10	4,0	200	50	14
P92 CGR 0032 S20+25	33466	R	40	32	30	30,0	22	12	2,0+2,5	250	64	14
P92 CGR 0032 S30	10077	R	40	32	30	30,0	22	12	3,0	250	64	14
P92 CGR 0032 S35	10079	R	40	32	30	30,0	22	12	3,5	250	64	14
P92 CGR 0032 S40	10081	R	40	32	30	30,0	22	12	4,0	250	64	14
P92 CGR 0032 S50	10083	R	44	32	30	30,0	26	16	5,0	250	64	14
P92 CGR 0040 T40	10085	R	52	40	38	38,0	30	16	4,0	300	80	2
P92 CGR 0040 T50	10087	R	52	40	38	38,0	30	16	5,0	300	80	2
P92 CGR 0040 T60	19356	R	52	40	38	38,0	30	16	6,0	300	80	2

Remark

Boring bars and inserts with the same "S" dimension fit together.

Fitting inserts

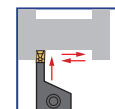


Abrasion by cutting action

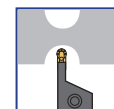
Information about plasma-nitrided boring bars on page 217



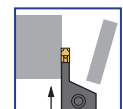
Torque
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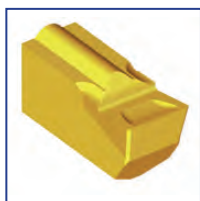


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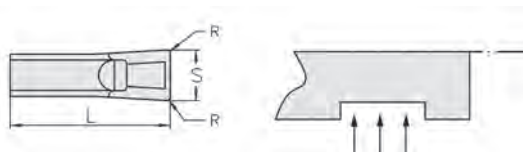


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P92 System for grooving and turning with 1-edge inserts



KCTD
System P92



WG300 Ref.	PM	KM	PM NANOSPEED	KM TILOX	(C)	P	L	R	S +0,15
	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.					
KCTD 3	10899	20748	10902	29682	N	3/4,5	9,5	0,2	3,0
KCTD 3 MAX	10903	26940	10906	31091	N	5,5/7	12	0,2	3,0

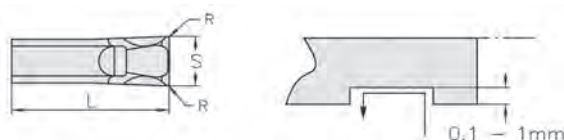
Remark

Ground cutting edge with positive top-rake and wide chip-space.

Fitting boring bars below on this page



KCTDS
System P92



WG300 Ref.	PM	KM	PM NANOSPEED	KM TILOX	(C)	P	L	R	S +0,15
	ID-Nr.	ID-Nr.	ID-Nr.	ID-Nr.					
KCTDS 3	10907	20746	10910	35903	N	3/4,5	9,5	0,2	3,0
KCTDS 3 MAX	10911	14603	10914	12644	N	5,5/7	12	0,2	3,0

Remark

Chamfered cutting edge and ground turning edges for excellent chip control.

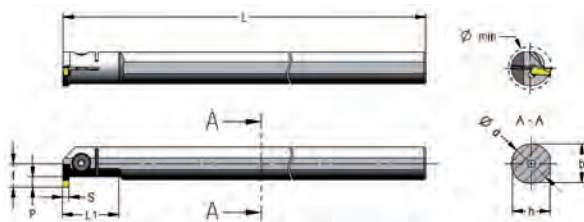
Fitting boring bars below on this page

Small boring bars with internal cooling for grooving and turning



P92 CGL..30C
System P92

LH boring bar



P92 CGR..30C
System P92-K



RH boring bar

WG390 Ref.	ID-Nr.	(C)	KCTD Ømin	KCTD MAX Ømin	d	h	b	f	P	S	L	L1	
P92 CGL 0012 M30C	10062	L	15,5	18	12	11	-	9	3/5,5	3,0	150	22	7
P92 CGL 0016 P30C	10064	L	20	22,5	16	15	15,5	11	4,5/7	3,0	170	26	19
P92 CGR 0012 M30C	10061	R	15,5	18	12	11	-	9	3/5,5	3,0	150	22	7
P92 CGR 0016 P30C	10063	R	20	22,5	16	15	15,5	11	4,5/7	3,0	170	26	19

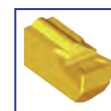
Remark

Recommended turning speed range: $V_c \sim 40 \text{ m/min} \rightarrow 120 \text{ m/min}$
Recommended turning feed range: $f \sim 0,02 \text{ mm/U} \rightarrow 0,08 \text{ mm/U}$

Fitting inserts: KCTD und KCTDS see above



Torque



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