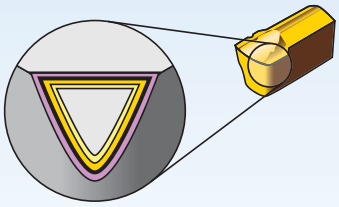
2017 Master Catalog

WIDIA™

ProGroove

With easy-to-change inserts available in multiple high-performance carbide grades, the ProGroove system ensures accurate, reliable, and reproducible cutting edge performance.

- Single-end grooving and cut-off inserts.
- Offered with integral toolholders and blades.
- Shallow, deep grooving, and cut-off capabilities.
- Available in four different geometries.



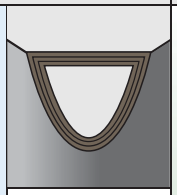
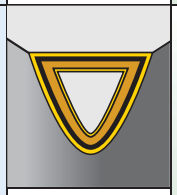
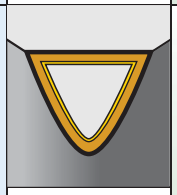
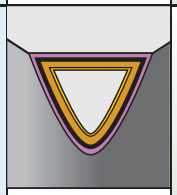
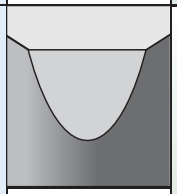
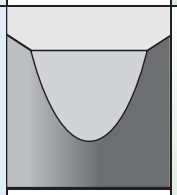
Coatings provide high-speed capability and are engineered for finishing to light roughing.

- Reduce cycle times — high speed and feed capability.
- Longer tool life — new multilayer coating provides better wear resistance.

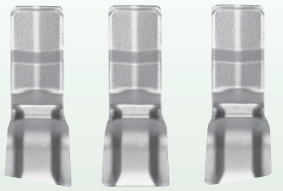
P	Steel
M	Stainless Steel
K	Cast Iron
N	Non-Ferrous
S	High-Temp Alloys
H	Hardened Materials

wear resistance ← → toughness

Grade

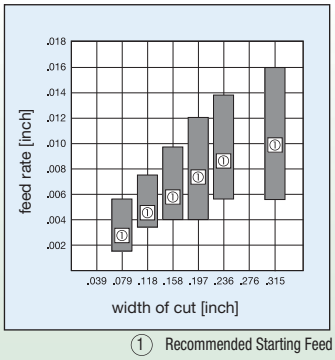
Coating	Grade Description		05	10	15	20	25	30	35	40	45
TN6030  HC-P30	PVD-TiAlN Nanolayer coated carbide. Medium and heavy machining for steels and nodular cast irons. Recommended at medium cutting speeds when good toughness properties are required.	P					■	■	■		
		M					■	■	■		
		K					■	■	■		
TN7525  HC-P25	MT-CVD/CVD — TiN-TiCN-Al_2O_3-TiN coated carbide. Light and medium machining for steels and nodular cast irons.	P		■	■	■	■	■			
		K		■	■	■	■	■			
TN7535  HC-P35	MT-CVD/CVD — TiN-TiCN-Al_2O_3 coated carbide. Medium and heavy machining for steels and nodular cast iron.	P		■	■	■	■				
		K		■	■	■	■				
TN8025  HC-M25	MT-CVD/CVD-TiN-TiCN-Al_2O_3-ZrCN coated carbide. Light and medium machining for all stainless steels. Can be used both with or without coolant.										
		M				■	■	■			
THM  HW-K15	Uncoated carbide for light and medium machining. For cast iron and all non-ferrous metals and non-metals. Also capable of machining hardened materials at low cutting speeds.										
		K		■	■	■					
		N		■	■	■					
		S		■	■	■					
		H		■	■	■					
TTM  HW-P25	Uncoated carbide with good toughness and wear properties. Medium machining for steels.	P				■	■	■			
		M				■	■	■			

PGU



left-hand neutral right-hand

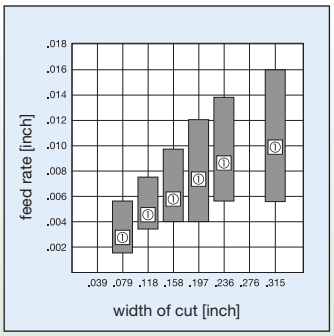
For grooving and parting operations, universal use. Positive chipbreaker groove for light cutting action. Right-hand and left-hand styles with 6° front angle.



① Recommended Starting Feed

PGM

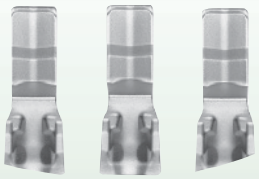
neutral



① Recommended Starting Feed

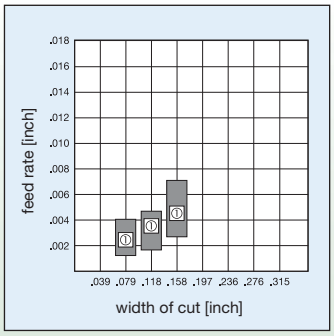
For grooving and parting, also capable of copy and straight turning as well as chamfering. With additional chip forming element for good chip control with varying depths of cut.

PGS



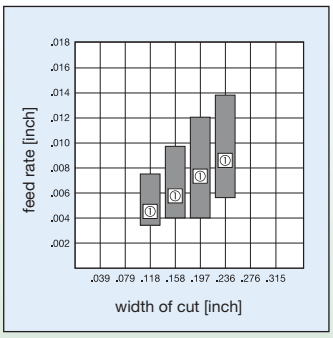
left-hand neutral right-hand

For low-bur parting with straight flanks and smooth surface finishes. All inserts are recommended for parting and grooving slender workpieces, part diameter <1.25", and thin-wall tubes.



① Recommended Starting Feed

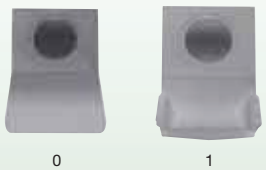
PGR



① Recommended Starting Feed

Full round inserts for profiling, grooving, and copy turning. Very good chip control for broad general use. Accurate, reproducible cutting edge positioning.

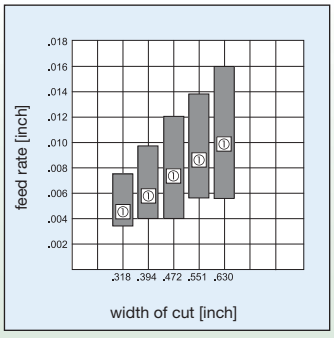
LG System • 0 and 1



0 1

…0
Inserts with wide range of applications in grooving and deep grooving. With additional chip control element for good chip control, even with varying widths of cut.

…1
Inserts with wide range of uses in grooving and deep grooving of short chipping materials.

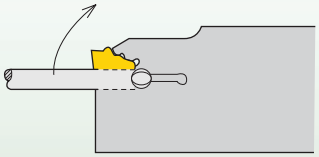


① Recommended Starting Feed

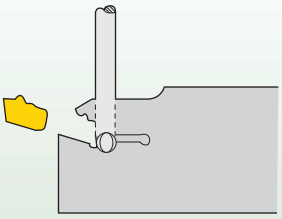
Material Group		Cutting Speed — vc m/min																	
		TN6030			TN7525			TN7535			TN8025			THM			TTM		
		min	Start	max	min	Start	max	min	Start	max	min	Start	max	min	Start	max	min	Start	max
P	0 / 1	130	**140**	150	200	**215**	230	140	**175**	210	–	–	–	–	–	–	90	**95**	100
	2	110	**145**	175	170	**220**	270	115	**145**	175	–	–	–	–	–	–	75	**100**	125
	3	110	**145**	175	170	**220**	270	115	**145**	175	–	–	–	–	–	–	75	**100**	125
	4	75	**95**	115	115	**145**	175	75	**100**	120	–	–	–	–	–	–	55	**65**	80
	5	100	**125**	145	155	**190**	220	105	**140**	170	–	–	–	–	–	–	70	**85**	100
	6	40	**55**	65	65	**85**	100	45	**60**	75	–	–	–	–	–	–	30	**40**	45
M	1	90	**110**	140	–	–	–	–	–	–	90	**120**	150	–	–	–	60	**75**	90
	2	55	**70**	90	–	–	–	–	–	–	55	**75**	95	–	–	–	40	**50**	55
	3	60	**75**	95	–	–	–	–	–	–	60	**80**	100	–	–	–	40	**50**	60
K	1	60	**80**	90	120	**150**	180	–	–	–	–	–	–	60	**80**	90	–	–	–
	2	60	**75**	85	120	**150**	180	–	–	–	–	–	–	60	**75**	85	–	–	–
	3	60	**75**	90	110	**140**	170	–	–	–	–	–	–	60	**75**	90	–	–	–
N	1	–	–	–	–	–	–	–	–	–	–	–	–	600	**750**	900	–	–	–
	2	–	–	–	–	–	–	–	–	–	–	–	–	535	**685**	835	–	–	–
	3	–	–	–	–	–	–	–	–	–	–	–	–	230	**300**	370	–	–	–
	4	–	–	–	–	–	–	–	–	–	–	–	–	135	**180**	225	–	–	–
	5	–	–	–	–	–	–	–	–	–	–	–	–	70	**90**	110	–	–	–
	6	–	–	–	–	–	–	–	–	–	–	–	–	445	**565**	690	–	–	–
	7	–	–	–	–	–	–	–	–	–	–	–	–	550	**700**	850	–	–	–
S	1	–	–	–	–	–	–	–	–	–	–	–	–	25	**35**	40	–	–	–
	2	–	–	–	–	–	–	–	–	–	–	–	–	15	**20**	20	–	–	–
	3	–	–	–	–	–	–	–	–	–	–	–	–	40	**60**	70	–	–	–
	4	–	–	–	–	–	–	–	–	–	–	–	–	20	**30**	35	–	–	–
H	1	–	–	–	–	–	–	–	–	–	–	–	–	10	**20**	35	–	–	–
	2	–	–	–	–	–	–	–	–	–	–	–	–	10	**20**	35	–	–	–
	3	–	–	–	–	–	–	–	–	–	–	–	–	10	**20**	35	–	–	–
	4	–	–	–	–	–	–	–	–	–	–	–	–	10	**20**	35	–	–	–

Material Group		Cutting Speed — vc SFM																	
		TN6030			TN7525			TN7535			TN8025			THM			TTM		
		min	Start	max	min	Start	max	min	Start	max	min	Start	max	min	Start	max	min	Start	max
P	0 / 1	425	**455**	490	655	**705**	750	455	**570**	685	–	**–**	–	–	**–**	–	295	**310**	325
	2	360	**465**	575	555	**720**	885	380	**475**	575	–	**–**	–	–	**–**	–	245	**320**	405
	3	360	**465**	575	555	**720**	885	380	**475**	575	–	**–**	–	–	**–**	–	245	**320**	405
	4	235	**300**	365	370	**470**	570	245	**320**	390	–	**–**	–	–	**–**	–	170	**210**	260
	5	325	**400**	475	510	**615**	720	345	**450**	555	–	**–**	–	–	**–**	–	230	**280**	330
	6	130	**180**	210	210	**275**	325	145	**195**	245	–	**–**	–	–	**–**	–	95	**130**	145
M	1	295	**390**	490	–	**–**	–	–	**–**	–	295	**390**	490	–	**–**	–	195	**245**	295
	2	180	**245**	310	–	**–**	–	–	**–**	–	180	**245**	310	–	**–**	–	130	**160**	180
	3	195	**260**	320	–	**–**	–	–	**–**	–	195	**260**	320	–	**–**	–	130	**165**	195
K	1	195	**255**	295	390	**490**	590	–	**–**	–	–	**–**	–	195	**255**	295	–	**–**	–
	2	195	**240**	280	390	**490**	590	–	**–**	–	–	**–**	–	195	**240**	280	–	**–**	–
	3	195	**245**	295	360	**455**	555	–	**–**	–	–	**–**	–	195	**245**	295	–	**–**	–
N	1	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	1965	**2460**	2950	–	**–**	–
	2	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	1750	**2240**	2730	–	**–**	–
	3	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	750	**980**	1210	–	**–**	–
	4	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	445	**590**	730	–	**–**	–
	5	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	230	**295**	360	–	**–**	–
	6	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	1450	**1855**	2260	–	**–**	–
	7	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	1805	**2295**	2785	–	**–**	–
S	1	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	75	**110**	130	–	**–**	–
	2	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	40	**55**	65	–	**–**	–
	3	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	135	**195**	235	–	**–**	–
	4	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	65	**95**	115	–	**–**	–
H	1	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	35	**70**	115	–	**–**	–
	2	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	35	**70**	115	–	**–**	–
	3	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	35	**70**	115	–	**–**	–
	4	–	**–**	–	–	**–**	–	–	**–**	–	–	**–**	–	35	**70**	115	–	**–**	–

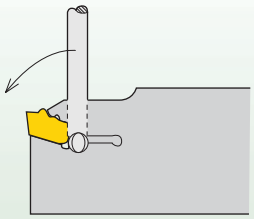
ProGroove System



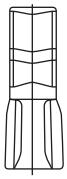
To change the cutting insert, place the wrench into the blade recess.
The blade mouth is opened by turning through 90°.

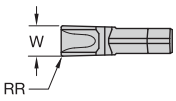


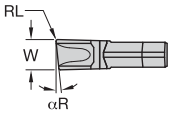
In this position, the wrench is self-locking, leaving both hands free
for changing the cutting insert.

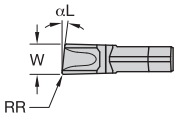


The cutting insert is pressed against the rear seat in the blade mouth,
releasing the wrench. The insert is accurately positioned and securely clamped.









● first choice
○ alternate choice

		TN6030	TN7525	TN7535	TN8025	THM	TTM
P		●	●	●	○		●
M		●	○	○	●		●
K		●	●	●		●	
N		○				●	
S		○				●	
H						●	

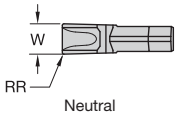
PGU

catalog number	insert size	W mm	W in	RR mm	RR in	hand	TN6030	TN7525	TN7535	TN8025	THM	TTM
123567320	2	2,10	.083	0,20	.008	N - Neutral	2953289	2498725	2498713	2021804	2008876	-
123567330	3	3,10	.122	0,30	.012	N - Neutral	2953284	-	2498714	2017822	2008931	-
123567340	4	4,10	.161	0,30	.012	N - Neutral	2953286	2498727	2498715	-	2009080	-
123567350	5	5,10	.201	0,30	.012	N - Neutral	2953673	2498728	2498716	-	2021873	-
123567360	6	6,10	.240	0,40	.016	N - Neutral	2953674	2952333	2952350	-	2009385	-
123567380	8	8,15	.321	0,60	.024	N - Neutral	2953666	-	2952351	2009482	2009504	-

catalog number	insert size	W mm	W in	RR mm	RR in	αL	hand	TN6030	TN7525	TN7535	TN8025	THM	TTM
123567231	3	3,10	.122	0,25	.010	6	L - Left	2953672	2498730	2498718	-	-	-
123567241	4	4,10	.161	0,25	.010	6	L - Left	2953676	-	-	-	-	-

catalog number	insert size	W mm	W in	RL mm	RL in	αR	hand	TN6030	TN7525	TN7535	TN8025	THM	TTM
123567230	3	3,10	.122	0,25	.010	6	R - Right	2953291	2498729	2498717	-	-	-
123567240	4	4,10	.161	0,25	.010	6	R - Right	2953667	2498731	2498719	-	-	-

NOTE: W tolerance on all = ±.002" (±0,05mm).



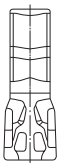
● first choice
○ alternate choice

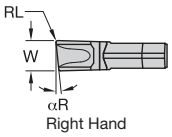
		TN6030	TN7525	TN7535	TN8025	THM	TTM
P		●	●	●	○		●
M		●	○	○	●		●
K		●	●	●		●	
N		○				●	
S		○				●	
H						●	

PGM

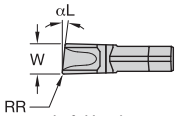
catalog number	insert size	W mm	W in	RR mm	RR in	hand	TN6030	TN7525	TN7535	TN8025	THM	TTM
123567420	2	2,10	.083	0,20	.008	N - Neutral	2953679	2498733	2498721	-	-	-
123567430	3	3,10	.122	0,30	.012	N - Neutral	2953678	2498734	2498722	-	-	-
123567440	4	4,10	.161	0,30	.012	N - Neutral	2953663	2498735	2498723	-	-	-
123567450	5	5,10	.201	0,30	.012	N - Neutral	2953671	2498736	2498724	-	-	-
123567460	6	6,10	.240	0,40	.016	N - Neutral	2953677	2952335	2952352	-	-	-
123567480	8	8,15	.321	0,60	.024	N - Neutral	2953675	2952336	2952353	-	-	-

NOTE: W tolerance on all = ±.002" (±0,05mm).

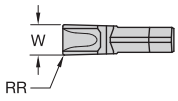




Right Hand



Left Hand



Neutral

● first choice
○ alternate choice

		TN6030	TN7525	TN7535	TN8025	THM	TTM
P		●	●	●	○		●
M		●	○	○	●		●
K		●	●	●		●	
N		○				●	
S		○				●	
H						●	

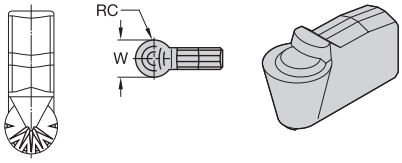
PGS

catalog number	insert size	W mm	W in	RR mm	RR in	hand	TN6030	TN7525	TN7535	TN8025	THM	TTM
123567702	2	2,25	.089	0,20	.008	N - Neutral	■	■	2952354	■	■	■
123567703	3	3,25	.128	0,20	.008	N - Neutral	■	■	2952355	■	■	■
123567704	4	4,25	.167	0,20	.008	N - Neutral	■	■	2952356	■	■	■

catalog number	insert size	W mm	W in	RR mm	RR in	αL	hand	TN6030	TN7525	TN7535	TN8025	THM	TTM
123567721	2	2,25	.089	0,20	.008	6	L - Left	■	■	2952358	■	■	■
123567731	3	3,25	.128	0,20	.008	6	L - Left	■	■	2952360	■	■	■

catalog number	insert size	W mm	W in	RL mm	RL in	αR	hand	TN6030	TN7525	TN7535	TN8025	THM	TTM
123567720	2	2,25	.089	0,20	.008	6	R - Right	■	■	2952357	■	■	■
123567730	3	3,25	.128	0,20	.008	6	R - Right	■	■	2952359	2017912	■	■
123567740	4	4,25	.167	0,20	.008	6	R - Right	■	■	2952361	■	■	■

NOTE: W tolerance on all = ±.002" (±0,05mm).



● first choice
○ alternate choice

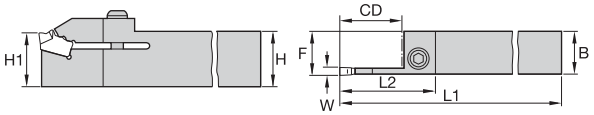
		TN6030	TN7525	TN7535	TN8025	THM	TTM
P		●	●	●	○		●
M		●	○	○	●		●
K		●	●	●		●	
N		○				●	
S		○				●	
H						●	

PGR

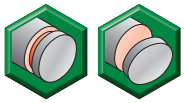
catalog number	insert size	W mm	W in	RC mm	RC in	TN6030	TN7525	TN7535	TN8025	THM	TTM
123567803	3	3,00	.118	1,50	.059	'	2952337	'	'	'	'
123567804	4	4,00	.158	2,00	.079	'	2952338	'	'	'	'
123567805	5	5,00	.197	2,50	.098	'	2952339	'	'	'	'
123567806	6	6,00	.236	3,00	.118	'	2952340	'	'	'	'

NOTE: W tolerance on all = ±.003" (±0,07mm).

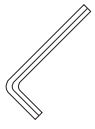
Integral Toolholders



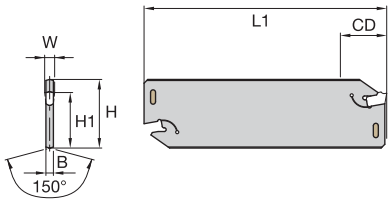
Right Hand Tool Shown



Grooving and Cut-Off



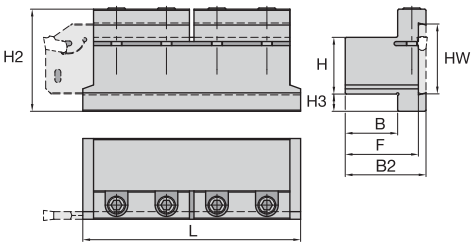
order number	catalog number	seat size	W	CD	H	B	F	L1	L2	H1	cap screw	wrench
right hand												
2962743	**12250023000**	3	.122	.787	.750	.750	.764	5.00	1.26	.750	**12148596200**	**12148041200**
2962745	**12250023200**	3	.122	.984	1.000	1.000	1.012	6.00	1.57	1.000	**12148596200**	**12148041200**
2962751	**12250025200**	5	.201	1.260	1.000	1.000	1.016	6.00	2.09	1.000	**12148596200**	**12148041200**
left hand												
2962744	**12250023100**	3	.122	.787	.750	.750	.764	5.00	1.26	.750	**12148596200**	**12148041200**



Cut-Off Blades

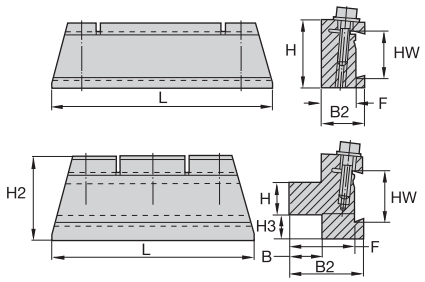
order number	catalog number	seat size	W mm	W in	H mm	H in	H1 mm	H1 in	L1 mm	L1 in	B mm	B in	CD mm	CD in	wrench
2021629	**12251332000**	2	2,1	.083	19,0	.748	15,7	.618	90	3.543	1,7	.067	20	.787	**12146003800**
2021639	**12251342000**	2	2,1	.083	26,0	1.024	21,4	.843	110	4.331	1,7	.067	25	.984	**12146003800**
2008113	**12251352000**	2	2,1	.083	32,0	1.260	25,0	.984	150	5.906	1,7	.067	25	.984	**12146003800**
2021640	**12251343000**	3	3,1	.122	26,0	1.024	21,4	.843	110	4.331	2,4	.095	40	1.575	**12146003800**
2008116	**12251353000**	3	3,1	.122	32,0	1.260	25,0	.984	150	5.906	2,4	.095	50	1.969	**12146003800**
2021641	**12251344000**	4	4,1	.161	26,0	1.024	21,4	.843	110	4.331	3,2	.126	40	1.575	**12146003800**
2008119	**12251354000**	4	4,1	.161	32,0	1.260	25,0	.984	150	5.906	3,2	.126	50	1.969	**12146003800**
2008122	**12251355000**	5	5,1	.201	32,0	1.260	25,0	.984	150	5.906	4,2	.165	60	2.362	**12146003800**
2008135	**12251356000**	6	6,1	.240	32,0	1.260	25,0	.984	150	5.906	5,0	.197	60	2.362	**12146009500**
2008138	**12251358000**	8	8,1	.319	32,0	1.260	25,0	.984	150	5.906	6,8	.268	60	2.362	**12146009500**
2021743	**12251368000**	8	8,1	.319	52,5	2.067	45,0	1.772	250	9.843	6,8	.268	100	3.937	**12146009500**

NOTE: Order wrench separately.

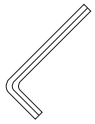


Cut-Off Blade Holders

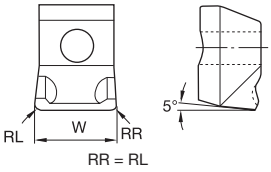
order number	catalog number	HW	H	B	F	H2	B2	H3	L	cap screw	wrench
2968845	**32251221200**	1.024	.750	.750	1.161	1.57	1.34	.32	3.39	**125.625**	**12148041300**
2968846	**32251221600**	1.260	1.000	1.000	1.417	1.89	1.63	.30	4.33	**125.630**	**12148041300**
2968847	**32251222000**	1.260	1.250	1.250	1.673	1.97	1.89	.13	4.33	**125.630**	**12148041300**



Cut-Off Blade Holders

order number	catalog number	HW	H	B	F	H2	B2	H3	L	cap screw	wrench
2021625	**12251221900**	19	16,0	16,0	28,3	30	30	4	100	**12148036000**	**12148041300**
2021634	**12251212500**	19	25,0	19,0	17,3	25	19	–	100	**12148036000**	**12148041300**
2021626	**12251221600**	26	16,0	16,0	31,0	40	36	12	100	**12148036000**	**12148041300**
2007826	**12251222000**	26	20,0	18,0	33,0	40	38	8	100	**12148036000**	**12148041300**
2008141	**12251213200**	26	32,0	20,0	15,0	32	20	–	125	**12148036000**	**12148041300**
2021635	**12251222500**	32	25,0	20,0	35,0	50	40	10	125	**12148036000**	**12148041300**
2008156	**12251223200**	32	32,0	25,0	40,0	50	45	3	125	**12148036000**	**12148041300**
2008159	**12251233200**	53	32,0	25,0	50,0	82	57	30	160	**12146013400**	**12148041400**
2021723	**12251234000**	53	40,0	40,0	58,0	82	65	22	160	**12146013400**	**12148041400**



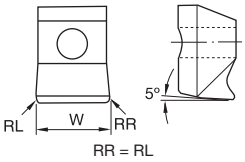
● first choice
○ alternate choice

P		●	●	●	○		●
M		●	○	○	●		●
K		●	●	●		●	
N		○				●	
S		○				●	
H						●	

LGN0

catalog number	W mm	W in	RR mm	RR in	TN6030	TN7525	TN7535	TN8025	THM	TTM
123568080	8,15	.321	0,80	.032	-	2952341	2952363	-	2017973	2009562
123568100	10,15	.400	0,80	.032	-	2952342	2952364	-	2017976	-
123568120	12,20	.480	0,80	.032	-	2952343	2952365	-	2017980	-
123568140	14,20	.559	0,80	.032	-	2952344	2952366	-	2022789	-
123568160	16,20	.638	0,80	.032	-	2952345	2952367	-	2022790	2021798

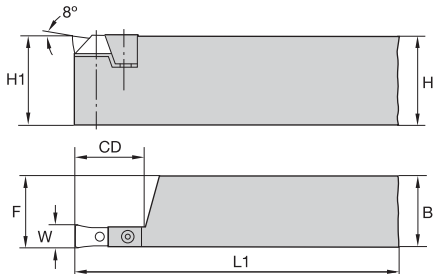
NOTE: W tolerance on all = ±.002" (± 0,05mm).



LGN1

catalog number	W mm	W in	RR mm	RR in	TN6030	TN7525	TN7535	TN8025	THM	TTM
123568081	8,15	.321	0,80	.032	-	-	-	-	2022787	-
123568121	12,20	.480	0,80	.032	-	-	-	-	2017993	-
123568141	14,20	.559	0,80	.032	-	-	-	-	2017996	-
123568161	16,20	.638	0,80	.032	-	-	-	-	2022791	-

NOTE: W tolerance on all = ±.002" (±0,05mm).

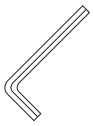
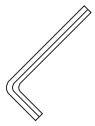
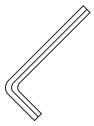


Grooving

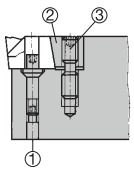
order number	catalog number	seat size	W	CD	H	H1	B	L1	F
right hand									
2983280	**32250110100**	8	.321	.866	1.250	1.250	1.000	6.02	1.021
2983282	**32250110500**	12	.480	1.181	1.500	1.500	1.250	7.02	1.272
2983973	**32250110700**	14	.559	1.181	1.500	1.500	1.250	7.02	1.272
2983974	**32250110900**	16	.638	1.339	1.500	1.500	1.250	7.02	1.272
left hand									
2983975	**32250110200**	8	.321	.866	1.250	1.250	1.000	6.02	1.021
2983977	**32250110600**	12	.480	1.181	1.500	1.500	1.250	7.02	1.272
2983978	**32250110800**	14	.559	1.181	1.500	1.500	1.250	7.02	1.272
2983979	**32250111000**	16	.638	1.339	1.500	1.500	1.250	7.02	1.272

Spare Parts

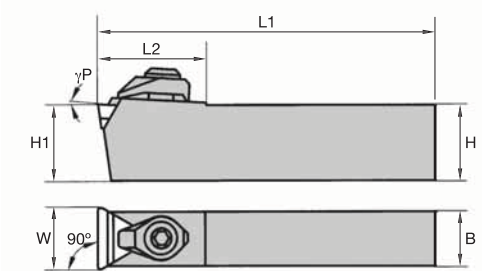


catalog number	clamping bolt	wedge clamp	clamping screw	wrench for clamp screw	wrench for clamp screw	wrench for clamping bolt
			right hand			
32250110100	**12148060600**	**12148094300**	**12148574100**	**12148041000**	**–**	**12148046000**
32250110500	**12148060700**	**12148094500**	**12148574900**	**–**	**12148041100**	**12148040900**
32250110700	**12148060700**	**12148094600**	**12148574000**	**–**	**12148041200**	**12148040900**
32250110900	**12148060800**	**12148094700**	**12148574000**	**12148041000**	**12148041200**	**–**
			left hand			
32250110200	**12148060600**	**12148094300**	**12148574100**	**12148041000**	**–**	**12148046000**
32250110600	**12148060700**	**12148094500**	**12148574900**	**–**	**12148041100**	**12148040900**
32250110800	**12148060700**	**12148094600**	**12148574000**	**–**	**12148041200**	**12148040900**
32250111000	**12148060800**	**12148094700**	**12148574000**	**12148041000**	**12148041200**	**–**



1. Clamping bolt
2. Wedge clamp
3. Clamping screw



Grooving

order number	catalog number	W	H	H1	B	L1	L2	γP°	gage insert
left hand									
2022921	12191061900	.409	.787	.787	.374	4.92	.827	3	TP..1103../TP..22..
2007414	12191062086	.602	.787	.787	.512	5.91	1.063	3	TP..1603../TP..32..
2022922	12191062586	.602	.984	.984	.512	5.91	1.063	3	TP..1603../TP..32..
2058066	12191062686	.795	.984	.984	.709	5.91	1.378	3	TP..2204../TP..43..
2022923	12191063286	.795	1.260	1.260	.709	7.09	1.378	3	TP..2204../TP..43..

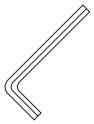
NOTE: Gage Inserts listed are ISO/ANSI style inserts.
Holders KS are supplied without chipbreaker. For chipbreaker order numbers, see below.

For Grooving without Chipbreaker









catalog number	clamp	button-head cap screw	screw	shim	shim screw	shim screw	washer	wrench
12191061900	12148589200	–	12148589800	12148032586	–	12148021900	–	12148041100
12191062086	12148586800	12148586000	–	12148031686	12148024100	–	12148024200	–
12191062586	12148586800	12148586000	–	12148031686	12148024100	–	12148024200	–
12191062686	12148586900	12148021100	–	12148032086	12148024500	–	12148024800	–
12191063286	12148586900	12148021100	–	12148032086	12148024500	–	12148024800	–

For Grooving with Chipbreaker (Order Additional Clamp and Chipbreaker)

			chipbreakers					
			B – edge width					
insert	clamp with chipbreaker	D	.016	.047	.071	.098	.126	.158
TP...22...	12148589200	.250	12148591011	12148588211	12148588311	12148588411	–	–
TP...32...	12148589300	.375	12148591111	12148586611	12148587011	12148587111	12148580011	–
TP...43...	12148586900	.500	–	–	12148580411	12148580511	12148580611	12148582511