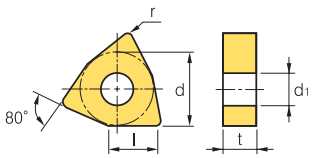
WN○○

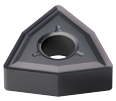
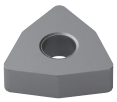
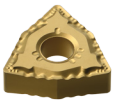
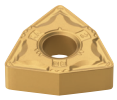
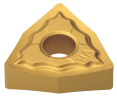


Dimensions (mm)			
Size	d	t	d1
06	9.525	4.76	3.81
08	12.7	4.76	5.16

Trigon 80° Negative

Workpiece																							
Steel	P	●	⊛	✱	●	⊛	●	⊛	⊛	✱	✱	●	●	⊛		✱							
Stainless steel	M									⊛	⊛			●	⊛	✱	⊛	✱		●	⊛	⊛	
Cast iron	K	●	⊛	✱	●	⊛	⊛				⊛	⊛	⊛										
Non-ferrous metal	N																					●	⊛
Heat resistant alloy, Titanium alloy	S										●				●	●	⊛	✱	●	●	⊛	●	⊛
Hardened steel	H																			⊛	✱	●	⊛

Machining types
- ● Continuous cutting
- ⊛ General cutting
- ✱ Interrupted cutting

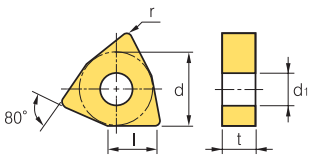
Inserts		Designation		Cermet			Coated		Coated															Uncoated		Cutting Condition	
				CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05	fn (mm/rev)	ap (mm)
Medium cutting	VP3 	WNGG	080404-VP3																								0.10~0.45	0.50~5.00
Roughing		WNMA	060404																								0.10~0.30	0.50~3.00
			060408												●												0.10~0.30	0.50~3.00
			060412																								0.10~0.40	1.00~3.00
			080404												●												0.15~0.60	1.00~5.00
			080408												●												0.15~0.60	1.00~6.00
			080412												●												0.15~0.70	1.50~6.00
			080416																								0.15~0.70	1.50~6.00
Finishing	VB 	WNMG	080404-VB						●		●		●														0.10~0.35	0.30~1.50
			080408-VB						●		●		●														0.15~0.45	0.50~2.00
			080412-VB						●		●																0.18~0.45	0.80~2.50
Finishing	VF	WNMG	060404-VF		●								●														0.07~0.30	0.50~1.50
			060408-VF																								0.10~0.40	0.50~1.50
			080404-VF							●			●														0.07~0.30	0.50~1.50
			080408-VF										●														0.10~0.40	0.50~1.50
			080412-VF																								0.20~0.50	0.50~1.50
Finishing	VL [Mild steel]	WNMG	060404-VL																								0.05~0.25	0.20~1.50
			080404-VL																								0.05~0.25	0.10~1.00
			080408-VL								●		●														0.10~0.35	0.20~1.50
Finishing	VW  [wiper]	WNMG	060404-VW																								0.05~0.30	0.40~3.00
			060408-VW																								0.08~0.30	0.40~3.50
			080404-VW																								0.10~0.30	0.50~3.00
			080408-VW																								0.15~0.50	0.50~4.00
			080412-VW																								0.18~0.50	1.00~4.00
Medium to finishing	HA 	WNMG	060404-HA																				●	●			0.05~0.30	0.10~3.00
			060408-HA																				●	●			0.10~0.40	0.80~3.50
			080404-HA																				●	●			0.05~0.30	0.80~3.50
			080408-HA																				●	●			0.10~0.40	0.80~3.50
			080412-HA																								0.13~0.55	0.80~3.50

Cutting edge geometry A52~A61 Recommended chip breaker B04~B11 Code system B26~B27

● : Stock item

Available tool holders			
Designation	Page	Designation	Page
MWLNR/L	B177	WWLNR/L	B168
PWLNR/L	B200		

WN○○

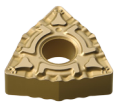
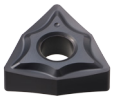
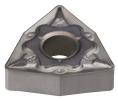


Dimensions (mm)			
Size	d	t	d_1
06	9.525	4.76	3.81
08	12.7	4.76	5.16

Trigon 80° Negative

Workpiece																								
Steel	P	●	⇕	✱	●	⇕	●	⇕	⇕	✱	✱	●	●	⇕		✱								
Stainless steel	M									⇕	⇕			●	⇕	✱	⇕	✱		●	⇕	⇕		
Cast iron	K	●	⇕	✱	●	⇕	⇕				⇕	⇕	⇕										●	⇕
Non-ferrous metal	N																						●	⇕
Heat resistant alloy, Titanium alloy	S										●				●	●	⇕	✱	●	●	⇕		●	⇕
Hardened steel	H																			⇕	✱		●	⇕

Machining types
- ● Continuous cutting
- ⇕ General cutting
- ✱ Interrupted cutting

	Inserts	Designation	Cermet			Coated		Coated														Uncoated		Cutting Condition	
			CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05	fn (mm/rev)	ap (mm)
Medium to finishing	LP new	WNMG 06T308-LP																								0.70~0.30	0.30~1.50
		060404-LP																								0.07~0.30	0.30~1.50
		060408-LP						●		●																0.10~0.30	0.30~1.50
		080404-LP						●		●		●														0.10~0.35	0.30~2.00
		080408-LP						●		●		●														0.10~0.40	0.50~2.50
		080412-LP						●		●		●														0.13~0.45	0.80~3.00
Medium to finishing	VC 	WNMG 080404-VC						●		●																0.15~0.40	0.15~4.00
		080408-VC						●		●																0.15~0.45	0.15~4.50
		080412-VC						●		●		●														0.15~0.45	0.15~4.50
Medium to finishing	VP2 	WNMG 080404-VP2																●	●		●					0.10~0.45	0.50~5.00
		080408-VP2								●								●	●	●	●	●		●		0.12~0.50	0.50~5.00
		080412-VP2																●	●	●	●	●		●		0.05~0.30	0.10~3.00
Medium to finishing	VQ  [Cermet]	WNMG 060404-VQ																								0.05~0.30	0.50~4.00
		060408-VQ																								0.08~0.30	0.80~4.00
		060412-VQ																								0.10~0.30	1.00~4.00
		080404-VQ	●		●	●	●																			0.05~0.30	0.50~4.00
		080408-VQ	●		●	●	●																			0.08~0.40	0.80~4.00
		080412-VQ																								0.10~0.35	0.80~3.50
Medium cutting	HM	WNMG 060404-HM												●												0.15~0.43	0.42~3.00
		060408-HM							●		●												●			0.10~0.50	1.00~4.00
		080404-HM							●		●												●			0.15~0.42	0.50~4.20
		080408-HM						●	●	●	●	●											●			0.10~0.50	1.00~5.00
		080412-HM																					●			0.10~0.50	1.00~5.00
Medium cutting	MK new	WNMG 060408-MK											●	●												0.08~0.30	0.80~2.50
		080404-MK												●												0.10~0.45	1.00~3.00
		080408-MK												●												0.10~0.50	1.00~3.50
		080412-MK												●												0.10~0.50	1.00~4.00
		080416-MK																								0.13~0.50	1.20~4.20
Medium cutting	MM new	WNMG 06T304-MM																								0.08~0.35	0.50~4.00
		06T308-MM																								0.10~0.40	0.50~4.00
		06T312-MM																								0.12~0.45	0.50~4.00
		060404-MM																								0.08~0.35	0.50~4.00
		060408-MM														●	●						●			0.10~0.40	0.50~4.00
		060412-MM														●	●						●			0.12~0.45	0.50~4.00
		080404-MM														●	●	●			●	●	●			0.10~0.40	0.50~4.00
		080408-MM													●	●	●	●				●	●			0.12~0.45	0.50~4.00
		080412-MM													●	●	●	●				●	●			0.15~0.60	0.50~4.00

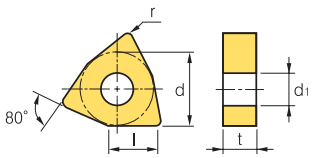
Cutting edge geometry A52~A61 Recommended chip breaker B04~B11 Code system B26~B27

● : Stock item

Available tool holders			
Designation	Page	Designation	Page
MWLNR/L	B177	WWLNR/L	B168
PWLNR/L	B200		

WN○○

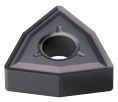
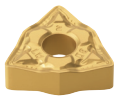
Trigon 80° Negative



Dimensions (mm)			
Size	d	t	d1
06	9.525	4.76	3.81
08	12.7	4.76	5.16
13	19.05	6.35	7.93

Workpiece			CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05
Steel	P		●	⬌	✱	●	⬌	●	⬌	⬌	✱	✱	●	●	⬌		✱								
Stainless steel	M										⬌	⬌			●	⬌	✱	⬌	✱		●	⬌	⬌		
Cast iron	K		●	⬌	✱	●	⬌	⬌				⬌	⬌	⬌										●	⬌
Non-ferrous metal	N																							●	⬌
Heat resistant alloy, Titanium alloy	S											●				●	●	⬌	✱	●	●	⬌		●	⬌
Hardened steel	H																				⬌	✱		●	⬌

Machining types
- ● Continuous cutting
- ⬌ General cutting
- ✱ Interrupted cutting

Inserts	Designation		Cermet			Coated		Coated																Uncoated		Cutting Condition	
			CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05	fn (mm/rev)	ap (mm)
Medium cutting, MP (new)	WNMG	06T304-MP																								0.10~0.40	0.40~2.80
		06T308-MP																								0.15~0.45	0.50~3.00
		060404-MP						●		●		●				●										0.10~0.40	0.40~2.80
		060408-MP						●		●		●	●			●										0.15~0.45	0.50~3.00
		060412-MP																								0.15~0.50	0.80~3.20
		080404-MP						●		●		●			●	●	●			●	●	●				0.10~0.40	0.40~4.00
		080408-MP						●		●		●			●	●	●			●	●	●				0.15~0.45	0.50~4.50
		080412-MP						●		●		●			●	●	●			●	●					0.15~0.50	0.80~5.00
		080416-MP						●		●		●														0.18~0.55	0.10~5.00
Medium cutting, VM	WNMG	060404-VM										●						●	●							0.10~0.45	1.00~3.50
		060408-VM							●	●		●						●	●							0.10~0.50	1.00~4.00
		060412-VM																								0.13~0.60	1.30~4.00
		080404-VM							●			●						●	●							0.05~0.30	0.90~5.00
		080408-VM							●	●	●	●						●	●		●		●			0.10~0.50	1.00~5.00
		080412-VM							●			●						●	●							0.10~0.50	1.00~5.00
		080416-VM																								0.10~0.50	1.20~5.00
Medium cutting, VP3 	WNMG	060408-VP3																								0.60~0.38	0.40~3.50
		060412-VP3																								0.60~0.38	0.40~3.50
		080404-VP3																●	●	●	●	●		●	●	0.10~0.45	0.50~5.00
		080408-VP3																●	●	●	●	●		●	●	0.12~0.50	0.50~5.00
		080412-VP3																●	●	●	●	●		●	●	0.05~0.30	0.10~3.00
		130612-VP3																								0.20~0.40	1.00~5.00
Medium cutting, LW [wiper] 	WNMG	060408-LW						●		●						●										0.15~0.60	0.50~3.50
		060412-LW																								0.20~0.70	0.80~3.50
		080408-LW						●		●		●				●										0.15~0.60	1.00~5.00
		080412-LW																								0.20~0.70	1.00~6.00
General, B25	WNMG	080404-B25						●		●		●														0.17~0.45	1.00~5.00
		080408-B25						●		●	●	●														0.23~0.60	1.50~5.00
		080412-B25						●		●		●														0.25~0.60	2.00~5.00
Roughing, GR	WNMG	080404-GR																								0.15~0.50	0.08~6.00
		080408-GR							●	●	●	●														0.20~0.50	1.00~7.00
		080412-GR							●	●	●	●														0.25~0.50	1.30~7.00
		080416-GR																								0.25~0.60	1.80~6.00

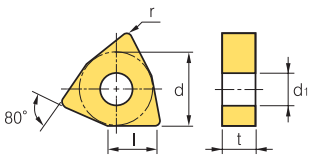
Cutting edge geometry A52~A61 Recommended chip breaker B04~B11 Code system B26~B27

● : Stock item

Available tool holders			
Designation	Page	Designation	Page
MWLNR/L	B177	WWLNR/L	B168
PWLNR/L	B200		

WN○○

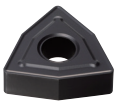
Trigon 80° Negative



Dimensions (mm)			
Size	d	t	d_1
06	9.525	4.76	3.81
08	12.7	4.76	5.16
10	15.875	6.35	6.35
13	19.05	6.35	7.93

Workpiece			CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05
Steel	P		●	⬌	✖	●	⬌	●	⬌	⬌	✖	✖	●	●	⬌		✖								
Stainless steel	M										⬌	⬌			●	⬌	✖	⬌	✖		●	⬌	⬌		
Cast iron	K		●	⬌	✖	●	⬌	⬌				⬌	⬌	⬌										●	⬌
Non-ferrous metal	N																							●	⬌
Heat resistant alloy, Titanium alloy	S											●				●	●	⬌	✖	●	●	⬌		●	⬌
Hardened steel	H																				⬌	✖		●	⬌

Machining types
- ● Continuous cutting
- ⬌ General cutting
- ✖ Interrupted cutting

Inserts		Designation	Cermet CN1500	Cermet CN2000	Cermet CN2500	Coated CC1500	Coated CC2500	Coated NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	Uncoated H01	Uncoated H05	Cutting Condition fn (mm/rev)	Cutting Condition ap (mm)
Roughing	RK new	WNMG 060408-RK																								0.10~0.40	1.00~3.50
		060412-RK																								0.23~0.40	1.50~5.00
		080404-RK												●												0.23~0.50	1.50~6.00
		080408-RK											●	●												0.23~0.53	1.50~6.00
		080412-RK											●	●												0.28~0.53	1.80~6.00
		080416-RK												●												0.25~0.60	2.00~6.00
Roughing	RM new	WNMG 060404-RM														●	●									0.10~0.50	1.50~3.00
		060408-RM														●	●									0.15~0.55	1.50~3.00
		060412-RM														●	●									0.20~0.60	1.50~3.00
		080404-RM														●	●	●				●	●			0.10~0.50	2.00~4.00
		080408-RM													●	●	●	●			●	●	●			0.15~0.55	2.00~4.00
		080412-RM													●	●	●	●				●				0.20~0.60	2.00~4.00
Roughing	VP4 new	WNMG 080408-VP4																				●				0.15~0.35	1.00~4.00
		080412-VP4																				●				0.20~0.40	1.00~4.00
Roughing	VR 	WNMG 060408-VR																								0.20~0.40	1.00~6.00
		080404-VR																								0.20~0.50	0.80~7.00
		080408-VR																								0.25~0.55	1.20~7.00
		080412-VR																								0.30~0.60	1.50~7.00
		080416-VR																								0.40~0.60	1.50~4.00
Medium to roughing	B25	WNMM 100608-B25									●															0.30~0.80	3.00~8.00
		130612-B25																								0.40~0.90	4.00~10.00
Finishing	SR new [Shaft]	WNMX 080404R-SR																								0.10~0.35	0.70~3.00
		080408R-SR																								0.12~0.40	1.00~3.00
		080404L-SR																								0.10~0.35	0.70~3.00
		080408L-SR																								0.12~0.40	1.00~3.00
Medium cutting	SH [Shaft]	WNMX 080404R-SH																								0.15~0.30	1.00~4.00
		080408R-SH																								0.15~0.50	1.50~5.00
		080404L-SH																								0.15~0.30	1.00~4.00
		080408L-SH																								0.15~0.50	1.50~5.00

Cutting edge geometry A52~A61 Recommended chip breaker B04~B11 Code system B26~B27

● : Stock item

Available tool holders			
Designation	Page	Designation	Page
MWLNR/L	B177	WWLNR/L	B168
PWLNR/L	B200		