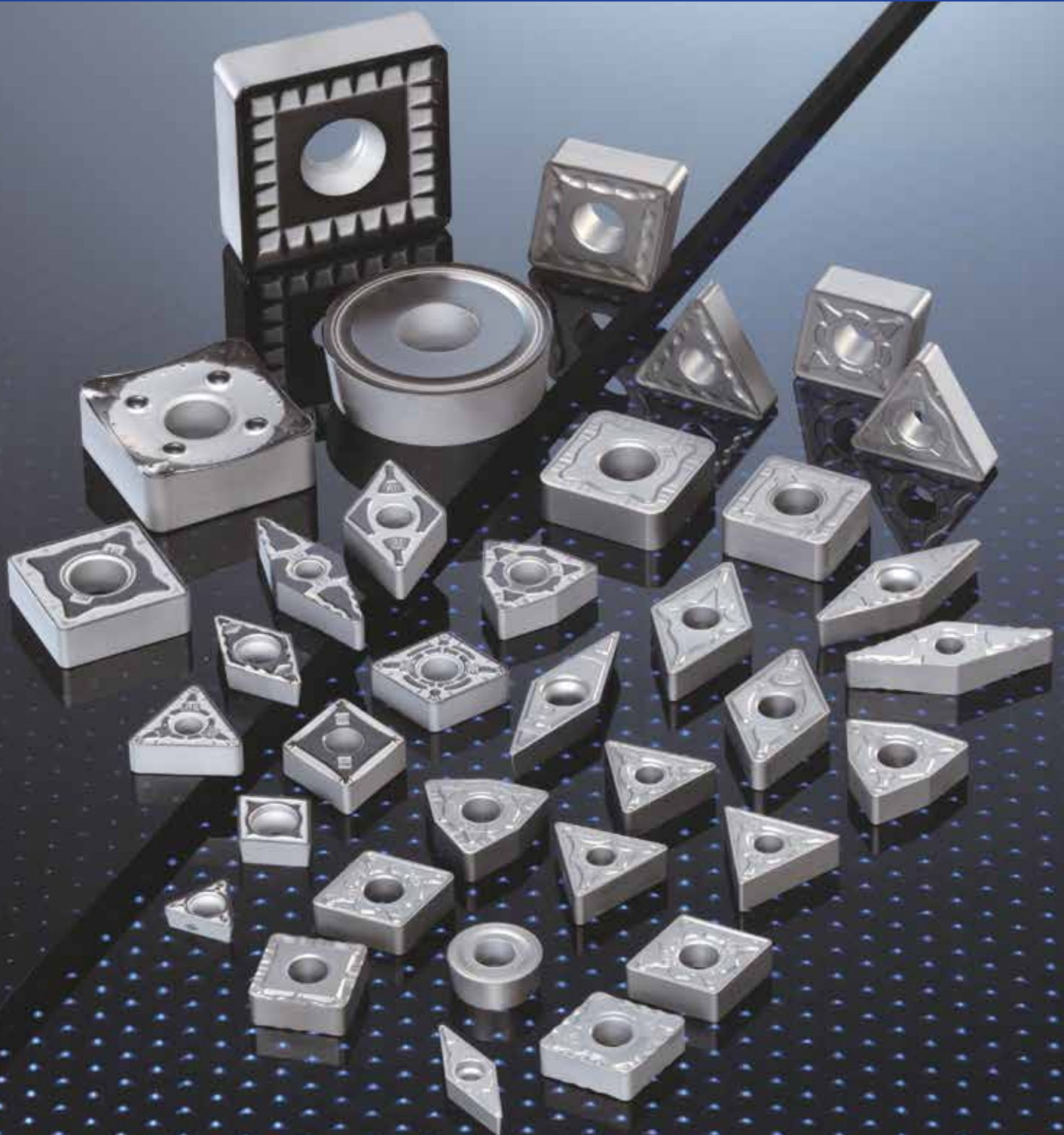


Coated Grades for Steel Turning

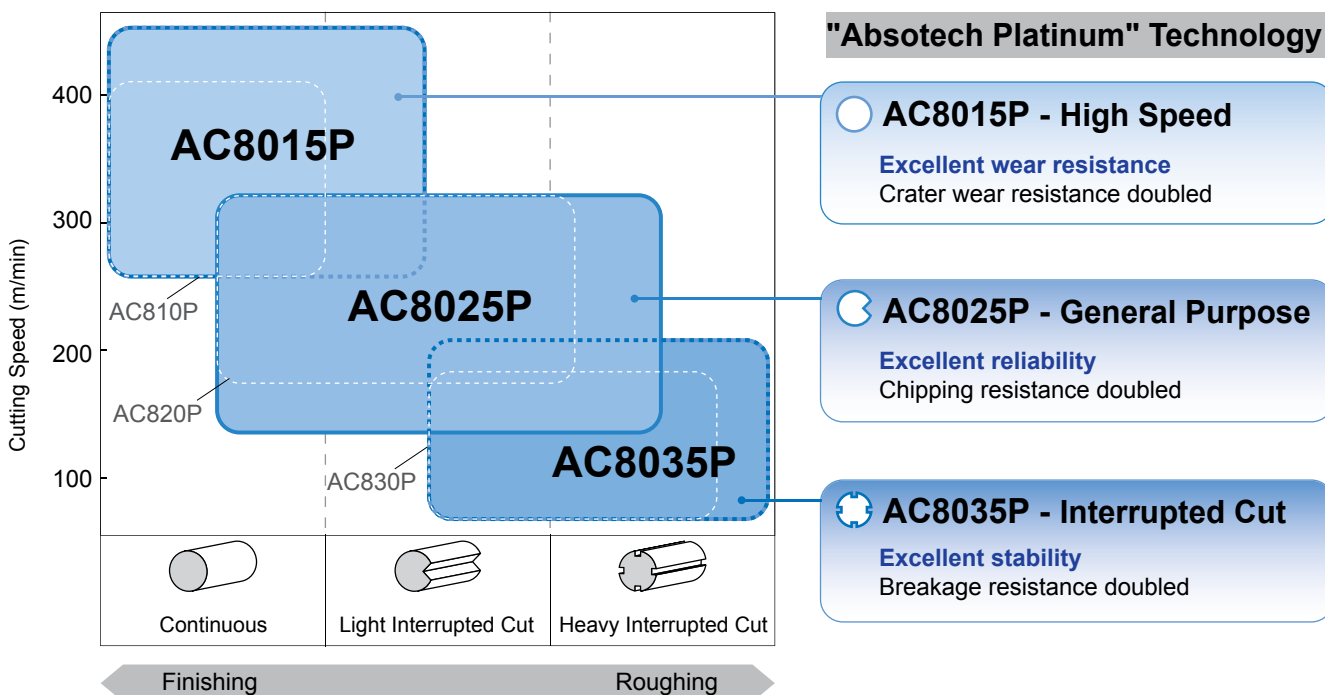
AC8015P/AC8025P/AC8035P

New Grades for Steel Turning, Creating "Absolutely Stable Cutting"



For Steel Turning AC8000P Series

Application Range and Features



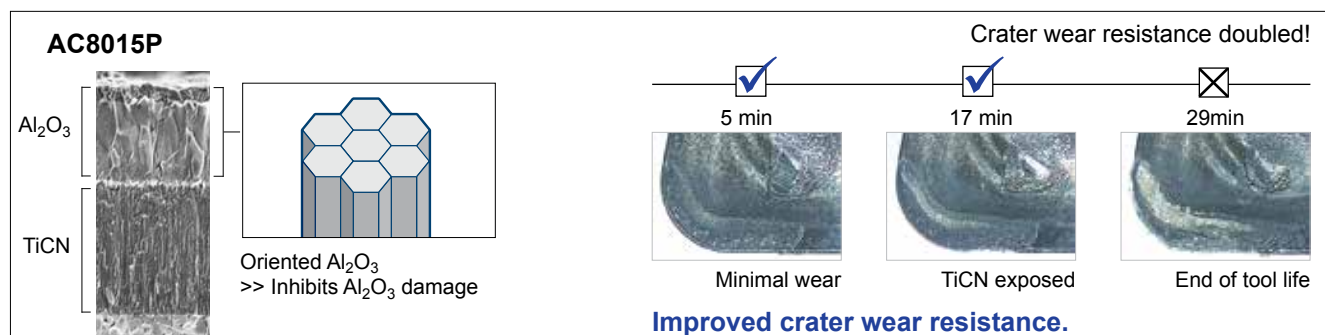
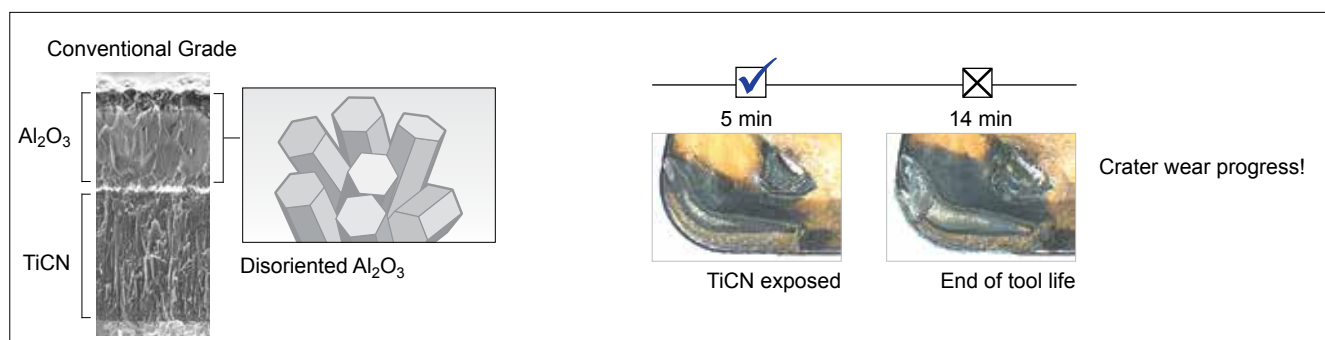
Cutting Performance

AC8015P For High Speed

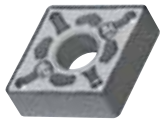


Reduced crater damage due to chip abrasion through optimized crystal orientation in the alumina layer.

Work Material: 100Cr6, 1.3505
External continuous
Insert: CNMG120408 NGU
Cutting Conditions: $v_c = 300\text{m/min}$, $f = 0,3\text{mm}$, $a_p = 1,5\text{mm}$, wet

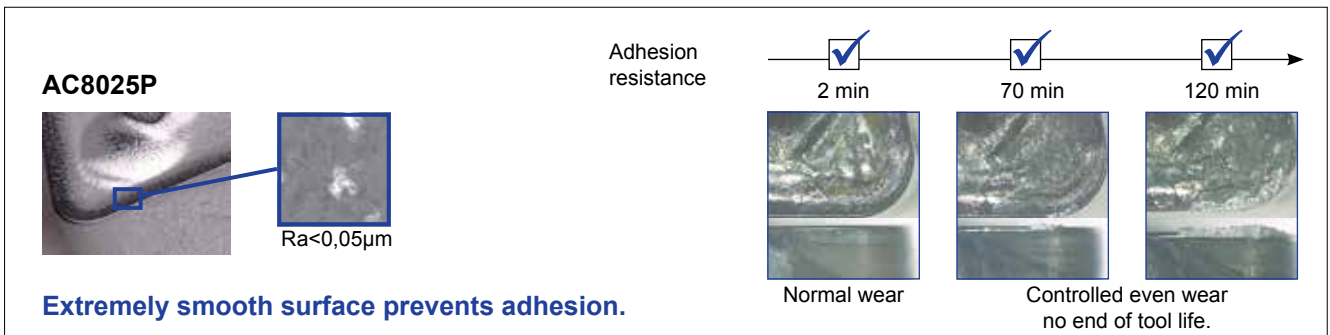
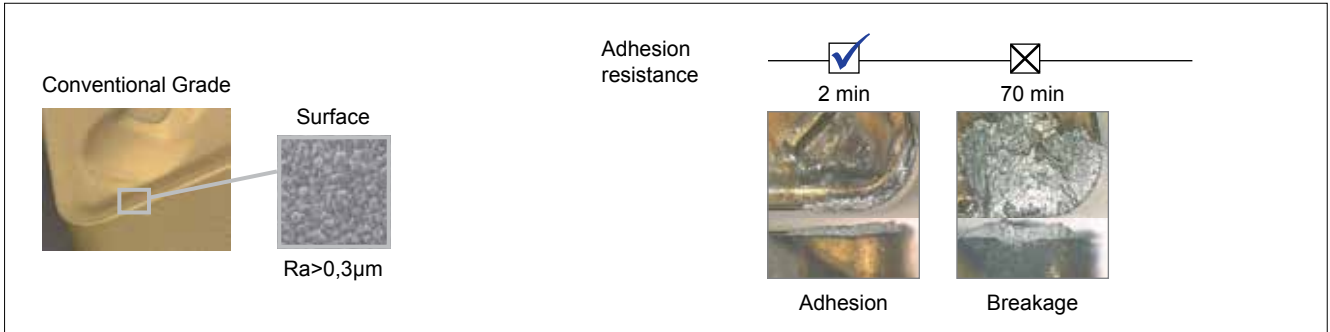


AC8025P For General Purpose (1st Recommendation)



Improved tool surface smoothness and significantly reduced adhesion through special surface treatment.

Work Material: 25CrMo4, 1.7218
Facing
Insert: CNMG120408 NGU
Cutting Conditions: $v_c = 100-300\text{m/min}$, $f = 0,3\text{mm}$, $a_p = 1,5\text{mm}$, wet

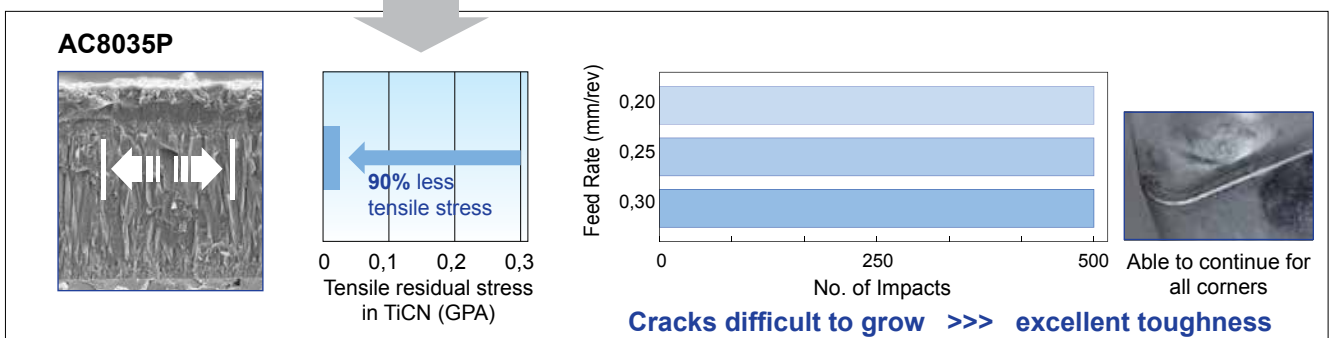
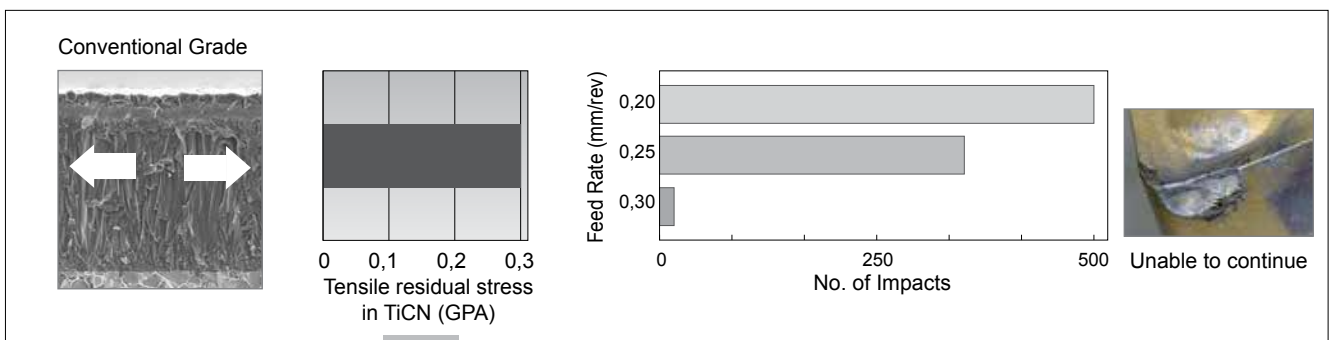


AC8035P For Interrupted Cutting



Drastically reduced tensile residual stress in coating through special surface treatment.

Work Material: 34CrMoS34, 1.7226
Interrupted cut
Insert: CNMG120408 NGU
Cutting Conditions: $v_c = 160\text{m/min}$, $f = 0,2-0,3\text{mm}$, $a_p = 2\text{mm}$, dry



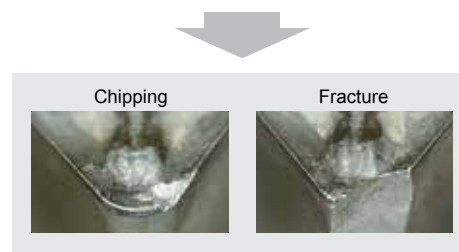
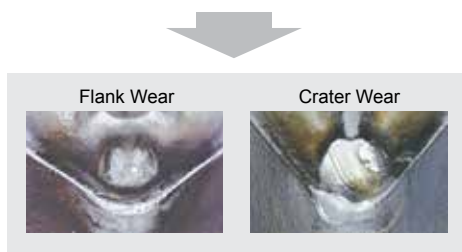
For Steel Turning AC8000P Series

Grades and Chipbreaker Selection Guide

1st Recommendation
General Purpose **AC8025P**

1st Recommendation
NGU

	Elevated Feed Rate Area	General Purpose	Tougher Cutting Edge
Finish ~ Small Depth	NFE NSE	NSU	NSX
General Purpose	NGE	NGU	NUX
Rough ~ Larger Cutting Depth	NME	NMU	NMX



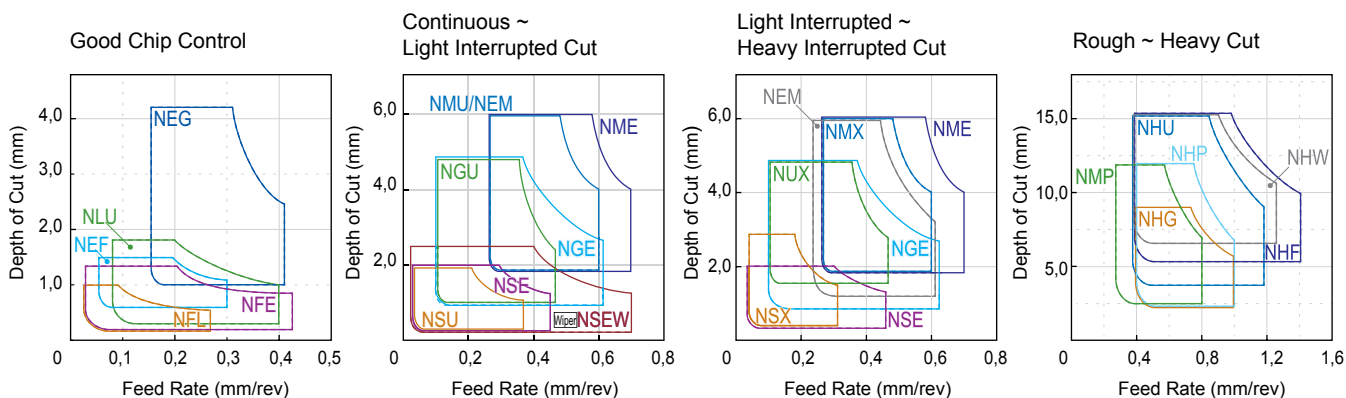
Better Wear Resistance
High Speed **AC8015P**

Better Toughness
Interrupted Cut **AC8035P**

1st Recommendation	NGU
Higher efficiency required	NGE

1st Recommendation	NGU
Higher stability required	NUX

Chipbreaker Application Range



■ Recommended Cutting Conditions

AC8015P

Min - Optimum - Max

Insert Specification		Chipbreaker	Soft Steel, Low Carbon Steel, Low Alloy Steel < 180HB			High Carbon Steel, High Alloy Steel > 180HB		
			Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed v_c (m/min)	Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed v_c (m/min)
CNM_12 DNM_15 SNM_12	TNM_16 TNM_22 WNM_08	NFE	0,1 - 0,4 - 1,2	0,10 - 0,20 - 0,40	290 - 410 - 500	0,1 - 0,4 - 1,2	0,10 - 0,20 - 0,40	240 - 360 - 450
		NLU - NSU - NSE	0,5 - 1,5 - 2,0	0,10 - 0,20 - 0,40	170 - 310 - 470	0,5 - 1,5 - 2,0	0,10 - 0,20 - 0,40	130 - 260 - 420
		NSEW	0,5 - 1,5 - 2,5	0,10 - 0,40 - 0,60	170 - 310 - 470	0,5 - 1,5 - 2,5	0,10 - 0,40 - 0,60	130 - 260 - 420
		NGU - NGE - NUX	0,8 - 2,2 - 5,0	0,10 - 0,30 - 0,45	170 - 310 - 470	0,8 - 2,2 - 5,0	0,10 - 0,30 - 0,45	130 - 260 - 420
		NMU	1,8 - 3,0 - 6,0	0,20 - 0,35 - 0,60	140 - 280 - 400	1,8 - 3,0 - 6,0	0,20 - 0,35 - 0,60	110 - 240 - 350
		NME	1,0 - 3,0 - 6,0	0,20 - 0,45 - 0,70	140 - 280 - 400	1,0 - 3,0 - 6,0	0,20 - 0,45 - 0,70	110 - 240 - 350
CNM_16	SNM_15	NHG	3,0 - 4,5 - 8,0	0,35 - 0,50 - 0,80	140 - 280 - 400	3,0 - 4,5 - 8,0	0,35 - 0,50 - 0,80	110 - 240 - 350
		NGU - NGE - NUX	0,8 - 3,5 - 5,0	0,15 - 0,30 - 0,45	140 - 280 - 400	0,8 - 3,5 - 5,0	0,15 - 0,30 - 0,45	110 - 240 - 350
		NMU	1,8 - 4,5 - 6,0	0,20 - 0,40 - 0,60	140 - 240 - 330	1,8 - 4,5 - 6,0	0,20 - 0,40 - 0,60	110 - 200 - 280
		NME	1,5 - 4,5 - 7,0	0,20 - 0,50 - 0,70	140 - 240 - 330	1,5 - 4,5 - 7,0	0,20 - 0,50 - 0,70	110 - 200 - 280
CNM_19 CNM_25 DNM_19	SNM_19 SNM_25 TNM_27	NHG	3,0 - 5,0 - 8,0	0,35 - 0,60 - 0,80	120 - 210 - 300	3,0 - 5,0 - 8,0	0,35 - 0,60 - 0,80	90 - 170 - 250
		NMU	1,8 - 5,0 - 6,0	0,20 - 0,40 - 0,60	140 - 240 - 330	1,8 - 5,0 - 6,0	0,20 - 0,40 - 0,60	110 - 200 - 280
		NME	2,0 - 5,0 - 8,0	0,20 - 0,50 - 0,70	140 - 240 - 330	2,0 - 5,0 - 8,0	0,20 - 0,50 - 0,70	110 - 200 - 280
		NHG	3,0 - 6,5 - 9,0	0,35 - 0,60 - 0,80	120 - 210 - 300	3,0 - 6,5 - 9,0	0,35 - 0,60 - 0,80	90 - 170 - 250

AC8025P

Min - Optimum - Max

Insert Specification		Chipbreaker	Soft Steel, Low Carbon Steel, Low Alloy Steel < 180HB			High Carbon Steel, High Alloy Steel > 180HB		
			Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed v_c (m/min)	Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed v_c (m/min)
CNM_12 DNM_15 SNM_12	TNM_16 TNM_22 WNM_08	NFE	0,1 - 0,4 - 1,2	0,10 - 0,25 - 0,45	150 - 250 - 350	0,1 - 0,4 - 1,2	0,10 - 0,25 - 0,40	120 - 210 - 300
		NLU - NSU - NSE	0,5 - 1,5 - 2,0	0,10 - 0,20 - 0,40	150 - 250 - 350	0,5 - 1,5 - 2,0	0,10 - 0,20 - 0,40	120 - 210 - 300
		NSEW	0,5 - 1,5 - 2,5	0,10 - 0,40 - 0,60	150 - 250 - 350	0,5 - 1,5 - 2,5	0,10 - 0,40 - 0,60	120 - 210 - 300
		NGU - NGE - NUX	0,8 - 2,2 - 5,0	0,10 - 0,30 - 0,45	150 - 230 - 300	0,8 - 2,2 - 5,0	0,10 - 0,30 - 0,45	100 - 180 - 270
		NMU	1,8 - 3,0 - 6,0	0,20 - 0,35 - 0,60	130 - 200 - 280	1,8 - 3,0 - 6,0	0,20 - 0,35 - 0,60	80 - 150 - 230
		NME	1,0 - 3,0 - 6,0	0,20 - 0,45 - 0,70	130 - 200 - 280	1,0 - 3,0 - 6,0	0,20 - 0,45 - 0,70	80 - 150 - 230
CNM_16	SNM_15	NHG	3,0 - 4,5 - 8,0	0,35 - 0,50 - 0,80	100 - 180 - 260	3,0 - 4,5 - 8,0	0,35 - 0,50 - 0,80	60 - 130 - 200
		NGU - NGE - NUX	0,8 - 3,5 - 5,0	0,15 - 0,30 - 0,45	130 - 200 - 280	0,8 - 3,5 - 5,0	0,15 - 0,30 - 0,45	100 - 160 - 230
		NMU	1,8 - 4,5 - 6,0	0,20 - 0,40 - 0,60	100 - 180 - 260	1,8 - 4,5 - 6,0	0,20 - 0,40 - 0,60	80 - 140 - 210
		NME	1,5 - 4,5 - 7,0	0,20 - 0,50 - 0,70	100 - 180 - 260	1,5 - 4,5 - 7,0	0,20 - 0,50 - 0,70	80 - 140 - 210
CNM_19 CNM_25 DNM_19	SNM_19 SNM_25 TNM_27	NHG	3,0 - 5,0 - 8,0	0,35 - 0,60 - 0,80	80 - 160 - 240	3,0 - 5,0 - 8,0	0,35 - 0,60 - 0,80	70 - 120 - 180
		NMU	1,8 - 5,0 - 6,0	0,20 - 0,40 - 0,60	100 - 180 - 260	1,8 - 5,0 - 6,0	0,20 - 0,40 - 0,60	80 - 140 - 210
		NME	2,0 - 5,0 - 8,0	0,20 - 0,50 - 0,70	100 - 180 - 260	2,0 - 5,0 - 8,0	0,20 - 0,50 - 0,70	80 - 140 - 210
		NHG	3,0 - 6,5 - 9,0	0,35 - 0,60 - 0,80	80 - 160 - 240	3,0 - 6,5 - 9,0	0,35 - 0,60 - 0,80	70 - 120 - 180
		NHF	4,5 - 8,0 - 13,5	0,45 - 0,80 - 1,10	135 - 170 - 220	4,5 - 8,0 - 13,5	0,45 - 0,80 - 1,15	105 - 140 - 190

AC8035P

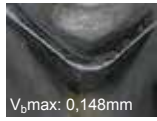
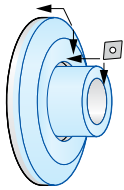
Min - Optimum - Max

Insert Specification		Chipbreaker	Soft Steel, Low Carbon Steel, Low Alloy Steel < 180HB			High Carbon Steel, High Alloy Steel > 180HB		
			Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed v_c (m/min)	Depth of Cut a_p (mm)	Feed Rate f (mm/rev)	Cutting Speed v_c (m/min)
CNM_12 DNM_15 SNM_12	TNM_16 TNM_22 WNM_08	NFE	0,1 - 0,4 - 1,2	0,10 - 0,25 - 0,45	120 - 200 - 300	0,1 - 0,4 - 1,2	0,10 - 0,25 - 0,45	120 - 180 - 250
		NLU - NSU - NSE	0,5 - 1,3 - 2,0	0,10 - 0,20 - 0,40	120 - 200 - 300	0,5 - 1,3 - 2,0	0,10 - 0,20 - 0,40	120 - 180 - 250
		NSEW	0,8 - 2,2 - 5,0	0,10 - 0,30 - 0,45	120 - 200 - 300	0,8 - 2,2 - 5,0	0,10 - 0,30 - 0,45	100 - 150 - 200
		NGU - NGE - NUX	1,8 - 3,0 - 6,0	0,20 - 0,35 - 0,60	100 - 180 - 250	1,8 - 3,0 - 6,0	0,20 - 0,35 - 0,60	80 - 130 - 180
		NMU	1,0 - 3,0 - 6,0	0,20 - 0,45 - 0,70	100 - 180 - 250	1,0 - 3,0 - 6,0	0,20 - 0,45 - 0,70	80 - 130 - 180
		NME	3,0 - 4,5 - 8,0	0,35 - 0,50 - 0,80	100 - 150 - 200	3,0 - 4,5 - 8,0	0,35 - 0,50 - 0,80	70 - 100 - 160
CNM_16	SNM_15	NHG	3,0 - 4,5 - 8,0	0,15 - 0,30 - 0,45	100 - 180 - 250	3,0 - 4,5 - 8,0	0,15 - 0,30 - 0,45	90 - 130 - 170
		NGU - NGE - NUX	0,8 - 3,5 - 5,0	0,20 - 0,40 - 0,60	100 - 150 - 200	0,8 - 3,5 - 5,0	0,20 - 0,40 - 0,60	70 - 110 - 150
		NMU	1,8 - 4,5 - 6,0	0,20 - 0,50 - 0,70	100 - 150 - 200	1,8 - 4,5 - 6,0	0,20 - 0,50 - 0,70	70 - 110 - 150
		NME	1,5 - 4,5 - 7,0	0,35 - 0,60 - 0,80	80 - 130 - 180	1,5 - 4,5 - 7,0	0,35 - 0,60 - 0,80	60 - 100 - 140
CNM_19 CNM_25 DNM_19	SNM_19 SNM_25 TNM_27	NHG	3,0 - 5,0 - 8,0	0,20 - 0,40 - 0,60	100 - 150 - 200	3,0 - 5,0 - 8,0	0,20 - 0,40 - 0,60	70 - 110 - 150
		NMU	2,0 - 5,0 - 8,0	0,20 - 0,50 - 0,70	100 - 150 - 200	2,0 - 5,0 - 8,0	0,20 - 0,50 - 0,70	70 - 110 - 150
		NME	3,0 - 6,5 - 9,0	0,35 - 0,60 - 0,80	80 - 130 - 180	3,0 - 6,5 - 9,0	0,35 - 0,60 - 0,80	60 - 100 - 140
		NHG	4,5 - 8,0 - 13,5	0,45 - 0,80 - 1,15	120 - 150 - 190	4,5 - 8,0 - 13,5	0,45 - 0,80 - 1,15	90 - 120 - 160
		NHF	5,0 - 8,0 - 13,5	0,80 - 1,20 - 1,60	70 - 110 - 150	5,0 - 8,0 - 13,5	0,80 - 1,20 - 1,60	50 - 80 - 120

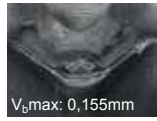
Application Examples

Gear, 20CrMo5, 1.7218

AC8015P ensures minimal wear and 1,5 times higher tool life.



NUX AC8015P
(150pcs)

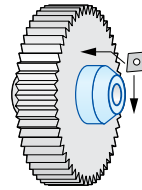


Competitor
(100pcs)

Insert: CNMG120412 NUX
Cutting Conditions: $v_c = 280\text{m/min}$, $f = 0,25\text{mm/rev}$, $a_p = 2,0\text{-}2,5\text{mm}$, wet

Gear, 34CrMo4, 1.7220

AC8015P ensures minimal crater wear and 1,5 times higher tool life.



NGE AC8015P
(150pcs)

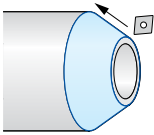


Conventional
(100pcs)

Insert: CNMG120412 NGE
Cutting Conditions: $v_c = 200\text{-}260\text{m/min}$, $f = 0,3\text{-}0,4\text{mm/rev}$, $a_p = 1,5\text{mm}$, wet

Carbon Steel

AC8015P's excellent chipping resistance ensures minimal damage and double tool life.



NMU AC8015P
(25pcs)

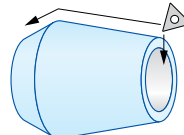


Competitor
(12pcs)

Insert: CNMG120412 NMU
Cutting Conditions: $v_c = 160\text{m/min}$, $f = 0,45\text{mm/rev}$, $a_p = 2,5\text{mm}$, wet

Tool Holder, 100Cr6, 1.3505

AC8015P ensures minimal crater breakage and 1,7 times higher tool life.



NGE AC8015P
(500pcs)

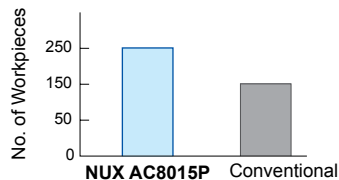
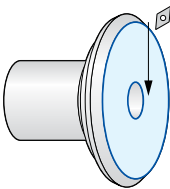


Competitor
(300pcs)

Insert: TNMG160404 NGE
Cutting Conditions: $v_c = 210\text{-}270\text{m/min}$, $f = 0,2\text{mm/rev}$, $a_p = 3,3\text{mm}$, wet

Hub, C55, 1.0535

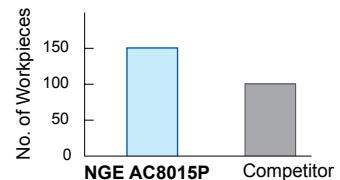
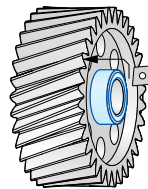
AC8015P ensures minimal wear and 1,7 times higher tool life.



Insert: DNMG150412 NUX
Cutting Conditions: $v_c = 240\text{m/min}$, $f = 0,5\text{mm/rev}$, $a_p = 1,0\text{-}2,5\text{mm}$, wet

Gear, 34CrMo4, 1.7220

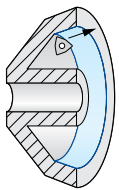
AC8015P's excellent chipping resistance ensures minimal damage and 1,5 times higher tool life.



Insert: CNMG120412 NGE
Cutting Conditions: $v_c = 200\text{-}260\text{m/min}$, $f = 0,3\text{-}0,4\text{mm/rev}$, $a_p = 2,0\text{mm}$, wet

CVD Part, 20CrMo5, 1.7218

AC8015P's excellent chipping resistance ensures minimal damage.



NSX AC8015P
(300pcs)



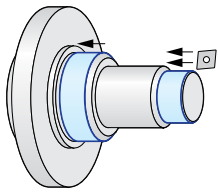
Conventional
(300pcs)

Insert: WNMG080412 NSX
Cutting Conditions: $v_c = 300\text{m/min}$, $f = 0,2\text{-}0,3\text{mm/rev}$, $a_p = 1,0\text{mm}$, wet

Application Examples

Axle End, C45, 1.0503

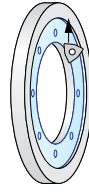
AC8025P ensures minimal crater wear.



Insert: CNMM120416 NMP
Cutting Conditions: $v_c = 180-200\text{m/min}$, $f = 0,43-0,55\text{mm/rev}$, $a_p = 1,0-3,0\text{mm}$, wet

Ring Gear, 15CrMo5

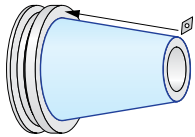
AC8025P ensures 1,5 times higher tool life.



Insert: WNMG080416 NME
Cutting Conditions: $v_c = 250\text{m/min}$, $f = 0,30-0,45\text{mm/rev}$, $a_p = 2,5\text{mm}$, wet

Tool Holder, 15CrMo5, 1.7262

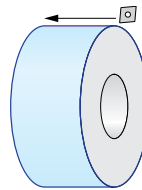
AC8025P's excellent chipping resistance ensures minimal damage.



Insert: DNMG150608 NEM
Cutting Conditions: $v_c = 150\text{m/min}$, $f = 0,4\text{mm/rev}$, $a_p = 4,0\text{mm}$, wet

Ring, C45, 1.0503

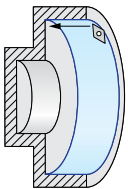
AC8025P 3 times higher tool life.



Insert: CNMG120408 NGE
Cutting Conditions: $v_c = 200-250\text{m/min}$, $f = 0,25\text{mm/rev}$, $a_p = 1,0\text{mm}$, wet

Cylinder, Soft Steel

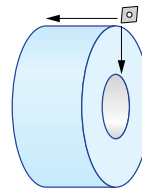
AC8025P's excellent chipping resistance ensures minimal damage after attaining double tool life.



Insert: DCMT11T308 NSU
Cutting Conditions: $v_c = 210\text{m/min}$, $f = 0,15\text{mm/rev}$, $a_p = 1,0\text{mm}$, wet

Bush, 20MnCr5, 1.7147

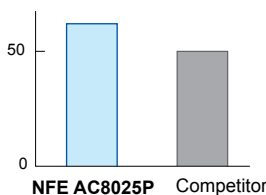
AC8025P ensures excellent flank wear resistance.



Insert: CNMG120416 NME
Cutting Conditions: $v_c = 260\text{m/min}$, $f = 0,5-1,0\text{mm/rev}$, $a_p = 1,5-2,0\text{mm}$, wet

Front Cover, Soft Steel

AC8025P shows excellent finishing surface by combination of NFE type chipbreaker and ensures 1,2 times higher tool life.

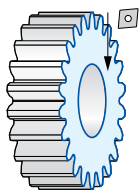


Insert: TNMG160408 NFE
Cutting Conditions: Facing: $v_c = 450-480\text{m/min}$, $f = 0,25-0,32\text{mm/rev}$, $a_p = 0,05-0,25\text{mm}$, wet
Turning: $v_c = 400\text{m/min}$, $f = 0,2-0,3\text{mm/rev}$, $a_p = 0,2-0,3\text{mm}$, wet

Application Examples

Planetary Pinion, C35, 1.0501

AC8035P's excellent breakage resistance ensures minimal damage.



NUX AC8035P
(300pcs)



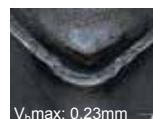
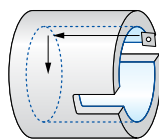
Conventional
(200pcs)

Interrupted cut

Insert: CNMG120412 NUX
Cutting Conditions: $v_c = 180\text{m/min}$, $f = 0,3\text{mm/rev}$, $a_p = 2,0\text{mm}$, wet

Automotive Part, C25, 1.0406

AC8035P's excellent breakage resistance ensures minimal damage and a reliable tool life.



$V_s \text{ max: } 0,23\text{mm}$
NUX AC8035P
(120pcs)



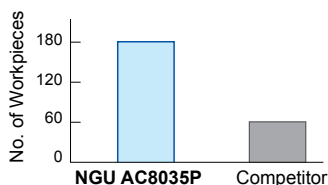
Conventional
(120pcs)

Interrupted cut

Insert: CNMG120408 NUX
Cutting Conditions: $v_c = 100-130\text{m/min}$, $f = 0,2\text{mm/rev}$, $a_p = 1,0-3,2\text{mm}$, wet

Flange, 19Mn5, 1.0482

AC8035P's excellent chipping resistance ensures minimal damage and 3 times tool life.

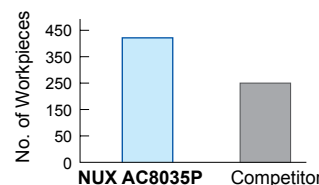
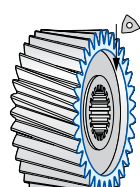


Roughing/Interrupted cut

Insert: TNMG160408 NGU
Cutting Conditions: $v_c = 100\text{m/min}$, $f = 0,3\text{mm/rev}$, $a_p = 1,5\text{mm}$, wet

Gear, 34CrNiMo6, 1.6582

AC8035P's excellent chipping resistance ensures minimal damage and 1,7 times tool life.

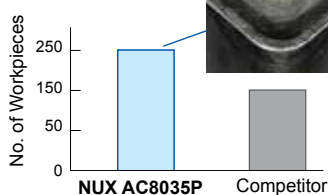
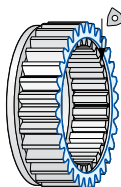


Roughing/Interrupted cut

Insert: WNMG080408 NUX
Cutting Conditions: $v_c = 180\text{m/min}$, $f = 0,15-0,40\text{mm/rev}$, $a_p = 1,0\text{mm}$, wet

Reverse Gear, 20Cr4, 1.7027

AC8035P's excellent chipping resistance ensures minimal damage and 1,6 times tool life.

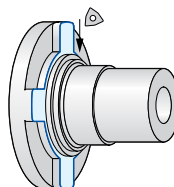


Roughing/Interrupted cut

Insert: WNMG080408 NUX
Cutting Conditions: $v_c = 230\text{m/min}$, $f = 0,15-0,30\text{mm/rev}$, $a_p = 1,0-2,0\text{mm}$, wet

Flange, 41Cr4, 1.7035

AC8035P's excellent chipping resistance ensures minimal damage and 1,5 times tool life.



NGU AC8035P
(90pcs)



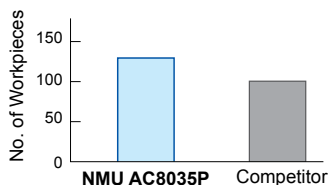
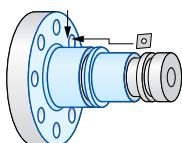
Competitor
(60pcs)

Roughing/Interrupted cut

Insert: WNMG080412 NGU
Cutting Conditions: $v_c = 80-200\text{m/min}$, $f = 0,2\text{mm/rev}$, $a_p = 1,5\text{mm}$, dry

Axle End

AC8035P's excellent chipping resistance ensures minimal damage and 1,3 times tool life.



Mill-Scaled Work /
Continuous to Interrupted cut

Insert: CNMG190616 NMU
Cutting Conditions: $v_c = 140-280\text{m/min}$, $f = 0,5\text{mm/rev}$, $a_p = 5\text{mm}$, dry

35° Diamond Type

Shape	Cat. No.	Stock			Dimensions (mm)			
		AC8015P	AC8025P	AC8035P	Inscribed Circle	Thick-ness	Screw Hole Ø	Nose Radius
	VNMG 160402 NEF	○	○	○	9,525	4,76	3,81	0,2
	160404 NEF	○	●	○				0,4
	160408 NEF	○	●	○				0,8
	VNMG 160404 NGU	●	●	○	9,525	4,76	3,81	0,4
	160408 NGU	●	●	○				0,8
	160412 NGU	●	●	○				1,2
	VNMG 160404 NGE	○	○	○	9,525	4,76	3,81	0,4
	160408 NGE	○	○	○				0,8
	160412 NGE	○	○	○				1,2
	VNMG 160404 NUX	○	○	○	9,525	4,76	3,81	0,4
	160408 NUX	○	○	○				0,8
	160412 NUX	○	○	○				1,2
	VNMG 160404 NUP	○	●	●	9,525	4,76	3,81	0,4
	160408 NUP	○	●	●				0,8
	VNMG 160404 NUG	○	○	○	9,525	4,76	3,81	0,4
	160408 NUG	○	○	○				0,8
	160412 NUG	○	○	○				1,2
	VNMG 160404 NEG	○	●	○	9,525	4,76	3,81	0,4
	160408 NEG	○	●	○				0,8
	160412 NEG	○	●	○				1,2
	VNMG 160404 NUZ	○	○	○	9,525	4,76	3,81	0,4
	160408 NUZ	○	○	○				0,8
	160412 NUZ	○	○	○				1,2

Trigon Type

	WNMG 080404 NFL	○			12,7	4,76	5,16	0,4			
	080408 NFL	○						0,8			
	WNMG 060404 NFE	●	○	○	9,525	4,76	3,81	0,4			
	060408 NFE	●	○	○				0,8			
	WNMG 080402 NFE	●	○	○				12,7	4,76	5,16	0,2
	080404 NFE	●	○	○							0,4
	080408 NFE	●	○	○							0,8
	WNMG 060404 NLU	○	○	○	9,525	4,76	3,81	0,4			
	060408 NLU	○	○	○				0,8			
	060412 NLU	○	○	○				1,2			
	WNMG 080404 NLU	●	●	○				12,7	4,76	5,16	0,4
	080408 NLU	●	●	○							0,8
080412 NLU	○	○	○	1,2							
	WNMG 060404 NLUW	●	●	○	9,525	4,76	3,81	0,4			
	060408 NLUW	●	●	○				0,8			
	WNMG 080404 NLUW	●	●	○	12,7	4,76	5,16	0,4			
	080408 NLUW	●	●	○				0,8			
	080412 NLUW	●	●	○				1,2			
	WNMG 06T304 NSU	○	○	○	9,525	3,97	3,81	0,4			
	06T308 NSU	○	○	○				0,8			
	WNMG 060404 NSU	●	●	○				9,525	4,76	3,81	0,4
	060408 NSU	●	●	○							0,8
	060412 NSU	○	○	○							1,2
	WNMG 080404 NSU	●	●	○	12,7	4,76	5,16	0,4			
	080408 NSU	●	●	○				0,8			
	080412 NSU	●	●	○				1,2			
	WNMG 080404 NSE	●	●	○	12,7	4,76	5,16	0,4			
	080408 NSE	●	●	○				0,8			
	080412 NSE	●	●	○				1,2			
	WNMG 060404 NSEW	○	○	○	9,525	4,76	3,81	0,4			
	060408 NSEW	○	○	○				0,8			
	WNMG 080404 NSEW	●	●	○				12,7	4,76	5,16	0,4
080408 NSEW	●	●	○	0,8							
080412 NSEW	●	●	○	1,2							
	WNMG 060404 NEF	○	○	○	9,525	4,76	3,81	0,4			
	060408 NEF	○	○	○				0,8			
	WNMG 080404 NEF	○	○	○				12,7	4,76	5,16	0,4
080408 NEF	○	○	○	0,8							
○	○	○	1,2								
	WNMG 080404 NSX	○	○	○	12,7	4,76	5,16	0,4			
	080408 NSX	○	○	○				0,8			
	080412 NSX	○	○	○				1,2			
	WNMG 060404 NGU	●	●	○	9,525	4,76	3,81	0,4			
	060408 NGU	●	●	○				0,8			
	060412 NGU	●	●	○				1,2			
	WNMG 080404 NGU	●	●	○	12,7	4,76	5,16	0,4			
	080408 NGU	●	●	○				0,8			
	080412 NGU	●	●	○				1,2			
	WNMG 060408 NGUW	○	○	○	9,525	4,76	3,81	0,8			
	WNMG 080408 NGUW	●	●	○				12,7	4,76	5,16	0,8
	080412 NGUW	○	○	○							1,2
	WNMG 060408 NGE	●	○	○	9,525	4,76	3,81	0,8			
	060412 NGE	●	○	○				0,8			

Trigon Type

Shape	Cat. No.	Stock			Dimensions (mm)						
		AC8015P	AC8025P	AC8035P	Inscribed Circle	Thick-ness	Screw Hole Ø	Nose Radius			
	WNMG 080404 NGE	○	●	○	12,7	4,76	5,16	0,4			
	080408 NGE	●	●	○				0,8			
	080412 NGE	●	●	○				1,2			
	080416 NGE	●	●	○				1,6			
	WNMG 080404 NUX	○	○	○	12,7	4,76	5,16	0,4			
	080408 NUX	○	○	○				0,8			
	080412 NUX	○	○	○				1,2			
	WNMG 080408 NUP		●	●	12,7	4,76	5,16	0,8			
	080412 NUP		●	●				1,2			
	WNMG 06T304 NUG	○	○	○	9,525	3,97	3,81	0,4			
	06T308 NUG	○	○	○				0,8			
	WNMG 060404 NUG	○	○	○				9,525	4,76	3,81	0,4
	060408 NUG	○	○	○							0,8
	WNMG 080404 NUG	○	○	○	12,7	4,76	5,16	0,4			
	080408 NUG	○	○	○				0,8			
	080412 NUG	○	○	○				1,2			
	WNMG 060408 NEG	○	○	○	9,525	4,76	3,81	0,8			
	060412 NEG	○	○	○				1,2			
	WNMG 080404 NEG	○	○	○				12,7	4,76	5,16	0,4
	080408 NEG	○	○	○							0,8
080412 NEG	○	○	○	1,2							
	WNMG 060408 NMU	●	○	○	9,525	4,76	3,81	0,8			
	060412 NMU	●	○	○				1,2			
	WNMG 080408 NMU	●	●	○				12,7	4,76	5,16	0,8
	080412 NMU	●	●	○							1,2
080416 NMU	●	●	○	1,6							
	WNMG 080408 NEM	○	○	○	12,7	4,76	5,16	0,8			
	080412 NEM	○	○	○				1,2			
	WNMG 060408 NME	○	○	○	9,525	4,76	3,81	0,8			
	060412 NME	○	○	○				1,2			
	WNMG 080408 NME	●	●	○				12,7	4,76	5,16	0,8
	080412 NME	●	●	○							1,2
080416 NME	●	●	○	1,6							
	WNMG 080408 NMX	○	○	○	12,7	4,76	5,16	0,8			
	080412 NMX	○	○	○				1,2			
	WNMG 080404 NUZ	○	○	○	12,7	4,76	5,16	0,4			
	080408 NUZ	○	○	○				0,8			
	080412 NUZ	○	○	○				1,2			
	WNMM 080408 NMP	●	●	○	12,7	4,76	5,16	0,8			
	080412 NMP	●	●	○				1,2			
	WNMM 080412 NHG	●			12,7	4,76	5,16	1,2			

Inserts for T-REX

55° Corner Angle

Shape	Cat. No.	Stock			Dimensions (mm)		
		AC8015P	AC8025P	AC8035P	Inscribed Circle	Thickness	Nose Radius
	TRM 551704 FL	○	○		10,0	5,0	0,4
	551708 FL	○	○				0,8
	TRM 551704 GU	○	○		10,0	5,0	0,4
	551708 GU	○	○				0,8
	551712 GU	○	○				1,2
	TRM 551704 LU	○	○		10,0	5,0	0,4
	551708 LU	○	○				0,8
	551712 LU	○	○				1,2
	TRM 551704 SU	○	○		10,0	5,0	0,4
	551708 SU	○	○				0,8
	551712 SU	○	○				1,2

● Euro stock

○ Japan stock

80° Diamond Type

Shape	Relief Angle	Cat. No.	Stock			Dimensions (mm)			
			AC8015P	AC8025P	AC8035P	Inscribed Circle	Thickness	Screw Hole Ø	Nose Radius
	7°	CCMT 060202 NLU	●	●	○	6,35	2,38	2,8	0,2
		060204 NLU	●	●	○				0,4
		09T304 NLU	●	●	○	9,525	3,97	4,4	0,4
		09T308 NLU	●	●	○				0,8
	7°	CCMT 09T304 NLUW	●	●	○	9,525	3,97	4,4	0,4
		09T308 NLUW	●	●	○				0,8
	7°	CCMT 060202 NLB	○	○	○	6,35	2,38	2,8	0,2
		060204 NLB	○	○	○				0,4
		060208 NLB	○	○	○				0,8
		CCMT 09T302 NLB	○	○	○				0,2
	7°	09T304 NLB	○	○	○	9,525	3,97	4,4	0,4
		09T308 NLB	○	○	○				0,8
		CCMT 060202 NSU	●	●	○	6,35	2,38	2,8	0,2
		060204 NSU	●	●	○				0,4
	7°	060208 NSU	●	●	○				0,8
		CCMT 09T302 NSU	○	○	○				0,2
		09T304 NSU	○	○	○	9,525	3,97	4,4	0,4
		09T308 NSU	○	○	○				0,8
	7°	CCMT 120404 NSU	●	●	○	12,7	4,76	5,5	0,4
		120408 NSU	●	●	○				0,8
		CCMT 060204 NSC	○	○	○	6,35	2,38	2,8	0,4
		080304 NSC	○	○	○	7,94	3,18	3,4	0,4
	7°	CCMT 090308 NSC	○	○	○	9,525	3,18	4,4	0,8
		CCMT 120408 NSC	○	○	○	12,7	4,76	5,5	0,8
		CCMT 060204 NSK	●	●	○	6,35	2,38	2,8	0,4
		060208 NSK	○	○	○				0,8
	7°	CCMT 09T304 NSK	○	○	○	9,525	3,97	4,4	0,4
		09T308 NSK	○	○	○				0,8
		CCMT 120404 NSK	○	○	○	12,7	4,76	5,5	0,4
		120408 NSK	○	○	○				0,8
	7°	CCMT 09T304 NMU	●	●	○	9,525	3,97	4,4	0,4
		09T308 NMU	●	●	○				0,8
	11°	CPMT 080204 NLU	○	○	○	7,94	2,38	3,4	0,4
		CPMT 090304 NLU	○	○	○	9,525	3,18	4,4	0,4
		090308 NLU	○	○	○				0,8
	11°	CPMT 090304 NLUW	○	○	○	9,525	3,18	4,4	0,4
		090308 NLUW	○	○	○				0,8
	11°	CPMT 080204 NLB	○	○	○	7,94	2,38	3,4	0,4
		CPMT 090304 NLB	○	○	○	9,525	3,18	4,4	0,4
		090308 NLB	○	○	○				0,8
	11°	CPMT 060204 NSU	○	○	○	6,35	2,38	2,8	0,4
		060208 NSU	○	○	○				0,8
		CPMT 080204 NSU	○	○	○	7,94	2,38	3,4	0,4
		080208 NSU	○	○	○				0,8
	11°	CPMT 090304 NSU	○	○	○	9,525	3,18	4,4	0,4
		090308 NSU	○	○	○				0,8
		CPMT 080204 NMU	○	○	○	7,94	2,38	3,4	0,4
		080208 NMU	○	○	○				0,8
	11°	CPMT 090304 NMU	○	○	○	9,525	3,18	4,4	0,4
		090308 NMU	○	○	○				0,8
		CPMT 060204 NUS	○	○	○	6,35	2,38	2,8	0,4
	11°	CPMT 080308 NUS	○	○	○	7,94	3,18	3,4	0,8
		CPMT 09T308 NUS	○	○	○	9,525	3,97	4,4	0,8
		CPMH 120408 NUS	○	○	○	12,7	4,76	5,5	0,8

55° Diamond Type

Shape	Relief Angle	Cat. No.	Stock			Dimensions (mm)			
			AC8015P	AC8025P	AC8035P	Inscribed Circle	Thickness	Screw Hole Ø	Nose Radius
	7°	DCMT 070202 NLU	●	○	○	6,35	2,38	2,8	0,2
		070204 NLU	●	○	○				0,4
		DCMT 11T302 NLU	●	○	○	9,525	3,97	4,4	0,2
		11T304 NLU	●	○	○				0,4
	7°	11T308 NLU	●	○	○				0,8
		DCMX 11T308 NLUW	●	○	○	9,525	3,97	4,4	0,8
	7°	DCMT 070202 NLB	○	○	○	6,35	2,38	2,8	0,2
		070204 NLB	○	○	○				0,4
		070208 NLB	○	○	○				0,8
		DCMT 11T302 NLB	○	○	○	9,525	3,97	4,4	0,2
	7°	11T304 NLB	○	○	○				0,4
		11T308 NLB	○	○	○				0,8
		DCMT 070202 NSU	●	○	○	6,35	2,38	2,8	0,2
		070204 NSU	●	○	○				0,4
	7°	070208 NSU	●	○	○				0,8
		DCMT 11T302 NSU	○	○	○	9,525	3,97	4,4	0,2
		11T304 NSU	○	○	○				0,4
		11T308 NSU	○	○	○				0,8
	7°	DCMT 070204 NSK	○	○	○	6,35	2,38	2,8	0,4
		070208 NSK	○	○	○				0,8
		DCMT 11T304 NSK	○	○	○	9,525	3,97	4,4	0,4
		11T308 NSK	○	○	○				0,8
	7°	DCMT 11T312 NSK	○	○	○				1,2
		DCMT 11T304 NMU	●	○	○	9,525	3,97	4,4	0,4
	7°	11T308 NMU	●	○	○				0,8

Square Type

	7°	SCMT 09T304 NLU	○	○	○	9,525	3,97	4,4	0,4
		09T308 NLU	○	○	○				0,8
	7°	SCMT 120412 NLU	○	○	○	12,7	4,76	5,5	1,2
		SCMT 09T304 NLB	○	○	○	9,525	3,97	4,4	0,4
	7°	09T308 NLB	○	○	○				0,8
		SCMT 09T304 NSU	●	○	○	9,525	3,97	4,4	0,4
	7°	09T308 NSU	●	○	○				0,8
		120404 NSU	○	○	○	12,7	4,76	5,5	0,4
		120408 NSU	○	○	○				0,8
		SCMT 09T304 NSK	○	○	○	9,525	3,97	4,4	0,4
	7°	09T308 NSK	○	○	○				0,8
		SCMT 120404 NSK	○	○	○	12,7	4,76	5,5	0,4
		120408 NSK	○	○	○				0,8
		120412 NSK	○	○	○				1,2
	7°	SCMT 09T308 NMU	○	○	○	9,525	3,97	4,4	0,8
		SCMT 120408 NMU	○	○	○	12,7	4,76	5,5	1,2
	7°	SPMT 090304 NLU	○	○	○	9,525	3,18	3,4	0,4
		090308 NLU	○	○	○				0,8
	11°	SPMT 090304 NLB	○	○	○	9,525	3,18	3,4	0,4
		090308 NLB	○	○	○				0,8
	11°	SPMT 090304 NSF	○	○	○	9,525	3,18	3,3	0,4
		090308 NSF	○	○	○				0,8

● Euro stock

○ Japan stock

Round Type

	7°	RCMT 1003M0NRX	●	○	○	10,0	3,18	3,6	-
		10T3M0NRX	●	○	○	10,0	3,97	3,6	-
		1204M0NRX	●	○	○	12,0	4,76	4,4	-
		1606M0NRX	●	○	○	16,0	6,35	5,0	-
		2006M0NRX	●	○	○	20,0	6,35	6,5	-
	7°	2507M0NRX	○	○	○	25,0	7,94	7,6	-
		RCMT 1204M0NRH	○	○	○	12,0	4,76	4,4	-
		1606M0NRH	○	○	○	16,0	6,35	5,0	-
		2006M0NRH	○	○	○	20,0	6,35	6,5	-
		RCMX 1003M0NRP	○	○	○	10,0	3,18	3,6	-
	7°	1204M0NRP	○	○	○	12,0	4,76	4,2	-
		1606M0NRP	○	○	○	16,0	6,35	5,2	-
		2006M0NRP	○	○	○	20,0	6,35	6,5	-
		2507M0NRP	○	○	○	25,0	7,94	7,2	-
		3209M0NRP	○	○	○	32,0	9,52	9,5	-



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