



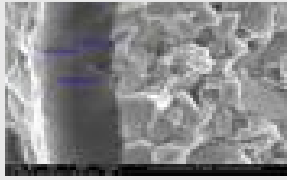


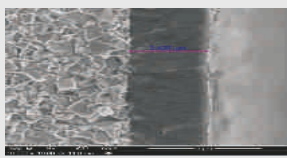
# XT930-C

**NEW PVD COATED GRADE**



## XT930-C Overview

- Ultrafine grain matrix, newly upgraded nano composite coating with high heat resistance and high toughness.
- Suitable for general milling of cast iron, steel, and stainless steel, with better wear resistance.
- Supplementary grades for forging steel and stainless steel turning.

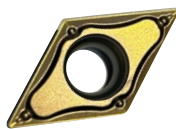
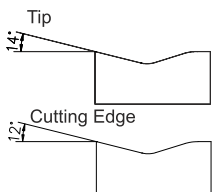
ISO	Color	Electron Microscopy Image	Grade
 P Steel    M Stainless Steel	 Bronze	AlTiMeN 	XT930 - C
 P Steel    M Stainless Steel	 Purple Black	AlTiMeN 	XT930

\* XT930 is available only for turning

## Industry Application

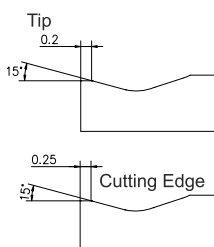
- Die & Mould
- Valves
- General Engineering
- Automobile Industry

## Geometry Details



### GF

The double positive rake angle design ensures the sharpness of the insert and low cutting resistance. The double chip breaker design broadens the chip breaking range. Suitable for finishing of steel, stainless steel for the inserts.

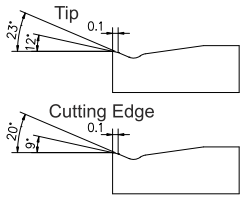


### GM

On the basis of ensuring the sharpness of the cutting edge, the strength of the cutting edge is enhanced. Suitable for semi-finishing of steel, stainless steel for positive inserts.

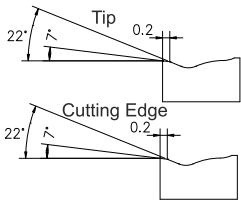


## Geometry Details



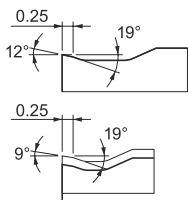
### BF

Narrow cutting edge and double positive rake angle, sharp cutting edge, low cutting resistance, special insert inclination design, can obtain high-quality machined surface. Suitable for finishing of stainless steel.



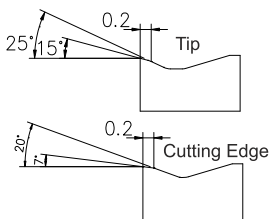
### CR

First Recommendation for medium cutting of carbon steel, alloy steel and stainless steel. Idea for general cutting applications. Positive land provides sharp cutting action.



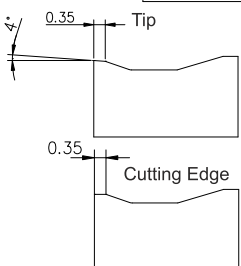
### MS

Superior Cutting edge sharpness and strength achieved by a Positive land. Extra Strength of cutting edge inhibits damage from wall shouldering. A wide chip pocket controls increasing of the cutting resistance and reduces vibration and chip jamming even at large depth of cut.



### SM

The double positive rake angle perfectly combines the sharpness and strength of the insert; the cutting resistance is small, and the wider chip breaker ensures the chip deformation space, thereby reducing the groove wear. Suitable for semi-finishing of stainless steel and high-temp alloy.



### AR

The preferred chip breaker for roughing, wide margin design, good edge strength, high metal removal rate, good wear resistance and cutting life. Suitable for roughing for large size inserts.

## Chipbreaker's Chart

Geometry	ap = (mm)	fn = (mm / rev)
GF	0.4 - 2.0	0.05 - 0.20
GM	0.4 - 3.0	0.08 - 0.25
BF	0.5 - 3.0	0.10 - 0.30
CR	0.8 - 3.0	0.10 - 0.35
MS	1.0 - 4.0	0.08 - 0.35
SM	1.0 - 4.0	0.08 - 0.30
AR	1.0 - 5.0	0.1 - 0.50

## Parameters

Material	Grade	Recommended Cutting Speed
Steel	XT930-C	90 - 220
Stainless Steel	XT930-C	70 - 200

## Turning

### • Positive Inserts

Insert	Grade	GF	GM
CCMT	060204	●	○
	060208	○	●
	09T302	○	
	09T304	●	○
	09T308	○	●
	120404		○
	120408		○
DCMT	070204	●	
	070208	○	●
	11T302	●	
	11T304	●	
	11T308	○	●
SCMT	09T304	●	○
	09T308	○	●
	120408	○	●
TCMT	110204	●	
	110208	○	●
	16T304	●	
	16T308		●
VBMT	160404	●	○
	160408	●	○

### • Negative Inserts

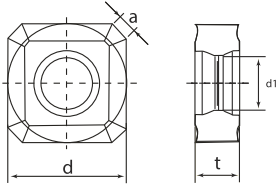
Insert	Grade	BF	CR	MS	SM	AR
CNMG	120404	●	●			
	120408	●	●	●		
	120412		●	●	○	
	190612			●	○	
	190616					●
DNMG	110404	○				
	150604	●				
	150608	●	○			
SNMG	120404			○		
	120408			●		
	120412			●		
	190612				●	
	190616				●	○
TNMG	160404	●	●	●		
	160408	●	●	●		
	160412	●	●	○		
VNMG	160404	●				
	160408	●				
WNMG	060408*		●			
	080404		●			
	080408		●		○	
	080412		●		●	

● = Stockable / ○ = Non Stockable

\* Also Available in GM

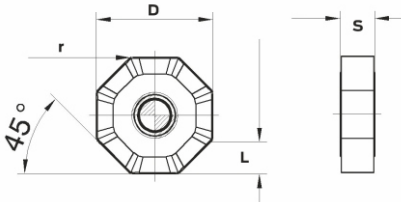
## Milling

### Face Milling



Description	Grade	Dimensions				Feed (mm / tooth)		AP (mm)		Stock
		d	a	d1	t	MIN	MAX	MIN	MAX	
SNMX1205ANN	XT930-C	13	1.8	6	5.5	0.08	0.3	0.5	5	●

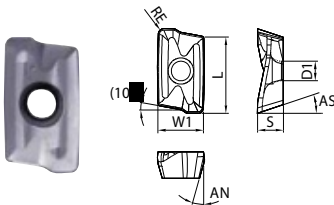
● = Stockable / ○ = Non Stockable



Description	Grade	Dimensions					Feed (mm / tooth)		AP (mm)		Stock
		L	D	S	O	R	MIN	MAX	MIN	MAX	
ONMU080608	XT930-C	6	20.2	6	-	0.8	0.1	0.3	0.5	3.5	●

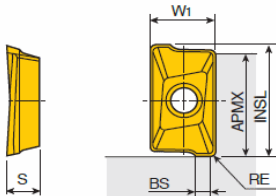
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### Shoulder Milling



Item	Grade	Dimensions (in)					Angle		AP (mm)	fn (mm/rev)	Stock
		W1	S	D1	L	RE	AS	AN			
XDMT11T308ER-JT	XT930-C	0.3	0.150	0.110	0.4	0.8	18°	13°	2.0 - 6.0	0.06 - 0.15	●
XDMT11T316ER-JT	XT930-C	0.3	0.150	0.110	0.4	1.6	18°	13°	2.2 - 8.0	0.08 - 0.15	●

● = Stockable, ○ = Non Stockable

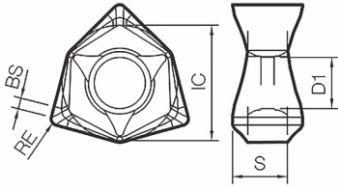


Item	Grade	INSL	W1	S	BS	RE	APMX	ap (min)	ap (max)	Stock
XDMT170508PDER-EM	XT930-C	18.50	10.70	6	3	0.80	16.00	4.50	13.00	●
XDMT170516PDER-EM	XT930-C	18.50	10.70	6	3	1.6	16.00	4.50	13.00	●
XDMT170524PDER-EM	XT930-C	18.50	10.70	6	3	2.4	16.00	4.50	13.00	●

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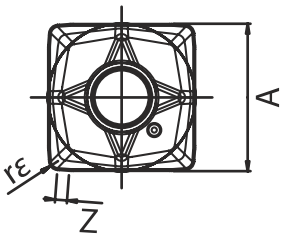
## Milling

### Shoulder Milling



Description	Grade	Dimensions					Feed (mm / tooth)		AP (mm)		Stock
		D1	S	BS	IC	RE	MIN	MAX	MIN	MAX	
WNMX080608	XT930-C	6.2	6.65	1.3	14	0.8	0.08	0.4	0.5	7	●

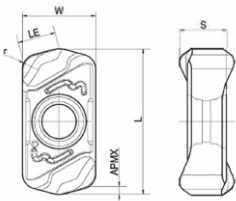
● = Stockable / ○ = Non Stockable



Description	Grade	Dimensions					Feed (mm / tooth)		AP (mm)		Stock
		A	T	OD	Z	rE	MIN	MAX	MIN	MAX	
SNMU1206EN-GM	XT930-C	13	5.51	4.7	1	0.8	0.08	0.3	0.5	3.5	●

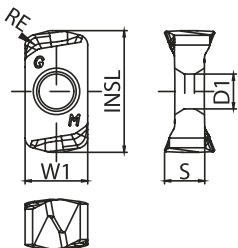
● = Stockable / ○ = Non Stockable

### High Feed



Description	Grade	RE	APMX	IC	S	Stock
ZNMU100312-HF	XT930-C	1.2	3.2	6	4.3	●

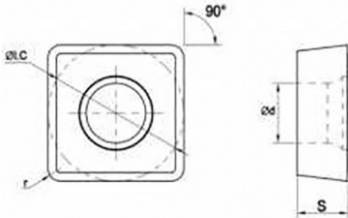
● = Stockable / ○ = Non Stockable



Description	Grade	Dimensions					Stock
		W1	s	D2	INSL	RE	
XOGU110310-HF	XT930-C	6.2	3.96	3.5	11.9	1.0	●

● = Stockable / ○ = Non Stockable

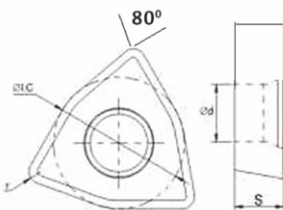
## Drilling



4 Corner Drilling Insert.  
Same Insert For Center And Periphery

Description	L	S	r	d	Feed (mm / tooth)		XT930-C
					MIN	MAX	
SPMG050204-GM	5	2.38	0.4	2.25	0.04	0.12	●
SPMG060204-GM	6	2.38	0.4	2.61	0.04	0.12	●
SPMG07T308-GM	7.94	3.97	0.05	2.85	0.05	0.15	●
SPMG090408-GM	9.8	4.3	0.06	4.05	0.06	0.15	●
SPMG110408-GM	11.5	4.8	0.06	4.45	0.06	0.18	●
SPMG140512-GM	14.3	5.2	0.08	5.75	0.08	0.2	●

● = Stockable / ○ = Non Stockable



3 Corner Drilling Insert.  
Same Insert For Center And Periphery

Description	L	s	d	r	iC	Feed (mm / tooth)		XT930-C
						MIN	MAX	
WCMX030208	3.4	2.38	2.8	0.8	5.56	0.04	0.09	●
WCMX040208	4.3	2.38	3.1	0.8	6.35	0.04	0.11	●
WCMX050308	5.4	3.18	3.2	0.8	7.94	0.04	0.11	●
WCMX06T308	6.5	3.97	3.7	0.8	9.52	0.06	0.13	●
WCMX080412	8.7	4.76	4.3	1.2	12.7	0.08	0.18	●

● = Stockable / ○ = Non Stockable

## Trial Reports

### ● Hi-Feed

<b>PRODUCT DESCRIPTION</b>	XOGU110310-HF-XT930-C	
<b>MATERIAL &amp; HARDNESS</b>	MS STEEL (28-30 HRC)	
<b>PARAMETERS</b>	<b>Competitor - M</b>	<b>XxCUT</b>
Depth of Cut	1 MM	0.8 MM
Vc : m/min	141	141
Fz : mm/tooth	0.46	0.48

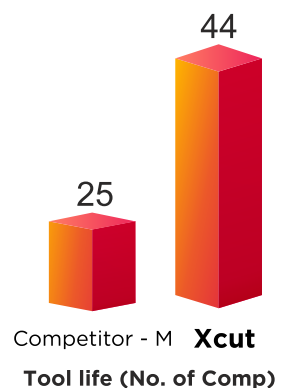
CPC reduced by 50% ↓



INPUT



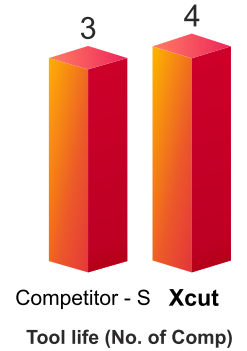
OUTPUT



## Trial Reports

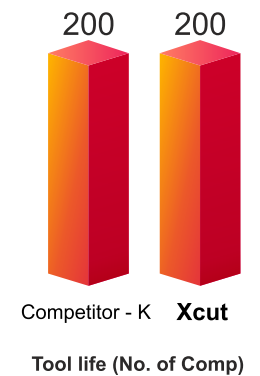
### • Turning

<b>PRODUCT DESCRIPTION</b>	CNMG120408MS-XT930-C	
<b>MATERIAL &amp; HARDNESS</b>	CF8M & 32 HRC	
<b>PARAMETERS</b>	<b>Competitor - S</b>	<b>XCUT</b>
Depth of Cut	2 MM	2 MM
Vc : m/min	130	130
Fz : mm/tooth	0.2	0.2
<b>CPC reduced by 25%</b> ↓		



### • Drilling

<b>PRODUCT DESCRIPTION</b>	SPMG050204-GM-XT930-C	
<b>MATERIAL &amp; HARDNESS</b>	Forged Steel	
<b>PARAMETERS</b>	<b>Competitor - K</b>	<b>XCUT</b>
Dia	14.5	14.5
Passes	1	1
Vc : m/min	127	127
Fz : mm/tooth	0.09-0.22	0.09-0.22
<b>CPC reduced by 25%</b> ↓		



### • Milling

<b>PRODUCT DESCRIPTION</b>	WNMX080608-XT930-C	
<b>MATERIAL, HARDNESS</b>	WCC & 28 HRC & 10" BONNET BODY	
<b>PARAMETERS</b>	<b>Competitor - K</b>	<b>XCUT</b>
Depth of Cut	Total stock Ap - 5mm Rough - 2 mm/pass No of pass - 3	Total stock Ap - 5mm Rough - 2.5 mm/pass No of pass - 2
Vc : m/min	250	250
Fz : mm/tooth	0.1	0.12
<b>Improve Productivity - 42%</b> ↑		

