



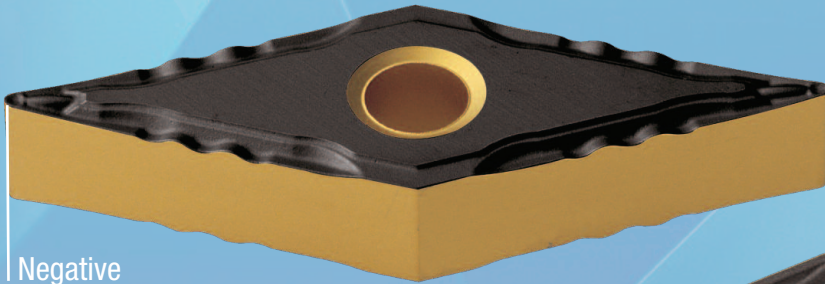
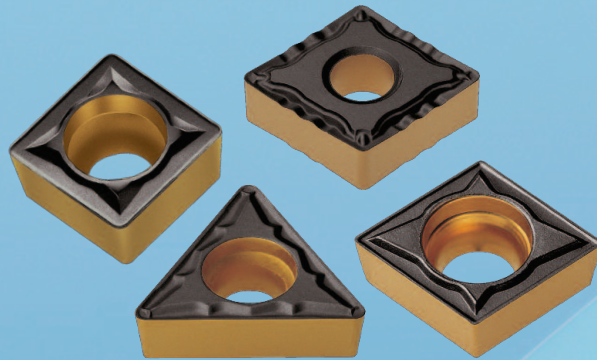
INDEXABLE CUTTING TOOLS

**NEW**

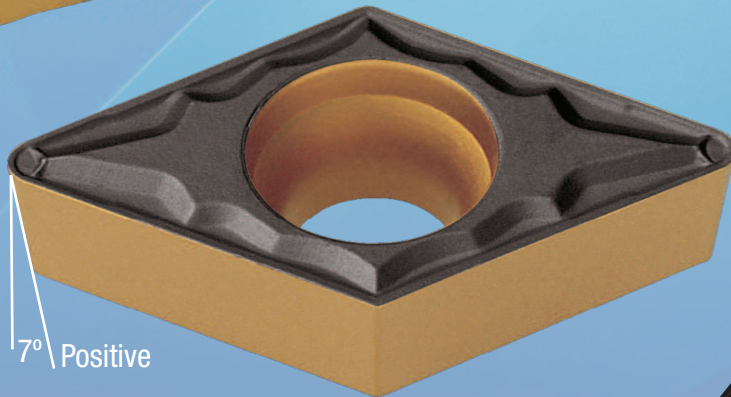
CVD Coated  
Turning Grades

**PT15C / PT25C**

ASK ABOUT OUR  
GUARANTEED  
TEST POLICY



Negative



7° Positive

**Positive Inserts**

**PAGE 3-4**

**Negative Inserts**

**PAGE 5-8**

# CARBIDE INSERTS



Sowa Tool & Machine Co. Ltd.  
500 Manitou Drive  
Kitchener, Ontario  
N2C 1L3

Western Canada Branch  
9649-49th Ave  
Edmonton, AB  
T6E 5Z5

Toll Free: 1-800-265-8221  
Phone: (519) 748-5750  
Fax: (519) 748-9304  
sales@sowatool.com  
www.sowatool.com



**Canadians Supporting Canadians**



Flip for Kits



\*Note: Some inserts may still be available in old grades as we transition our inventory

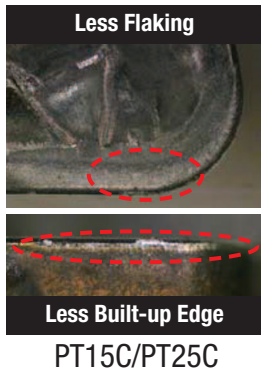
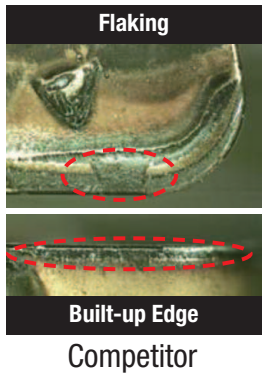
# Sowa Indexable Introduces... New CVD Coated Grades

# PT15C / PT25C

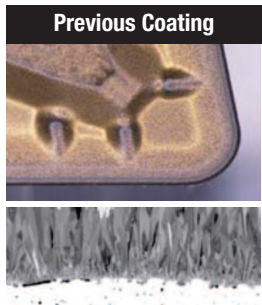
- Universal grades especially for machining forged automobile components and bearing steel both in continuous and interrupted cutting
- Available for all kinds of steels - carbon steel, alloy steel, rolled steel, tool steel, mild steel, bearing steel, and other special kinds of steel
- New coating technology increases welding resistance and chipping resistance, which leads to longer tool life

## Features:

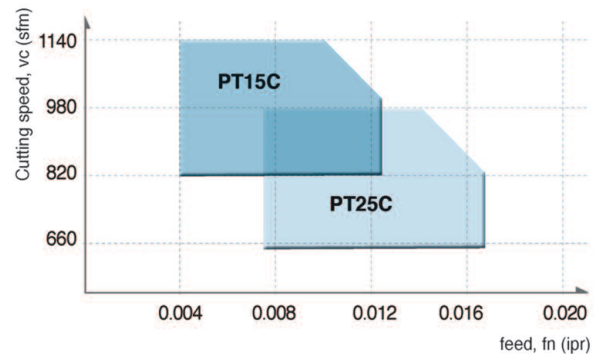
- Stable tool life > Higher production stability
- Longer tool life & higher removal rate > High cutting conditions and shorter cutting time
- Ideal combinations of grade and chip breakers > Prolongs tool life. A wider range of applications, from roughing to finishing



Disperses cutting force —> Reduces chipping —> Increases tool life —> Improves productivity

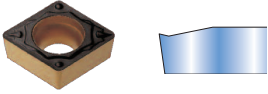


## Application Range



# Positive Turning Inserts

## CCGT-F1P

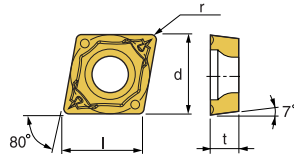


- Excellent chip control at shallow depth of cut and low feed rate.
- Excellent surface finish of work piece due to reduced cutting force.
- Suitable for fine boring.

■ USE  
Finishing

■ Recommendation

**F1P**  $d = 0.004 \sim 0.06 \text{ inch}$   
 $f = 0.002 \sim 0.01 \text{ ipr}$



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
CCGT 32.51-F1P	09T304		<b>149-289</b> <b>\$ 17.60</b>	.382	3/8	5/32	1/64	Turning SCACR/L Boring SCLCR/L

## CCMT-F1P/F2P

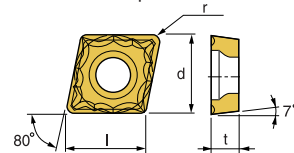


- Excellent chip control at wide range of cutting conditions.
- Suitable for stainless steel cutting.

■ USE  
Medium

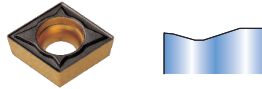
■ Recommendation

**F2P**  $d = 0.02 \sim 0.14 \text{ inch}$   
 $f = 0.002 \sim 0.016 \text{ ipr}$



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
CCMT 32.51-F1P	09T304		<b>149-257</b> <b>\$ 10.32</b>	.382	3/8	5/32	1/64	Turning SCACR/L Boring SCLCR/L
CCMT 21.50.5-F2P	060202	<b>149-494</b> <b>\$ 10.00</b>	<b>149-252</b> <b>\$ 10.08</b>	.256	1/4	3/32	.008	
CCMT 21.51-F2P	060204	<b>149-495</b> <b>\$ 10.00</b>	<b>149-227</b> <b>\$ 9.92</b>	.256	1/4	3/32	1/64	Turning SCACR/L Boring SCLCR/L
CCMT 21.52-F2P	060208	<b>149-496</b> <b>\$ 10.00</b>	<b>149-497</b> <b>\$ 10.00</b>	.256	1/4	3/32	1/32	
CCMT 32.50.5-F2P	09T302	<b>149-498</b> <b>\$ 10.32</b>		.382	3/8	5/32	.008	
CCMT 32.51-F2P	09T304	<b>149-499</b> <b>\$ 10.32</b>	<b>149-220</b> <b>\$ 10.24</b>	.382	3/8	5/32	1/64	
CCMT 32.52-F2P	09T308	<b>149-501</b> <b>\$ 10.32</b>	<b>149-221</b> <b>\$ 10.24</b>	.382	3/8	5/32	1/32	
CCMT 432-F2P	120408		<b>149-299</b> <b>\$ 13.60</b>	.508	1/2	3/16	1/32	

## CCMT-F3P

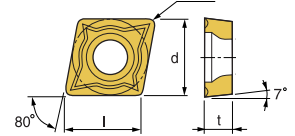


■ USE  
Medium

■ Recommendation

**F3P**  $d = 0.04 \sim 0.12 \text{ inch}$   
 $f = 0.004 \sim 0.012 \text{ ipr}$

- Suitable for intermittent cutting and cast iron machining.
- Good surface finish due to low cutting force.
- Suitable for both boring and outer diameter turning.



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
CCMT 21.51-F3P	060204		<b>149-241</b> <b>\$ 9.92</b>	.256	1/4	3/32	1/64	Turning SCACR/L Boring SCLCR/L
CCMT 32.51-F3P	09T304		<b>149-230</b> <b>\$ 10.24</b>	.382	3/8	5/32	1/64	
CCMT 32.52-F3P	09T308		<b>149-242</b> <b>\$ 10.24</b>	.382	3/8	5/32	1/32	
CCMT 431-F3P	120404		<b>149-262</b> <b>\$ 13.60</b>	.508	1/2	3/16	1/64	
CCMT 432-F3P	120408		<b>149-287</b> <b>\$ 13.60</b>	.508	1/2	3/16	1/32	

## CCMT-FVL

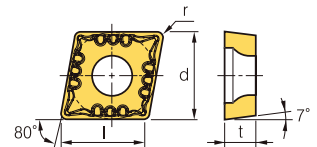


■ USE  
Finishing

■ Recommendation

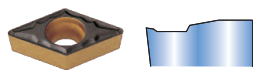
**FVL**  $d = 0.008 \sim 0.059 \text{ inch}$   
 $f = 0.004 \sim 0.014 \text{ ipr}$

- Stable chip control in high toughness material; low carbon steel, pipe steel, and steel plates
- Improved chip control for facing, copy machining, and better surface finish



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
CCMT 21.50.5-FVL	060202	<b>149-468</b> <b>\$ 10.00</b>		.256	1/4	3/32	.008	Turning SCACR/L Boring SCLCR/L

## DCMT-F2P

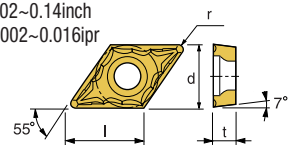


■ USE  
Medium

■ Recommendation

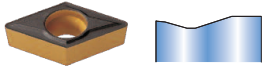
**F2P**  $d = 0.02 \sim 0.14 \text{ inch}$   
 $f = 0.002 \sim 0.016 \text{ ipr}$

- Excellent chip control at wide range of cutting conditions.
- Suitable for stainless steel cutting.



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
DCMT 21.51-F2P	070204	<b>149-503</b> <b>\$ 11.52</b>	<b>149-260</b> <b>\$ 11.52</b>	.307	1/4	3/32	1/64	Turning SDJCR/L SDNCN Boring SDQCR SDUCR SDZCR/L
DCMT 21.52-F2P	070208	<b>149-505</b> <b>\$ 11.52</b>	<b>149-507</b> <b>\$ 11.52</b>	.307	1/4	3/32	1/32	
DCMT 32.50.5-F2P	11T302	<b>149-509</b> <b>\$ 12.80</b>		.457	3/8	5/32	.008	
DCMT 32.51-F2P	11T304	<b>149-511</b> <b>\$ 12.80</b>	<b>149-222</b> <b>\$ 12.80</b>	.457	3/8	5/32	1/64	
DCMT 32.52-F2P	11T308	<b>149-513</b> <b>\$ 12.80</b>	<b>149-226</b> <b>\$ 12.80</b>	.457	3/8	5/32	1/32	

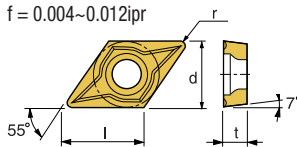
### DCMT-F3P



■ USE  
Medium

■ Recommendation

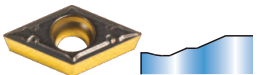
**F3P**  $d = 0.04 \sim 0.12$ inch  
 $f = 0.004 \sim 0.012$ ipr



- Excellent chip control at shallow depth of cut and low feed rate.
- Excellent surface finish of work piece due to reduced cutting force.
- Suitable for fine boring.

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
DCMT 21.51-F3P	070204		<b>149-332</b> <b>\$ 11.52</b>	.307	1/4	3/32	1/64	Turning SDJCR/L SDNCN
DCMT 32.51-F3P	11T304		<b>149-267</b> <b>\$ 12.80</b>	.457	3/8	5/32	1/64	Boring SDQCR SDUCR SDZCR/L
DCMT 32.52-F3P	11T308	<b>149-329</b> <b>\$ 12.80</b>	<b>149-328</b> <b>\$ 12.80</b>	.457	3/8	5/32	1/32	

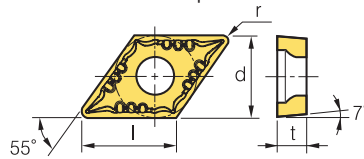
### DCMT-FVL



■ USE  
Finishing

■ Recommendation

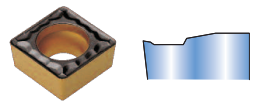
**FVL**  $d = 0.008 \sim 0.059$ inch  
 $f = 0.004 \sim 0.014$ ipr



- Stable chip control in high toughness material; low carbon steel, pipe steel, and steel plates
- Improved chip control for facing, copy machining, and better surface finish

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
DCMT 21.50.5-FVL	070202	<b>149-469</b> <b>\$ 11.52</b>		.307	1/4	3/32	.008	Turning SDJCR/L SDNCN Boring SDQCR SDUCR SDZCR/L

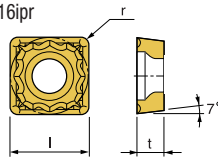
### SCMT-F2P



■ USE  
Medium

■ Recommendation

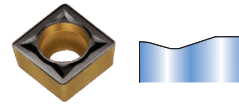
**F2P**  $d = 0.02 \sim 0.14$ inch  
 $f = 0.002 \sim 0.016$ ipr



- Excellent chip control at wide range of cutting conditions.
- Suitable for stainless steel cutting.

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
SCMT 32.52-F2P	09T308		<b>149-281</b> <b>\$ 10.24</b>		3/8	5/32	1/32	Turning SSBCR/L SSSCR/L Boring SSKCR/L

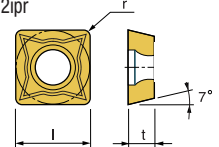
### SCMT-F3P



■ USE  
Medium

■ Recommendation

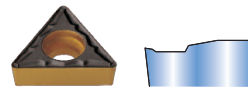
**F3P**  $d = 0.04 \sim 0.12$ inch  
 $f = 0.004 \sim 0.012$ ipr



- Suitable for intermittent cutting and cast iron machining.
- Good surface finish due to low cutting force.
- Suitable for both boring and outer diameter turning.

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
SCMT 431-F3P	120404		<b>149-319</b> <b>\$ 13.60</b>		1/2	3/16	1/64	Turning SSBCR/L SSSCR/L
SCMT 432-F3P	120408	<b>149-320</b> <b>\$ 13.60</b>			1/2	3/16	1/32	Boring SSKCR/L

### TCMT-F1P/F2P

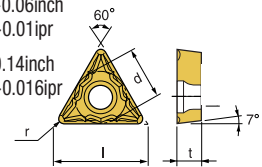


■ USE  
Medium

■ Recommendation

**F1P**  $d = 0.004 \sim 0.06$ inch  
 $f = 0.002 \sim 0.01$ ipr

**F2P**  $d = 0.02 \sim 0.14$ inch  
 $f = 0.002 \sim 0.016$ ipr



- Excellent chip control at wide range of cutting conditions.
- Suitable for stainless steel cutting.

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
TCMT 32.50.5-F1P	16T302	<b>149-517</b> <b>\$ 11.84</b>		.650	3/8	5/32	.008	Turning STFCR/L STGCR/L
TCMT 21.50.5-F2P	110202	<b>149-514</b> <b>\$ 9.76</b>		.433	1/4	3/32	.008	Boring STFCR/L
TCMT 21.51-F2P	110204	<b>149-515</b> <b>\$ 9.76</b>	<b>149-282</b> <b>\$ 9.76</b>	.433	1/4	3/32	1/64	Chamfer CT45°
TCMT 21.52-F2P	110208	<b>149-516</b> <b>\$ 9.76</b>	<b>149-286</b> <b>\$ 9.76</b>	.433	1/4	3/32	1/32	
TCMT 32.51-F2P	16T304	<b>149-518</b> <b>\$ 11.84</b>	<b>149-232</b> <b>\$ 11.76</b>	.650	3/8	5/32	1/64	
TCMT 32.52-F2P	16T308	<b>149-343</b> <b>\$ 11.76</b>	<b>149-362</b> <b>\$ 11.76</b>	.650	3/8	5/32	1/32	

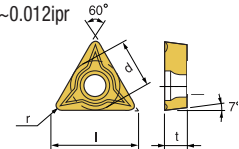
### TCMT-F3P



■ USE  
Medium

■ Recommendation

**F3P**  $d = 0.04 \sim 0.12$ inch  
 $f = 0.004 \sim 0.012$ ipr

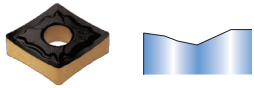


- Suitable for intermittent cutting and cast iron machining.
- Good surface finish due to low cutting force.
- Suitable for both boring and outer diameter turning.

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
TCMT 21.51-F3P	110204		<b>149-253</b> <b>\$ 9.76</b>	.433	1/4	3/32	1/64	Turning STFCR/L STGCR/L
TCMT 32.51-F3P	16T304		<b>149-235</b> <b>\$ 11.76</b>	.650	3/8	5/32	1/64	Boring STFCR/L
TCMT 32.52-F3P	16T308	<b>149-342</b> <b>\$ 11.76</b>	<b>149-239</b> <b>\$ 11.76</b>	.650	3/8	5/32	1/32	Chamfer CT45°

# Negative Turning Inserts

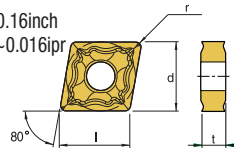
## CNMG-A



- USE  
Light & Medium

- Recommendation

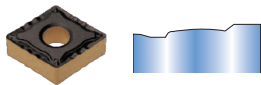
A  $d = 0.03 \sim 0.16$ inch  
 $f = 0.002 \sim 0.016$ ipr



- Sharp cutting edge generates low cutting force
- Specially designed tough main cutting edge
- Suitable for cutting of low carbon steel, stainless steel, aluminum

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
CNMG 432-A	120408		<b>149-285</b> <b>\$ 12.16</b>	.508	1/2	3/16	1/32	Turning DCLNR/L MCKNR/L MCLNR/L MCRNR/L Boring MCLNR/L PCLNR/L

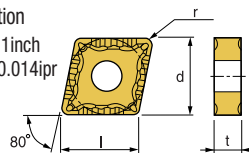
## CNMG-F2



- USE  
Finishing

- Recommendation

F2  $d = 0.01 \sim 0.1$ inch  
 $f = 0.002 \sim 0.014$ ipr



- Excellent chip control at varied depth of cutting.
- Strong cutting edge toughness due to special design.

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
CNMG 431-F2	120404	<b>149-333</b> <b>\$ 12.08</b>		.508	1/2	3/16	1/64	Turning DCLNR/L MCKNR/L MCLNR/L MCRNR/L
CNMG 432-F2	09T304	<b>149-390</b> <b>\$ 12.16</b>	<b>149-391</b> <b>\$ 12.16</b>	.508	1/2	3/16	1/32	Boring MCLNR/L PCLNR/L

## CNMG-M/M1

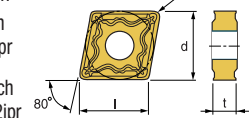


- USE  
Medium

- Recommendation

M  $d = 0.04 \sim 0.2$ inch  
 $f = 0.004 \sim 0.02$ ipr

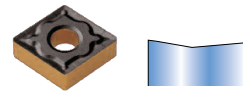
M1  $d = 0.035 \sim 0.2$ inch  
 $f = 0.002 \sim 0.012$ ipr



- Wide available chip control range from medium-finishing to medium-roughing.
- Suitable chip breaker for CNC machining

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
CNMG 431-M	120404		<b>149-394</b> <b>\$ 12.16</b>	.508	1/2	3/16	1/64	Turning DCLNR/L MCKNR/L MCLNR/L MCRNR/L
CNMG 431-M1	120404		<b>149-251</b> <b>\$ 12.16</b>	.508	1/2	3/16	1/64	
CNMG 432-M1	120408	<b>149-393</b> <b>\$ 12.16</b>	<b>149-377</b> <b>\$ 12.08</b>	.508	1/2	3/16	1/32	Boring MCLNR/L PCLNR/L
CNMG 432-M	120408		<b>149-231</b> <b>\$ 12.08</b>	.508	1/2	3/16	1/32	
CNMG 433-M	120412		<b>149-375</b> <b>\$ 12.08</b>	.508	1/2	3/16	3/64	
CNMG 433-M1	120412	<b>149-555</b> <b>\$ 12.16</b>		.508	1/2	3/16	3/64	

## CNMG-MM

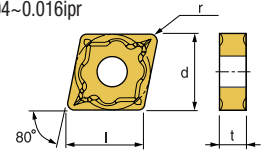


- USE  
Steels / Stainless Steels

- Recommendation

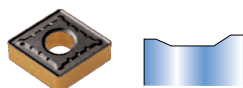
MM  $d = 0.04 \sim 0.16$ inch  
 $f = 0.004 \sim 0.016$ ipr

- Excellent choice for a variety of steels including Stainless Steel



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
CNMG 432-MM	120408		<b>149-256</b> <b>\$ 12.16</b>	.508	1/2	3/16	1/32	Turning DCLNR/L MCKNR/L MCLNR/L MCRNR/L Boring MCLNR/L PCLNR/L

## CNMG-R1

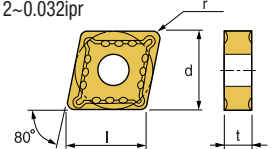


- USE  
Roughing

- Recommendation

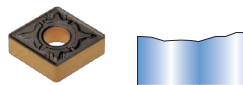
R1  $d = 0.12 \sim 0.32$ inch  
 $f = 0.012 \sim 0.032$ ipr

- Suitable for deep depth of cut and fast feed cutting of steel and cast iron.
- Suitable for intermittent cutting.



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
CNMG 432-R1	120408		<b>149-254</b> <b>\$ 12.08</b>	.508	1/2	3/16	1/32	Turning DCLNR/L MCKNR/L MCLNR/L MCRNR/L
CNMG 543-R1	160612		<b>149-345</b> <b>\$ 18.80</b>	.634	5/8	1/4	3/64	
CNMG 643-R1	190612		<b>149-330</b> <b>\$ 25.12</b>	.760	3/4	1/4	3/64	Boring MCLNR/L PCLNR/L

## CNMG-R2

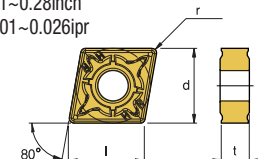


- USE  
Roughing

- Recommendation

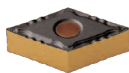
R2  $d = 0.1 \sim 0.28$ inch  
 $f = 0.01 \sim 0.026$ ipr

- Excellent chip control at deep depth of cut and fast feed rate.
- Strong cutting edge makes excellent cutting performance at intermittent cutting.



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
CNMG 432-R2	120408		<b>149-398</b> <b>\$ 12.16</b>	.508	1/2	3/16	1/32	Turning DCLNR/L MCKNR/L MCLNR/L MCRNR/L
CNMG 543-R2	160612		<b>149-399</b> <b>\$ 12.16</b>	.508	1/2	3/16	3/64	
CNMG 643-R2	190612		<b>149-409</b> <b>\$ 18.80</b>	.634	5/8	1/4	3/64	Boring MCLNR/L PCLNR/L

## DNMG-F2

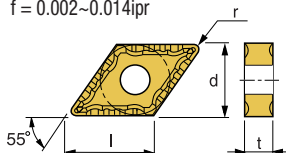


- USE Finishing
- Recommendation

- Excellent chip control at varied depth of cutting.
- Strong cutting edge toughness due to special design.

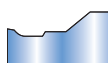
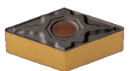
$$F2 \quad d = 0.015 \sim 0.1 \text{inch}$$

$$f = 0.002 \sim 0.014 \text{ipr}$$



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
DNMG 431-F2	150404	149-298 \$ 14.80		.610	1/2	3/16	1/64	Turning DDJNR/L MDJNR/L
DNMG 432-F2	150408	149-435 \$ 14.88	149-437 \$ 14.88	.610	1/2	3/16	1/32	Boring PDSNR/L PDUNR/L

## DNMG-M/M1



- USE Medium
- Recommendation

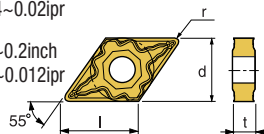
- Wide available chip control range from medium-finishing to medium-roughing.
- Suitable chip breaker for CNC machining

$$M \quad d = 0.04 \sim 0.2 \text{inch}$$

$$f = 0.004 \sim 0.02 \text{ipr}$$

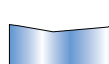
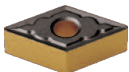
$$M1 \quad d = 0.035 \sim 0.2 \text{inch}$$

$$f = 0.002 \sim 0.012 \text{ipr}$$



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
DNMG 431-M	150404		149-261 \$ 14.88	.610	1/2	3/16	1/64	Turning DDJNR/L MDJNR/L
DNMG 432-M	150408	149-334 \$ 14.88	149-233 \$ 14.80	.610	1/2	3/16	1/32	Boring PDSNR/L PDUNR/L
DNMG 441-M	150604	149-441 \$ 14.88	149-445 \$ 14.88	.610	1/2	1/4	1/64	
DNMG 431-M1	150404	149-439 \$ 14.88		.610	1/2	3/16	1/64	
DNMG 432-M1	150408		149-243 \$ 14.88	.610	1/2	3/16	1/32	

## DNMG-MM

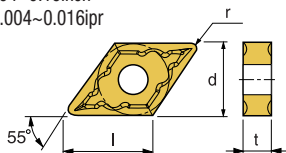


- USE Steels / Stainless Steels
- Recommendation

- Excellent choice for a variety of steels including Stainless Steel

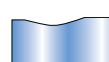
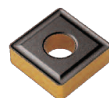
$$MM \quad d = 0.04 \sim 0.16 \text{inch}$$

$$f = 0.004 \sim 0.016 \text{ipr}$$



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
DNMG 431-MM	150404		149-258 \$ 14.88	.610	1/2	3/16	1/64	Turning DDJNR/L MDJNR/L
DNMG 432-MM	150408		149-279 \$ 14.88	.610	1/2	3/16	1/32	Boring PDSNR/L PDUNR/L

## SNMG-G



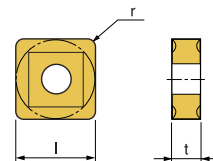
- USE General Cutting

- Recommendation

- Suitable for general cutting condition cutting.

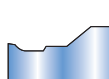
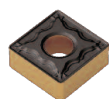
$$G \quad d = 0.16 \sim 0.4 \text{inch}$$

$$f = 0.02 \sim 0.04 \text{ipr}$$



Designation	ISO	PT15C	PT25C	l	t	r	Holders
SNMG 432-G	120408		149-280 \$ 12.08	1/2	3/16	1/32	Turning DDJNR/L MSDNN MSKNR/L MSRNR/L Boring PSKNR/L

## SNMG-M



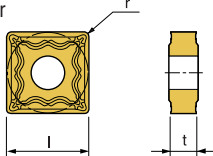
- USE Medium

- Recommendation

- Wide available chip control range from medium-finishing to medium-roughing.
- Suitable chip breaker for CNC machining

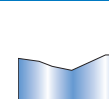
$$M \quad d = 0.04 \sim 0.2 \text{inch}$$

$$f = 0.004 \sim 0.02 \text{ipr}$$



Designation	ISO	PT15C	PT25C	l	t	r	Holders
SNMG 432-M	120408		149-325 \$ 12.16	1/2	3/16	1/32	Turning DDJNR/L MSDNN MSKNR/L MSRNR/L Boring PSKNR/L

## TNMG-A



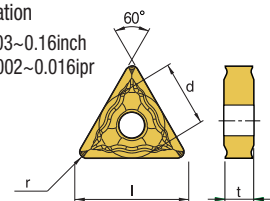
- USE Light & Medium

- Recommendation

- Sharp cutting edge generates low cutting force.
- Specially designed tough main cutting edge.
- Suitable for cutting of low carbon steel, stainless steel, aluminum.

$$A \quad d = 0.03 \sim 0.16 \text{inch}$$

$$f = 0.002 \sim 0.016 \text{ipr}$$



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
TNMG 332-A	160408		149-346 \$ 10.64	.650	3/8	3/16	1/32	Turning DTJNR/L MTCNN MTFNR/L MTENN MTGNR/L MTJNR/L
TNMG 432-A	220408		149-293 \$ 15.04	.866	1/2	3/16	1/32	Boring MTFNR MTUNR PTFNR/L

## TNMG-G

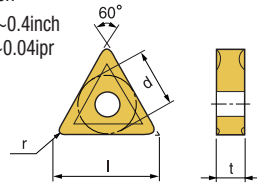


- USE  
General Cutting

- Recommendation

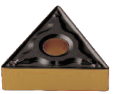
**G**  $d = 0.16 \sim 0.4 \text{ inch}$   
 $f = 0.02 \sim 0.04 \text{ ipr}$

• Suitable for general cutting condition cutting.



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
TNMG 431-G	220404		<b>149-324</b> <b>\$ 15.04</b>	.886	1/2	3/16	1/64	<b>Turning</b> DTJNR/L MTCNN MTFNR/L MTENN MTGNNR/L MTJNR/L <b>Boring</b> MTFNR MTUNR PTFNR/L
TNMG 432-G	220408		<b>149-283</b> <b>\$ 15.04</b>	.886	1/2	3/16	1/32	
TNMG 543-G	270612		<b>149-275</b> <b>\$ 24.08</b>	1.083	5/8	1/4	3/64	

## TNMG-M/M1



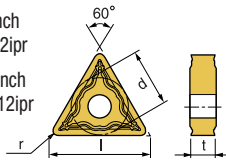
- USE  
Medium

- Recommendation

**M**  $d = 0.04 \sim 0.2 \text{ inch}$   
 $f = 0.004 \sim 0.02 \text{ ipr}$

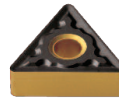
**M1**  $d = 0.035 \sim 0.2 \text{ inch}$   
 $f = 0.002 \sim 0.012 \text{ ipr}$

• Wide available chip control range from medium-finishing to medium-roughing.  
• Suitable chip breaker for CNC machining



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
TNMG 331-M1	160404		<b>149-259</b> <b>\$ 10.64</b>	.650	3/8	3/16	1/64	<b>Turning</b> DTJNR/L MTCNN MTFNR/L MTENN MTGNNR/L MTJNR/L <b>Boring</b> MTFNR MTUNR PTFNR/L
TNMG 431-M	220404		<b>149-240</b> <b>\$ 15.04</b>	.886	1/2	3/16	1/64	
TNMG 432-M	220408	<b>149-449</b> <b>\$ 15.04</b>	<b>149-228</b> <b>\$ 15.04</b>	.886	1/2	3/16	1/32	
TNMG 432-M1	220408		<b>149-278</b> <b>\$ 15.04</b>	.886	1/2	3/16	1/32	
TNMG 433-M1	220412		<b>149-288</b> <b>\$ 15.04</b>	.886	1/2	3/16	3/64	

## TNMG-MM

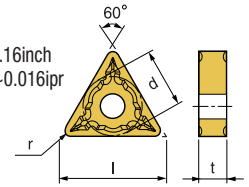


- USE  
Steels / Stainless Steels

- Recommendation

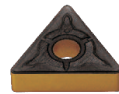
**MM**  $d = 0.04 \sim 0.16 \text{ inch}$   
 $f = 0.004 \sim 0.016 \text{ ipr}$

• Excellent choice for a variety of steels including Stainless Steel



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
TNMG 332-MM	160408		<b>149-323</b> <b>\$ 10.64</b>	.650	3/8	3/16	1/32	<b>Turning</b> DTJNR/L MTCNN MTFNR/L MTENN MTGNNR/L MTJNR/L <b>Boring</b> MTFNR MTUNR PTFNR/L
TNMG 431-MM	220404		<b>149-244</b> <b>\$ 15.04</b>	.886	1/2	3/16	1/64	
TNMG 432-MM	220408		<b>149-234</b> <b>\$ 15.04</b>	.886	1/2	3/16	1/32	

## TNMG-R2

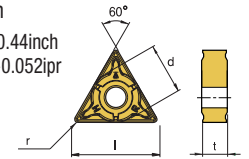


- USE  
Roughing

- Recommendation

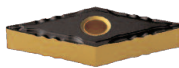
**R2**  $d = 0.12 \sim 0.44 \text{ inch}$   
 $f = 0.012 \sim 0.052 \text{ ipr}$

• Suitable for heavy duty cutting due to strong cutting edge.  
• Wide chip control range with low cutting force



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
TNMG 432-R2	220408	<b>149-340</b> <b>\$ 15.04</b>		.886	1/2	3/16	1/32	<b>Turning</b> DTJNR/L MTCNN MTFNR/L MTENN MTGNNR/L MTJNR/L <b>Boring</b> MTFNR MTUNR PTFNR/L

## VNMG-F2

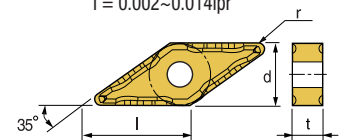


- USE  
Finishing

- Recommendation

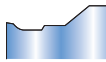
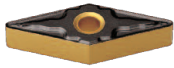
**F2**  $d = 0.012 \sim 0.1 \text{ inch}$   
 $f = 0.002 \sim 0.014 \text{ ipr}$

• Excellent chip control at varied depth of cutting.  
• Strong cutting edge toughness due to special design.



Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
VNMG 330.5-F2	160402		<b>149-270</b> <b>\$ 15.44</b>	.654	3/8	3/16	.008	<b>Turning</b> DVJNR/L MVJNR/L
VNMG 331-F2	160404		<b>149-321</b> <b>\$ 15.36</b>	.654	3/8	3/16	1/64	

## VNMG-M/M1



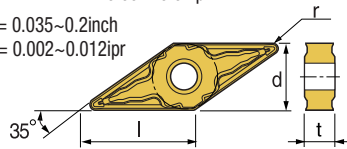
- USE Medium
- Recommendation

$$M \quad d = 0.04 \sim 0.2 \text{ inch}$$

$$f = 0.004 \sim 0.02 \text{ ipr}$$

$$M1 \quad d = 0.035 \sim 0.2 \text{ inch}$$

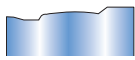
$$f = 0.002 \sim 0.012 \text{ ipr}$$



- Wide available chip control range from medium-finishing to medium-roughing.
- Suitable chip breaker for CNC machining

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
VNMG 331-M	160404		149-284 \$ 15.44	.653	3/8	3/16	1/64	Turning DVJNR/L MVJNR/L Boring MVUNR/L
VNMG 332-M	160408		149-265 \$ 15.36	.653	3/8	3/16	1/32	
VNMG 333-M1	160412		149-274 \$ 15.44	.653	3/8	3/16	3/64	

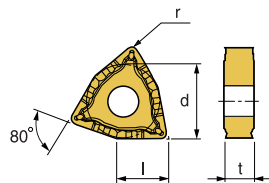
## WNMG-F2



- USE Finishing
- Recommendation

$$F2 \quad d = 0.01 \sim 0.1 \text{ inch}$$

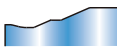
$$f = 0.002 \sim 0.014 \text{ ipr}$$



- Excellent chip control at varied depth of cutting.
- Strong cutting edge toughness due to special design.

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
WNMG 431-F2	080404	149-411 \$ 12.16		.343	1/2	3/16	1/64	Turning DWLNR/L MWLNR/L Boring MWLNR/L

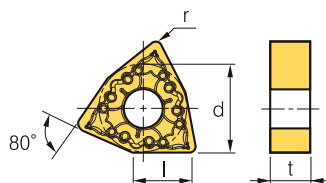
## WNMG-FVL



- USE Finishing
- Recommendation

$$FVL \quad d = 0.008 \sim 0.059 \text{ inch}$$

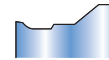
$$f = 0.004 \sim 0.014 \text{ ipr}$$



- Stable chip control in high toughness material; low carbon steel, pipe steel, and steel plates
- Improved chip control for facing, copy machining, and better surface finish

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
WNMG 432-FVL	080408	149-413 \$ 12.16	149-415 \$ 12.16	.343	1/2	3/16	1/32	Turning DWLNR/L MWLNR/L Boring MWLNR/L

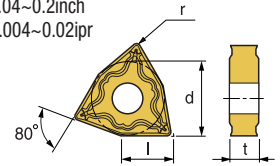
## WNMG-M/M1



- USE Medium
- Recommendation

$$M \quad d = 0.04 \sim 0.2 \text{ inch}$$

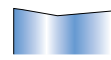
$$f = 0.004 \sim 0.02 \text{ ipr}$$



- Wide available chip control range from medium-finishing to medium-roughing.
- Suitable chip breaker for CNC machining

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
WNMG 431-M	080404	149-417 \$ 12.16	149-326 \$ 12.16	.343	1/2	3/16	1/64	Turning DWLNR/L MWLNR/L Boring MWLNR/L
WNMG 432-M	080408	149-335 \$ 12.16	149-248 \$ 12.16	.343	1/2	3/16	1/32	
WNMG 431-M1	080404		149-423 \$ 12.16	.343	1/2	3/16	1/64	
WNMG 432-M1	080408	149-419 \$ 12.16	149-425 \$ 12.16	.343	1/2	3/16	1/32	
WNMG 433-M1	080412	149-421 \$ 12.16	149-427 \$ 12.16	.343	1/2	3/16	3/64	

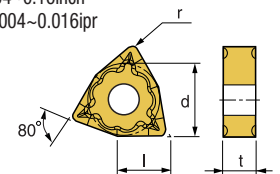
## WNMG-MM



- USE Steels / Stainless Steels
- Recommendation

$$MM \quad d = 0.04 \sim 0.16 \text{ inch}$$

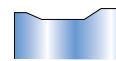
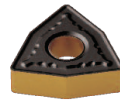
$$f = 0.004 \sim 0.016 \text{ ipr}$$



- Excellent choice for a variety of steels including Stainless Steel

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
WNMG 432-MM	080408		149-249 \$ 12.16	.343	1/2	3/16	1/32	Turning DWLNR/L MWLNR/L Boring MWLNR/L

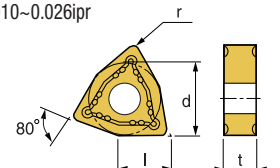
## WNMG-R1



- USE Roughing
- Recommendation

$$R1 \quad d = 0.1 \sim 0.28 \text{ inch}$$

$$f = 0.010 \sim 0.026 \text{ ipr}$$



- Excellent chip control at deep depth of cut and fast feed rate.
- Strong cutting edge makes excellent cutting performance at intermittent cutting.

Designation	ISO	PT15C	PT25C	l	d	t	r	Holders
WNMG 432-R1	080404		149-277 \$ 12.08	.343	1/2	3/16	1/32	Turning DWLNR/L MWLNR/L Boring MWLNR/L

## OKT-MAX Face Mill Kits



**Consists of:**  
 1 - OKT-MAX Face Mill  
 10- OFKT 05T3 Inserts (Coated)

Kit Contents	Insert	Kit Code No.	SALE \$
2" OKT-MAX Face Mill (147-019)	c/w 10 inserts (146-843)	OFKT 05T3 PM25C Inserts (Coated)	149-863 <b>659.92</b>

Note: Each Kit Contains 146-940 T15 Torx Wrench

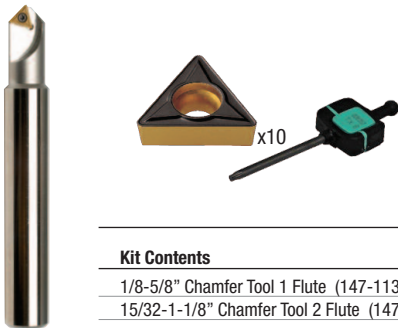
## Alumimill Kits



**Consists of:**  
 1 - AMFM Face Mill Complete With  
 VCKT 43.57.5 Inserts (Polished)

Kit Contents	Insert	Kit Code No.	SALE \$
2" Face Mill (147-424)	c/w 3 inserts (147-425)	VCKT 43.57.5 NA KT10U	149-927 <b>550.08</b>
2-1/2" Face Mill (147-834)	c/w 4 inserts (147-425)	VCKT 43.57.5 NA KT10U	149-928 <b>686.48</b>
3" Face Mill (147-470)	c/w 4 inserts (147-425)	VCKT 43.57.5 NA KT10U	149-929 <b>714.96</b>

## Chamfer Tool Kits



**Consists of:**  
 1 - CT 45° Chamfer Tool  
 10- TCMT PT25C Inserts

Kit Contents	Insert	Kit Code No.	SALE \$
1/8-5/8" Chamfer Tool 1 Flute (147-113)	c/w 10 inserts (149-253)	TCMT 21.51-F3P PT25C	149-486 <b>369.12</b>
15/32-1-1/8" Chamfer Tool 2 Flute (147-112)	c/w 10 inserts (149-239)	TCMT 32.52-F3P PT25C	149-487 <b>270.48</b>

## Mold Mill Kits



**Consists of:**  
 1 - Mold Mill  
 2 - RC Inserts (Coated)

KIT CONTENTS	Insert	Kit Code No.	SALE \$
5/8" Standard Length Moldmill (148-094)	c/w 2 pcs RC-5/8 Inserts (147-858)	149-912	<b>682.80</b>
5/8" Medium Length Moldmill (147-853)	c/w 2 pcs RC-5/8 Inserts (147-858)	149-913	<b>390.16</b>
5/8" Long Length Moldmill (148-095)	c/w 2 pcs RC-5/8 Inserts (147-858)	149-914	<b>735.84</b>
3/4" Standard Length Moldmill (148-096)	c/w 2 pcs RC-3/4 Inserts (147-859)	149-915	<b>524.80</b>
3/4" Medium Length Moldmill (147-854)	c/w 2 pcs RC-3/4 Inserts (147-859)	149-916	<b>549.44</b>
3/4" Long Length Moldmill (148-097)	c/w 2 pcs RC-3/4 Inserts (147-859)	149-917	<b>574.16</b>
1" Long Length Moldmill (148-099)	c/w 2 pcs RC-1 Inserts (147-860)	149-920	<b>937.20</b>
1-1/8" Medium Length Moldmill (147-856)	c/w 2 pcs RC-1-1/8 Inserts (147-861)	149-924	<b>553.20</b>
1-1/8" Long Length Moldmill (148-102)	c/w 2 pcs RC-1-1/8 Inserts (147-861)	149-925	<b>1,251.52</b>
1-1/4" Medium Length Moldmill (147-857)	c/w 2 pcs RC-1-1/4 Inserts (147-862)	149-922	<b>696.40</b>
1-1/4" Long Length Moldmill (148-104)	c/w 2 pcs RC-1-1/4 Inserts (147-862)	149-926	<b>747.68</b>

## DS4 Face Mill Kits

Coolant through



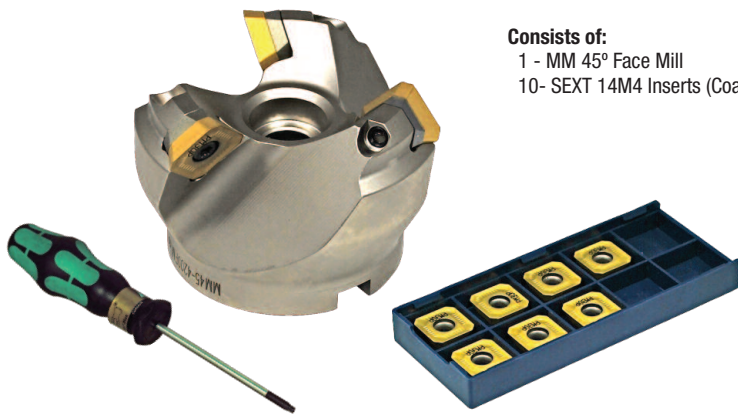
**Consists of:**  
 1 - DS4 90° Face Mill  
 20-30 LNMX100605PNR-F2 Inserts or  
 20-60 LNMX151008PNR-M Inserts



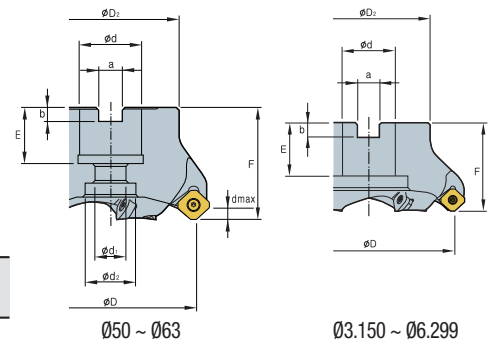
Kit Contents	Insert	Kit Code No.	SALE \$
1-1/2"(Z=5) DS4 3150HR-M (146-393)	c/w 20 inserts (145-636)	LNMX100605PNR-F2 PM30P	149-788 <b>736.32</b>
2-1/2"(Z=9) DS4 3250HR-M (148-374)	c/w 30 inserts (145-636)	LNMX100605PNR-F2 PM30P	149-789 <b>1,356.16</b>
3"(Z=10) DS4 3300HR-M (148-376)	c/w 30 inserts (145-636)	LNMX100605PNR-F2 PM30P	149-790 <b>2,155.04</b>
4"(Z=12) DS4 3400HR-M (148-391)	c/w 30 inserts (145-636)	LNMX100605PNR-F2 PM30P	149-791 <b>1,641.20</b>
2-1/2"(Z=6) DS4 4250HR-M (148-876)	c/w 20 inserts (145-678)	LNMX151008PNR-M PM30P	149-793 <b>1,409.76</b>
3"(Z=5) DS4 4300HR (148-877)	c/w 30 inserts (145-678)	LNMX151008PNR-M PM30P	149-794 <b>1,152.80</b>
5"(Z=7) DS4 4500HR (148-881)	c/w 50 inserts (125-678)	LNMX151008PNR-M PM30P	149-796 <b>1,879.12</b>
5"(Z=10) DS4 4500HR-M (148-882)	c/w 50 inserts (145-678)	LNMX151008PNR-M PM30P	149-797 <b>2,160.48</b>
6"(Z=11 DS4 4600HR-M (148-884)*	c/w 60 inserts (145-678)	LNMX151008PNR-M PM30P	149-799 <b>2,436.00</b>

\* non coolant through

## 45° Max Mill Kits



**Consists of:**  
 1 - MM 45° Face Mill  
 10- SEXT 14M4 Inserts (Coated)



Designation	Cutter No.	ØD	Ød	ØD <sub>2</sub>	Ød <sub>1</sub>	Ød <sub>2</sub>	a	b	E	F	No. of Inserts	d max
MM 45° Coarse Pitch												
4200FM	<b>147-811</b>	2.000	0.750	1.654	0.433	0.709	0.321	0.181	0.787	1.575	3	0.256
4250FM	<b>147-812</b>	2.500	0.750	1.654	0.433	0.709	0.321	0.181	0.787	1.575	4	
4300FM	<b>147-813</b>	3.000	1.000	1.969	0.551	0.787	0.384	0.248	0.866	1.969	5	
4400FM	<b>147-814</b>	4.000	1.250	2.362	-	1.772	0.510	0.319	0.866	1.969	5	

Kit Contents	Insert	Kit Code No.	SALE \$
2" Cutter (147-811)	c/w 10 inserts (147-730)	SEXT 14M4 AGSN PM25C	149-932 <b>488.32</b>
2" Cutter (147-811)	c/w 10 inserts (148-182)	SEXT 14M4 AGSN PM30P	149-933 <b>488.32</b>
2 1/2" Cutter (147-812)	c/w 10 inserts (147-730)	SEXT 14M4 AGSN PM25C	149-934 <b>559.92</b>
2 1/2" Cutter (147-812)	c/w 10 inserts (148-182)	SEXT 14M4 AGSN PM30P	149-935 <b>559.92</b>
3" Cutter (147-813)	c/w 10 inserts (147-730)	SEXT 14M4 AGSN PM25C	149-936 <b>753.92</b>
3" Cutter (147-813)	c/w 10 inserts (148-182)	SEXT 14M4 AGSN PM30P	149-937 <b>753.92</b>
4" Cutter (147-814)	c/w 10 inserts (147-730)	SEXT 14M4 AGSN PM25C	149-938 <b>889.04</b>
4" Cutter (147-814)	c/w 10 inserts (148-182)	SEXT 14M4 AGSN PM30P	149-939 <b>889.04</b>

## DS8 45° Milling Kits



Coolant through

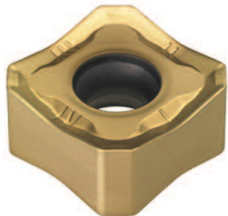


**Consists of:**  
 1 - DS8 45° Face Mill  
 20-80 SNMX 1206ANN-M Inserts

Kit Contents		Insert	Kit Code No.	SALE \$
3"(Z=10) DS8 4300HR-H (148-886)	c/w 30 inserts (145-679)	SNMX 1206ANN-M PM30P	149-775	<b>1,785.04</b>
4"(Z=6) DS8 4400HR (148-888)	c/w 40 inserts (145-679)	SNMX 1206ANN-M PM30P	149-774	<b>1,122.56</b>
4"(Z=8) DS8 4400HR-M (148-890)	c/w 40 inserts (145-679)	SNMX 1206ANN-M PM30P	149-773	<b>1,469.04</b>
5"(Z=16) DS 4500HR-H (148-892)	c/w 50 inserts (145-679)	SNMX 1206ANN-M PM30P	149-770	<b>1,561.20</b>
6"(Z=18) DS8 4600HR-H (148-895)	c/w 60 inserts (145-679)	SNMX 1206ANN-M PM30P	149-767	<b>1,415.84</b>
8"(Z=14) DS8 4800HR-M (148-898)	c/w 80 inserts (145-679)	SNMX 1206ANN-M PM30P	149-766	<b>3,144.72</b>

2" - 5" With Coolant hole   
 6" - 8" No Coolant Hole Coolant through

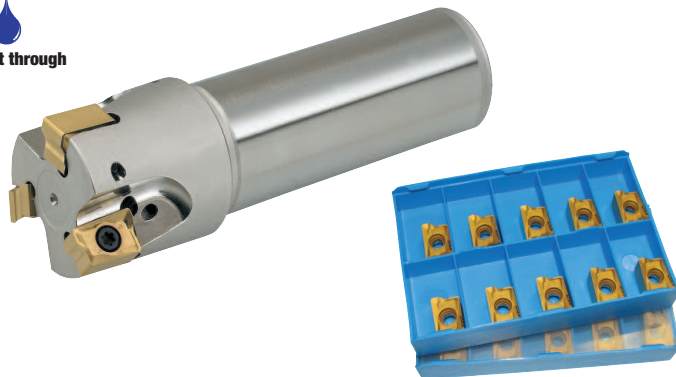
### Features Of The DS8 Insert



- Innovative double-sided high rake angle insert makes it possible to use 8 cutting edges.
- Smooth cutting with low cutting load that has been acquired from the unique geometry & high rake angle of cutting edge guarantees excellent surface finish.
- The combination of the innovative geometries & the variety of grades provides wide coverage for milling applications.
- Applicable for various workpieces including Steel, Cast Iron & Stainless Steel.

## DS4 End Mill Kits

Coolant through



**Consists of:**  
 1 - DS4 90° End Mill  
 10-20 LNMX100605PNR-F2 Inserts or  
 10-20 LNMX151008PNR-M Inserts



### Features Of The DS4 Insert

- Chip breaker has a high rake angle for smooth chip control.
- Step design improves chip control by reducing the cutting load
- Major cutting edge for low cutting
- Concave design to avoid interference between each cutting edge.
- Specially designed minor cutting edge improves surface finish.
- Periphery face has a strong and negative face. (Clearance angle 0°).

Kit Contents		Insert	Kit Code No.	SALE \$
1-1/4"(Z=3) DS4 3125HR-S125 (146-390)	c/w 10 inserts (145-636)	LNMX100605PNR-F2 PM30P	149-763	<b>450.80</b>
1-1/4"(Z=4) DS4 3125HR-S125M (146-391)	c/w 10 inserts (145-636)	LNMX100605PNR-F2 PM30P	149-780	<b>509.76</b>
1-1/4"(Z=2) DS4 4125HR-S125 (148-870)	c/w 10 inserts (145-678)	LNMX151008PNR-M PM30P	149-781	<b>647.52</b>
1-1/2"(Z=3) DS4 4150HR-S125 (148-871)	c/w 10 inserts (145-678)	LNMX151008PNR-M PM30P	149-782	<b>529.12</b>
2"(Z=4) DS4 4200HR-S125M (148-872)	c/w 10 inserts (145-678)	LNMX151008PNR-M PM30P	149-783	<b>626.00</b>
1-1/2"(Z=4) DS4 3150HR-S125 (146-392)	c/w 20 inserts (145-636)	LNMX100605PNR-F2 PM30P	149-784	<b>538.88</b>
2"(Z=5) DS4 3200HR-S125 (146-394)	c/w 20 inserts (145-636)	LNMX100605PNR-F2 PM30P	149-786	<b>1,044.80</b>
2"(Z=7) DS4 3200HR-S125M (146-395)	c/w 20 inserts (145-636)	LNMX100605PNR-F2 PM30P	149-787	<b>854.88</b>

## AP11 Master End Mill Kit



**Consists of:**  
 1 - Each 1/2", 5/8", 3/4", 1" AP11-90 End Mills  
 20- APXT 11T3 Inserts (Coated)

Kit Contents	Insert	Code No.	Kit SALE \$
1/2" $\phi$ , 5/8" $\phi$ , 3/4" $\phi$ , and 1" $\phi$ Mini-Mill (#146-371, #146-372, #146-373, #146-374)	20 - APXT 11T3 PM25C Inserts (#146-356)	149-866	<b>632.32</b>

Note: Each Kit Contains 146-596 T8 Torx Wrench

## AP16 End Mill Kits

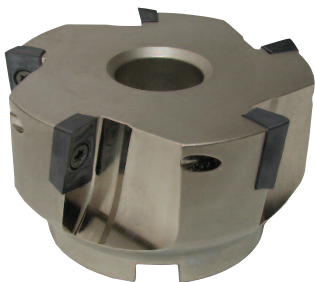


**Consists of:**  
 1 - AP16-90 Endmills  
 10- APKT 1604 Inserts (Coated)

Kit Contents	Insert	Code No.	Kit SALE \$
1" 2-FL. End Mill (1" Shank) (#145-705)	10 - APKT 1604PDSR M PM30P Coated Inserts (#147-333)	149-900	<b>305.52</b>
1-1/4" 3-FL. End Mill (1" Shank) (#145-706)	10 - APKT 1604PDSR M PM30P Coated Inserts (#147-333)	149-901	<b>319.84</b>
1-1/2" 3-FL. End Mill (1-1/4" Shank) (#145-707)	10 - APKT 1604PDSR M PM30P Coated Inserts (#147-333)	149-902	<b>334.32</b>

Note: Each Kit Contains 146-596 T8 Torx Wrench

## APFM Face Mill Kits



**Consists of:**  
 1 - APFM 16-90 Face Mill  
 10- APKT 1604 Inserts (Coated)

Kit Contents	Insert	Code No.	Kit SALE \$
2" Face Mill (147-009)	c/w 10 inserts (147-333) APKT 1604 PDSR M PM30P	149-907	<b>384.80</b>
2-1/2" Face Mill (147-011)	c/w 10 inserts (147-333) APKT 1604 PDSR M PM30P	149-908	<b>467.60</b>
3" Face Mill (147-013)	c/w 10 inserts (147-333) APKT 1604 PDSR M PM30P	149-909	<b>467.60</b>
4" Face Mill (147-000)	c/w 10 inserts (147-333) APKT 1604 PDSR M PM30P	149-910	<b>521.12</b>

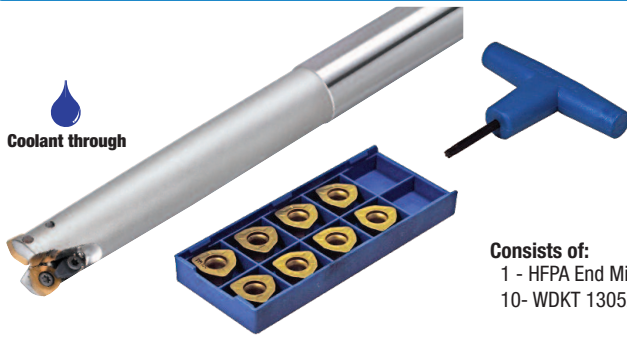
## R8 Milling Cutter & Insert Kit



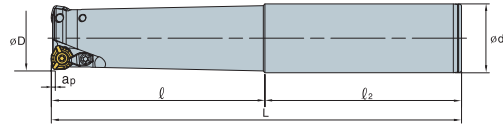
Kit Contents	Insert	Code No.	Kit SALE \$
2" R8 (Bridgeport shank) End Mill (141-016)	c/w 10 inserts (146-709) TPU 322 PM25C Inserts (Coated)	500-732	<b>659.28</b>

**Consists of:**  
 1 - R8 Shank End Mill 2" Dia.  
 10- TPU 322 Inserts (Coated)

## HFPA End Mill Kits

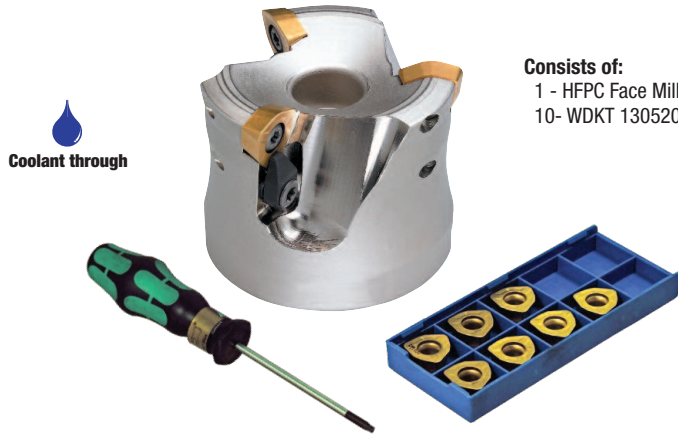


Consists of:  
 1 - HFPA End Mill  
 10- WDKT 130520 Inserts (Coated)

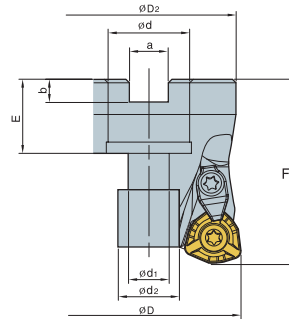
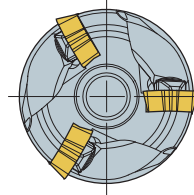


Model No.	Cutting Dia. (ØD)	Shank Dia.(Ød)	l	l <sub>2</sub>	L	Insert	No. of Inserts	Kit Code No.	SALE \$
HFPA 1-1/4 (148-646)	1-1/4	1.000	2.756	3.150	5.906	WDKT 130520 ZDSR-MH PM10C (148-653)	10	149-990	520.40
HFPA 1-1/4 (148-647)	1-1/4	1.000	4.725	3.150	7.874	WDKT 130520 ZDSR-MH PM10C (148-653)	10	149-991	531.92

## HFPC Face Mill Kits

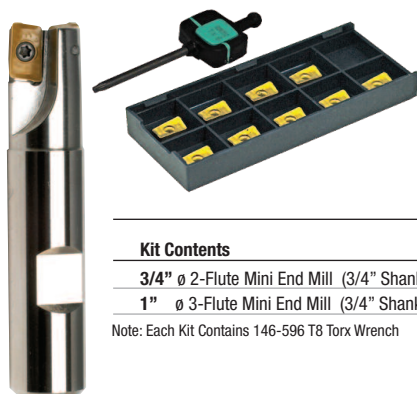


Consists of:  
 1 - HFPC Face Mill  
 10- WDKT 130520 Inserts (Coated)



Model No.	Cutting Dia. (ØD)	Bore Dia.(Ød)	ØD <sub>2</sub>	Ød <sub>2</sub>	a	b	E	F	Insert	No. of Inserts	Kit Code No.	SALE \$
HFPC 13200R-3 (148-636)	2.000	.750	1.772	.630	.321	.221	.778	1.969	WDKT 130520 ZDSR-MH PM10C (148-653)	10	149-992	921.76
HFPC 13250R-4 (148-639)	2.500	.750	1.772	.630	.321	.221	.778	1.969	WDKT 130520 ZDSR-MH PM10C (148-653)	10	149-993	783.44
HFPC 13300R-5 (148-641)	3.000	1.000	2.205	.827	.384	.248	.985	2.756	WDKT 130520 ZDSR-MH PM10C (148-653)	10	149-994	1,312.48

## AP11 End Mill Kits

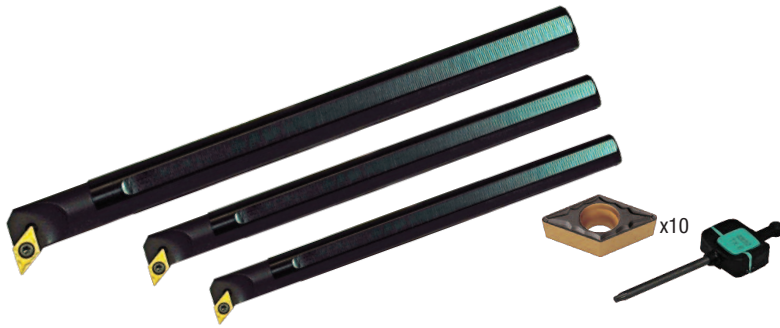


Consists of:  
 1 - AP11-90 End Mill  
 10- APXT 11T3 Inserts (Coated)

Kit Contents	Insert	Kit Code No.	SALE \$
3/4" ø 2-Flute Mini End Mill (3/4" Shank) (#146-373)	10 - APXT 11T3 Coated Inserts (#146-356)	149-864	235.60
1" ø 3-Flute Mini End Mill (3/4" Shank) (#146-374)	10 - APXT 11T3 Coated Inserts (#146-356)	149-865	247.12

Note: Each Kit Contains 146-596 T8 Torx Wrench

## SI-SDUCR Boring Bar Kits



**Consists of:**

- 1 - 3/8" ø B/Bar, SI-SDUCR 6-2 (#145-939)
- 1 - 1/2" ø B/Bar, SI-SDUCR 8-2 (#145-940)
- 1 - 5/8" ø B/Bar, SI-SDUCR 10-2 (#145-941)
- 10 DC\_\_T21.51 Inserts

Application	Material	Kit Contents	Right Hand Kit Code No.	SALE \$
Medium	Steel	1 pc SI-SDUCR 3/8", 1/2", 5/8" Boring Bars	149-485	<b>317.04</b>
Medium	Aluminum	1 pc SI-SDUCR 3/8", 1/2", 5/8" Boring Bars	149-852	<b>329.76</b>

## External Threading Kits



**Consists of:**

- 1 - ETH3 Toolholder
- 2 - ECTR 300 Inserts (Coated)

Kit Contents	Insert	Kit Code No.	SALE \$
3/4" Toolholder (146-708) c/w 2pcs 3/8" Partial Profile inserts Coated (146-597)	ECTR 300 8-28 PM30P	149-839	<b>255.92</b>
1" Toolholder (146-290) c/w 2pcs 3/8" Partial Profile inserts Coated (146-597)	ECTR 300 8-28 PM30P	149-840	<b>235.12</b>

## Internal Threading Kits



**Consists of:**

- 1 - ITH3 Toolholder
- 2 - ICTR 300 Inserts (Coated)

Kit Contents	Insert	Kit Code No.	SALE \$
3/4" Toolholder (146-255) c/w 2pcs - 3/8" Partial Profile inserts Coated (146-610)	ICTR 300 8-28 PM30P	149-842	<b>262.88</b>
1" Toolholder (146-254) c/w 2pcs - 3/8" Partial Profile inserts Coated (146-610)	ICTR 300 8-28 PM30P	149-843	<b>276.96</b>
1-1/4" Toolholder (146-256) c/w 2pcs - 3/8" Partial Profile inserts Coated (146-610)	ICTR 300 8-28 PM30P	149-879	<b>314.48</b>

## SI-SCLCR/L Master Boring Bar Kits



**Consists of:**

- 1 - 5/8"  $\emptyset$  B/Bar, SI-SCLCR 10-3 (#145-925)
- 1 - 3/4"  $\emptyset$  B/Bar, SI-SCLCR 12-3 (#145-926)
- 1 - 1"  $\emptyset$  B/Bar, SI-SCLCR 16-3 (#145-927)
- 10 - CCMT 32.51 inserts
- 1 - wrench (#146-940)

Application	Material	Kit Contents	Right Hand Kit Code No.	SALE \$	Left Hand Kit Code No.	SALE \$
Medium	Steel	1 pc SI SCLCR 5/8", 3/4", 1" Boring Bars	10 pcs CCMT 32.51 F2P PT25C (149-220)	149-471	361.36	-
Medium	Steel	1 pc SI SCLCR 5/8", 3/4", 1" Boring Bars	10 pcs CCMT 32.51 F2P PT25C (149-220)	-	149-473	361.36
Medium	Aluminum	1 pc SI SCLCR 5/8", 3/4", 1" Boring Bars	10 pcs CCGT 32.51 AP KT10U (146-011)	149-847	424.56	-

## SI-SCLCR Boring Bar Kits



**Consists of:**

- 1 - SI-SCLCR Boring Bar
- 10 - CCMT 32.51 Inserts (Coated)

Application	Material	Kit Contents	Right Hand Kit Code No.	SALE \$	
Medium	Steel	1 pc SI SCLCR 10-3(5/8")(145-925)	10 pcs CCMT 32.51 F2P PT25C (149-220)	149-475	173.68
Medium	Steel	1 pc SI SCLCR 12-3(3/4")(145-926)	10 pcs CCMT 32.51 F2P PT25C (149-220)	149-477	181.28
Medium	Steel	1 pc SI SCLCR 16-3(1")(145-927)	10 pcs CCMT 32.51 F2P PT25C (149-220)	149-479	198.32

## A-SCLCR Coolant Thru Boring Bar Kits

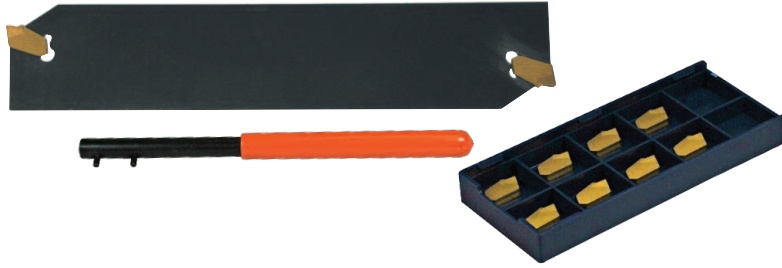


**Consists of:**

- 1 - 5/16"  $\emptyset$  B/Bar, A-SCLCR 5-2 (#146-589)
- 1 - 3/8"  $\emptyset$  B/Bar, A-SCLCR 6-2 (#146-590)
- 1 - 1/2"  $\emptyset$  B/Bar, A-SCLCR 8-2 (#146-591)
- 1 - 5/8"  $\emptyset$  B/Bar, A-SCLCR 10-2 (#147-348)
- 1 - wrench (#146-939)
- 10 - CC\_T21.51 Inserts

Application	Material	Kit Contents	Right Hand Kit Code No.	SALE \$	
Finishing	Steel	1 pc A-SCLCR 5/16", 3/8", 1/2", 5/8	10 pcs CCMT 21.50.5 F2P PT25C (149-252)	149-481	443.36
Medium	Steel	1 pc A-SCLCR 5/16", 3/8", 1/2", 5/8	10 pcs CCMT 21.51 F2P PT25C (149-227)	149-483	441.76
Medium	Aluminum	1 pc A-SCLCR 5/16", 3/8", 1/2", 5/8	10 pcs CCGT 21.51 AP KT10U (146-024)	149-850	400.08

## PRO Part Off Kits



**Consists of:**  
 1 - PP-B Part Off Blade  
 10 - SP 300 Inserts (Coated)  
 1 - SW15S Wrench

Kit Contents	Insert	Kit Code No.	SALE \$
PP-B 326S 1" Blade (146-232) c/w 10-1/8" inserts (146-452)	SP300 PT30C	149-835	<b>248.64</b>
PP-B 332S 1-1/4" Blade (146-898) c/w 10-1/8" inserts (146-452)	SP300 PT30C	149-836	<b>248.64</b>
PP-B 432S 1-1/4" Blade (146-899) c/w 10-0.161" inserts (146-454)	SP400 PT30C	147-441	<b>257.28</b>

## PRO Part Off Kits



**Consists of:**  
 1 - PP-B Part Off Blade  
 1 - P.O.B. Part Off Block  
 10 - SP 300 Inserts (Coated)  
 1 - SW15S Wrench

Kit Contents	Insert	Kit Code No.	SALE \$
PP-B 326S 1" Blade (146-232) c/w 10-1/8" inserts (146-452) & P.O.B. 19-5 Part Off Block (146-510)	SP300 PT30C	149-837	<b>450.80</b>
PP-B 326S 1-1/4" Blade (146-898) c/w 10-1/8" inserts (146-452) & P.O.B. 25; 4-6 Part Off Block (145-895)	SP300 PT30C	149-838	<b>419.12</b>

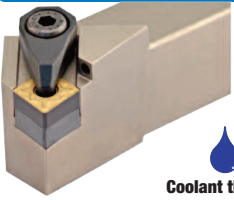
## MTG - Multi Turn Groove Kits



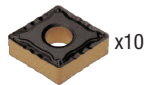
**Consists of:**  
 1 - MGEHR Toolholder  
 5 - MGMN Inserts (Coated)

Kit Contents	Insert	Kit Code No.	SALE \$
MGEHR 16-3 1" Shank (148-066) c/w 5-3mm inserts (149-225)	MGMN 300M PT25C	149-640	<b>293.28</b>
MGEHR 16-4 1" Shank (148-074) c/w 5-4mm inserts (149-237)	MGMN 400M PT25C	149-642	<b>299.68</b>

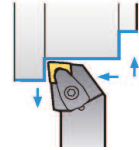
### DCLNR Dimple Lock Toolholder Kits



Coolant through



**Consists of:**  
 1 - DCLNR Toolholder  
 10 - CNMG 432 Inserts (Coated)

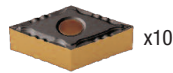


Application	Material	Kit Contents	Kit Code No.	SALE \$
Finishing	Steel	1 pc DCLNR 16-4DAN 1" Shank (145-658) / 10 pcs CNMG 432-F2 PT15C (149-390)	500-891	<b>284.24</b>
Medium/Finishing	Steel	1 pc DCLNR 16-4DAN 1" Shank (145-658) / 10 pcs CNMG 432-M PT25C (149-231)	500-892	<b>283.44</b>

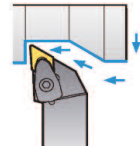
### DDJNR Dimple Lock Toolholder Kits



Coolant through



**Consists of:**  
 1 - DDJNR Toolholder  
 10 - DNMG 432 Inserts (Coated)



Application	Material	Kit Contents	Kit Code No.	SALE \$
Finishing	Steel	1 pc DDJNR 16-4DAN 1" Shank (145-659) / 10 pcs DNMG-F2 432 PT15C (149-435)	500-893	<b>391.44</b>
Medium/Finishing	Steel	1 pc DDJNR 16-4DAN 1" Shank (145-659) / 10 pcs DNMG-M 432 PT25C (149-233)	500-894	<b>390.64</b>

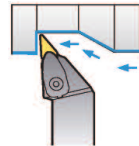
### DVJNR Dimple Lock Toolholder Kit



Coolant through



**Consists of:**  
 1 - DVJNR Toolholder  
 10 - VNMG 332 Inserts (Coated)



Application	Material	Kit Contents	Kit Code No.	SALE \$
Medium	Steel	1 pc DVJNR 16-4DAN 1" Shank (145-688) / 10 pcs VNMG 332-M PT25C (149-265)	500-895	<b>316.24</b>

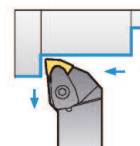
### DWLNLR Dimple Lock Toolholder Kit



Coolant through

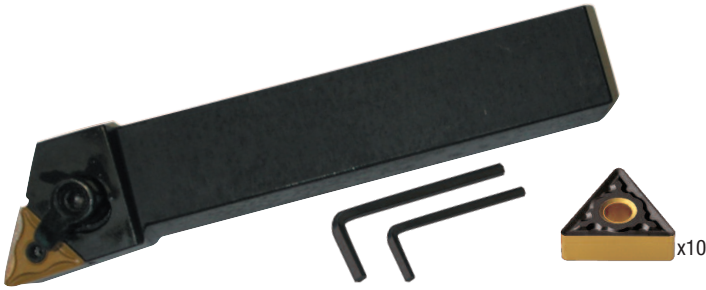


**Consists of:**  
 1 - DWLNLR Toolholder  
 10 - WNMG 432 Inserts (Coated)



Application	Material	Kit Contents	Kit Code No.	SALE \$
Medium/Finishing	Steel	1 pc DWLNLR 16-4DAN 1" Shank (145-680) / 10 pcs WNMG 432-M PT25C (149-248)	500-896	<b>376.48</b>

## MTJNR/L Turning Kits



**Consists of:**  
 1 - MTJNR/L Toolholder  
 10 - TNMG 432 Inserts (Coated)

Application	Material	Kit Contents	Right Hand		Left Hand	
			Kit Code No.	SALE \$	Kit Code No.	SALE \$
Medium Finishing	Steel	1 pc MTJNR 16-4D 1" Shank (145-757) 10 pcs TNMG 432 M PT25C (149-228)	149-447	259.76	-	-
Medium	Steel	1 pc MTJNR 16-4D 1" Shank (145-757)/MTJNL 16-4D (145-756) 10 pcs TNMG 432 MM PT25C (149-234)	149-451	259.76	149-453	259.76
Medium	Steel	1 pc MTJNR 12-3D 3/4" Shank (145-887)/MTJNL 12-3B (145-888) 10 pcs TNMG 322 G PT30C (146-093)	149-818	199.52	149-821	199.52
Medium	Steel	1 pc MTJNR 10-3B 5/8" Shank (145-891)/MTJNL 10-3B (145-892) 10 pcs TNMG 322 G PT30C (146-093)	149-819	262.00	149-822	252.64

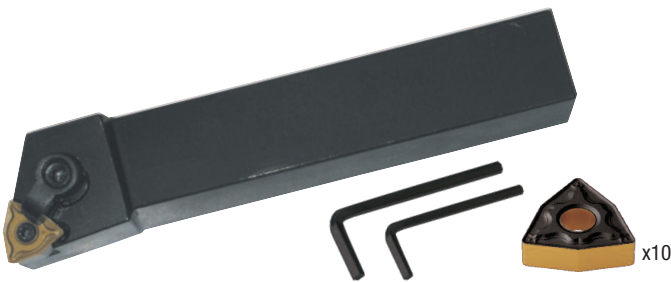
## MVJNR/L Turning Kits



**Consists of:**  
 1 - MVJNR/L Toolholder  
 10 - VNMG 332 Inserts (Coated)

Application	Material	Kit Contents	Right Hand		Left Hand	
			Kit Code No.	SALE \$	Kit Code No.	SALE \$
Medium	Steel	1 pc MVJNR 16-3D (145-893)/MVJNL 16-3D (145-738) 10 pcs VNMG 332 M PT25C (149-265)	149-455	271.28	149-457	271.28

## MWLN/L Turning Kits



**Consists of:**  
 1 - MWLN/L Toolholder  
 10 - WNMG 432 Inserts (Coated)

Application	Material	Kit Contents	Right Hand		Left Hand	
			Kit Code No.	SALE \$	Kit Code No.	SALE \$
Medium Finish	Steel	1 pc MWLN 16-4D 1" Shank (145-808) 10 pcs WNMG 432 M PT25C (149-248)	149-459	212.00	-	-
Medium	Steel	1 pc MWLN 16-4D 1" Shank (145-808)/MWLNL 16-4D (145-809) 10 pcs WNMG 432 MM PT25C (149-249)	149-461	212.00	149-463	212.00
Medium	Steel	1 pc MWLN 12-4D 3/4" Shank (145-875)/MWLNL 12-4D (145-876) 10 pcs WNMG 432 MM PT25C (149-249)	149-465	213.76	149-467	212.16
Medium	Stainless Steel	1 pc MWLN 16-4D 1" Shank (145-808) 10 pcs WNMG 432 MM MT20C (146-769)	149-827	211.20	-	-
Medium	Cast Iron	1 pc MWLN 16-4D 1" Shank (145-808) 10 pcs WNMA 432 KT05C (147-429)	149-828	211.20	-	-
Roughing	Cast Iron	1 pc MWLN 16-4D 1" Shank (145-808) 10 pcs WNMA 432 KT10C (147672)	149-829	135.52	-	-

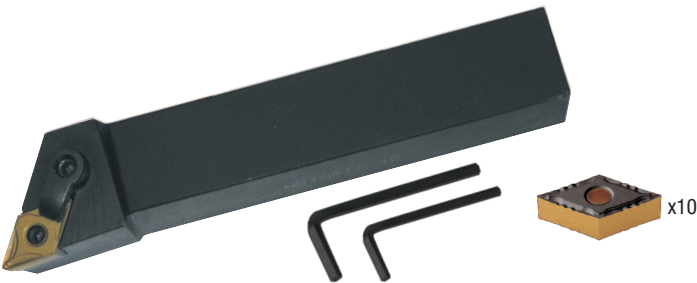
## MCLNR/L Turning Kits



**Consists of:**  
 1 - MCLNR/L Toolholder  
 10 - CNMG 432 Inserts (Coated)

Application	Material	Kit Contents	Right Hand		Left Hand	
			Kit Code No.	SALE \$	Kit Code No.	SALE \$
Finishing	Steel	1 pc MCLNR 16-4D (145-828) 10 pcs CNMG 432 F2 PT15C (149-390)	149-348	<b>212.00</b>	-	-
Medium/Finishing	Steel	1 pc MCLNR 16-4D (145-828) 10 pcs CNMG 432 M PT25C (149-231)	149-363	<b>211.20</b>	-	-
Medium	Steel	1 pc MCLNR 16-4D (145-828)/MCLNL 16-4D (145-829) 10 pcs CNMG 432 MM PT25C (149-256)	149-374	<b>212.00</b>	149-379	<b>212.00</b>
Roughing	Steel	1 pc MCLNR 16-4D (145-828) 10 pcs CNMG 432 R1 PT25C (149-254)	149-395	<b>211.20</b>	-	-
Medium	Stainless Steel	1 pc MCLNR 16-4D (145-828) 10 pcs CNMG 432 MM MT20C (146-765)	149-803	<b>211.20</b>	-	-
Medium	Cast Iron	1 pc MCLNR 16-4D (145-828) 10 pcs CNMA 432 KT10C (147-473)	149-804	<b>131.60</b>	-	-

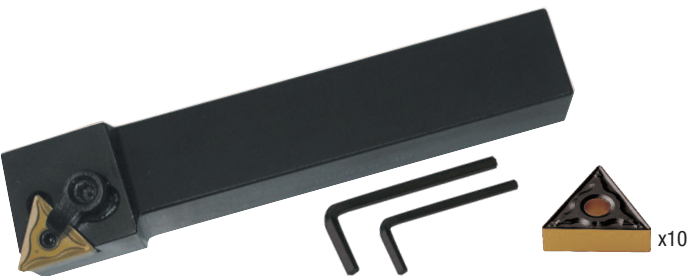
## MDJNR/L Turning Kits



**Consists of:**  
 1 - MDJNR/L Toolholder  
 10 - DNMG 432 Inserts (Coated)

Application	Material	Kit Contents	Right Hand		Left Hand	
			Kit Code No.	SALE \$	Kit Code No.	SALE \$
Finishing	Steel	1 pc MDJNR 16-4D (145-845) 10 pcs DNMG 432 F2 PT15C (149-435)	149-396	<b>239.20</b>	-	-
Medium/Finishing	Steel	1 pc MDJNR 16-4D (145-845) 10 pcs DNMG 432 M PT25C (149-233)	149-397	<b>238.40</b>	-	-
Medium	Steel	1 pc MDJNR 16-4D (145-845)/MDJNL 16-4D (145-846) 10 pcs DNMG 432 MM PT25C (149-279)	149-429	<b>239.20</b>	149-431	<b>239.20</b>
Medium	Stainless Steel	1 pc MDJNR 16-4D (145-845) 10 pcs DNMG 432 MM MT20C (146-768)	149-810	<b>238.40</b>	-	-

## MTGNR Turning Kits



**Consists of:**  
 1 - MTGNR Toolholder  
 10 - TNMG 432 Inserts (Coated)

Application	Material	Kit Contents	Right Hand	
			Kit Code No.	SALE \$
Medium/Finishing	Steel	1 pc MTGNR 16-4D (145-814) 10 pcs TNMG 432 M PT25C (149-228)	149-433	<b>249.68</b>
Roughing	Steel	1 pc MTGNR 16-4D (145-814) 10 pcs TNMG 432 MM PT25C (149-234)	149-443	<b>249.68</b>



**INDEXABLE KITS**

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# KITS



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