

HIGH PERFORMANCE MILLING



YG-1 USA

800.765.8665

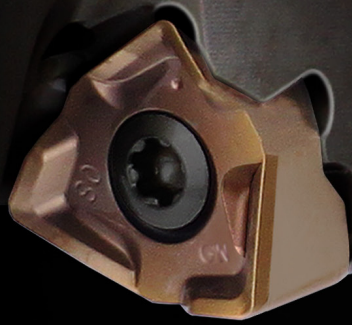
YG1USA.COM

# TRUE 90° SHOULDER MILLING

TPKT



WNEX

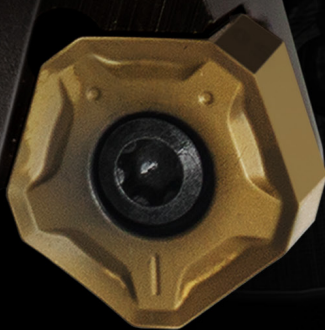


LNKU



# FACE MILLING & HIGH FEED MILLING

PNMU



ENMX



YG-1 INDEXABLE MILLING

# TPKT | TRUE 90° SHOULDER MILLING

## 07 11 16



**TPKT16**  
 TRUE 90° SHOULDER  
 APMax  
 .430"  
 11mm

**TPKT11**  
 APMax  
 .275"  
 7mm  
 \* END MILL

**TPKT07**  
 APMax  
 .177"  
 4.5mm  
 \* MODULAR HEAD

**Larger Core** →

▶ **Optimized coolant delivery**  
 Improves chip and thermal evacuation

→ **TPKT - 3 Cutting Edges**

▶ **High positive rake**  
 Minimized burr

▶ **High helix cutting edge**  
 Smooth cutting and low cutting force

▶ **Wide wiper edge**  
 Excellent surface finish

▶ **New design of curved cutting edge**  
 Minimized mismatch at step machining



# WNEX

## TRUE 90° SHOULDER MILLING 04 08



▶ **3 face contact for maximum insert stability**  
Enhances tool life and component quality

▶ **Maximized support behind the insert**  
Improves longevity of cutter body

**TRUE 90° SHOULDER**

**WNEX08**  
APMax  
.275"  
7mm

\* **MODULAR HEAD**

▶ **Optimized coolant delivery**  
Improves chip and thermal evacuation

**2-stage rake angle**

**Reinforced cutting edge**

**Chip Groove (Patented)**

▶ **2-stage rake face**  
Optimized chip flow

→ **WNEX – 6 Cutting Edges (Double-sided)**

▶ **True 90° shoulder**  
Excellent shoulder finish

▶ **High helix cutting edge**  
Reduced cutting force and power draw

▶ **Wide wiper**  
Class leading floor finish

▶ **Thick insert**  
To maximize bulk strength yielding superior predictability and enhancing tool life

▶ **Patent chip groove**  
Superior chip evacuation

**WNEX04**  
APMax  
.157"  
4mm

\* **END MILL**

# LNKU | TRUE 90° SHOULDER MILLING

## 13



**Higher clamping stability**  
Wedge shaped pocket

**TRUE 90° SHOULDER**

**LNKU13**

**APMax**  
.430"  
11mm

**\* Tangential Facemill**  
Enlarged core diameter  
Higher productivity

**Reinforced cutting edge**  
Predictable, durable and stable machining

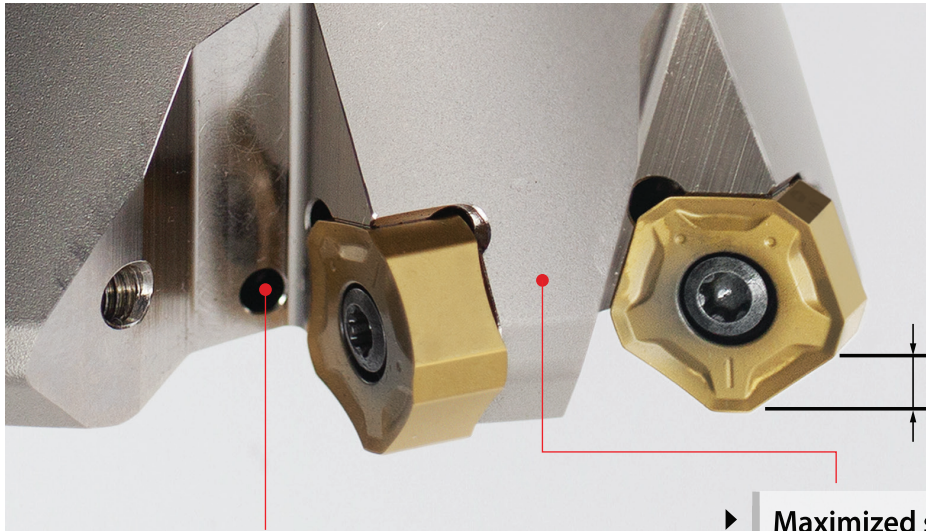
**Tangential type**      **Radial type**

→ **LNKU – 4 Cutting Edges (Double-sided)**

- Long length of cutting edge**  
High depth of cut
- Curved cutting edge**  
Minimized mismatch at step machining
- High positive rake face**  
Optimized chip formation and minimized burr
- High helix cutting edge**  
Smooth cutting and low cutting force
- Thicker insert**  
Ultra rigidity
- Wide wiper flat cutting edge**  
Excellent surface finish
- Tangential clamping system**  
Rigid clamping and stable machining



# PNMU | FACE MILLING 12



## **PNMU12**

**APMax**  
.158"  
4mm

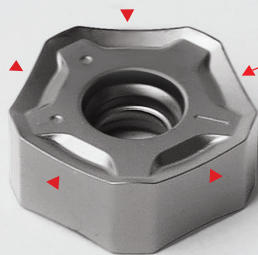
- ▶ **Optimized coolant delivery**  
Improves chip and thermal evacuation

- ▶ **Maximized support behind the insert**  
Improves longevity of cutter body

### → **PNMU – 10 Cutting Edges (Double-sided)**

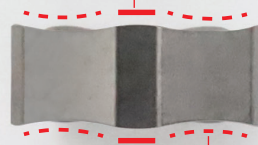


- ▶ **36° entry angle**  
Increased feed rate due to chip thinning, outstanding stability due to direction of force into the spindle



- ▶ **10 true cutting edges (Double-sided)**  
Separation of cutting edge and wiper yields full use of all 10 edges, resulting in outstanding value

- ▶ **Wiper flat cutting edge**  
Excellent surface finish



- ▶ **Curved cutting edge**  
Reduced cutting forces



# ENMX

HIGH FEED MILLING  
**04 06 09**



\* END MILL



## ENMX09

APMax  
.059"  
1.5mm

- ▶ **Optimized coolant delivery**  
Improves chip and thermal evacuation

→ **ENMX – 4 Cutting Edges (Double-sided)**



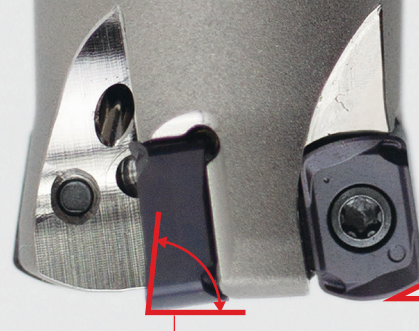
- ▶ **Corner Protection**  
To eliminate chipping

- ▶ **Positive Rake Angle**  
For lower cutting force

- ▶ **Wide Flank Face**  
Rigid Insert Clamping



- ▶ **Thick insert**  
To maximize bulk strength yielding superior predictability and enhancing tool life



## ENMX06

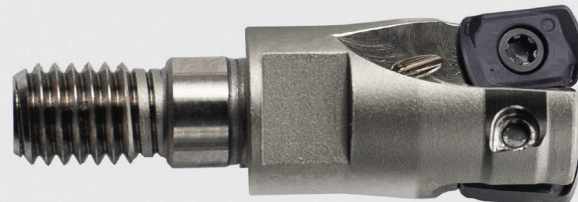
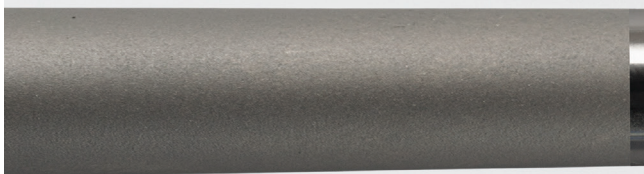
APMax  
.039"  
1mm

- ▶ **Low Entering Angle**  
For high feed rate  
**15° entry angle**

↓  
**Design for Maximum Stability in Long Reach Applications**

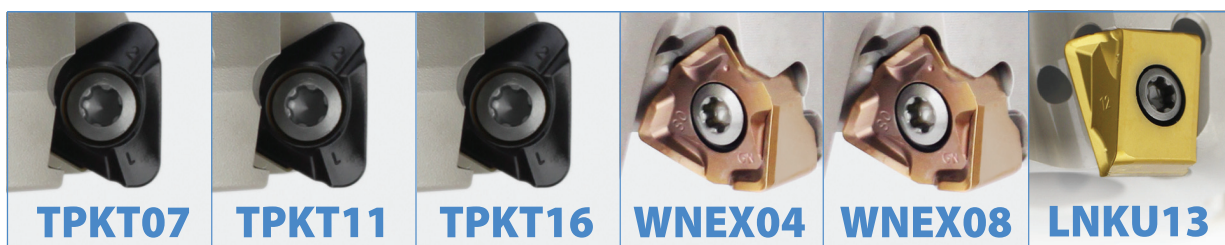
## ENMX04

APMax  
.020"  
0.5mm



\* **MODULAR HEAD**

## → TRUE 90° SHOULDER MILLING



<b>APMax</b>	4.5mm/.177"	7mm/.275"	11mm/.430"	4mm/.157"	7mm/.275"	11mm/.430"
<b>Feed rate/MRR</b>	Lowest	Low	Low to Medium	Low to Medium	Medium	Medium to High
<b>Finish</b>	Best	Best	Best	Better	Better	Good
<b>Machine type</b>	Small	Small	Small to Medium	Small to Medium	Small to Large	Medium to Large
<b>Setup Stability</b>	Low	Low	Low to Decent	Low to Decent	Decent to Good	Good to Great
<b>Spindle interface</b>	Small	Small	Small to Medium	Small to Medium	Medium to Large	Large
<b>Facemills</b>	32-40mm/1.5-2"	2-5"	50-200mm/2"-6"	40-63mm/2-3"	50-125mm/2-5"	40-160mm/2-10"
<b>Endmills</b>	12-40mm/0.5-1.5"	20-40mm/1.25-2"	32-40mm/1.25-2"	20-32mm/0.75-1.5"	32-50mm/1.25-1.5"	-
<b>Modular</b>	- / .625-1.5"	- / 1.25-1.5"	-	20-32mm/0.75-1.5"	32-40mm/1.25-1.5"	-

## → FACE MILLING & PROFILE MILLING



<b>APMax</b>	0.5mm/.020"	1mm/.039"	1.5mm/.059"	4mm/.158"	4mm/.157"	7mm/.275"
<b>Feed rate</b>	High	High	Very high	Medium	Low to Medium	Low
<b>Facing</b>	Good	Good	Good	Best	Good	Good
<b>Finish</b>	Poor	Poor	Poor	Best	Better	Good
<b>Profiling/Ramping</b>	Best	Best	Better	Unsuitable	Good	Good
<b>Machine type</b>	Small	Small	Small to Medium	Small to Large	Small to Medium	Small to Large
<b>Setup Stability</b>	Low	Low	Decent	Decent to Good	Low to Decent	Decent to Good
<b>Spindle interface</b>	Small to Medium	Small to Medium	Small to Large	Small to Large	Small to Medium	Medium to Large
<b>Facemills</b>	-	40-50mm/1.5-3"	50-125mm/2"-6"	50-200mm/2-10"	40-63mm/2-3"	50-125mm/2-5"
<b>Endmills</b>	8-21mm/.375-1.25"	16-32mm/.625-1.5"	25-40mm/1-1.5"	-	20-32mm/0.75-1.5"	32-50mm/1.25-1.5"
<b>Modular</b>	10-32mm/.375-1.375"	16-42mm/.625-1.5"	- / 1-1.5"	-	20-32mm/0.75-1.5"	32-40mm/1.25-1.5"

# YG-1 ROTARY TOOLING

HYDRAULIC  
CHUCK (Power E)



SHELL MILL  
ARBOR



END MILL  
HOLDER



SK SLIM CHUCK



ER COLLET  
CHUCK



SHRINK FIT  
HOLDER



POWER MILLING  
CHUCK



TAPPING ER  
CHUCK



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