

HIGH PERFORMANCE MILLING



yg1usa.com

# TRUE 90° SHOULDER MILLING

TPKT



WNEX



LNKU



# FACE MILLING & HIGH FEED MILLING

PNMU



ENMX



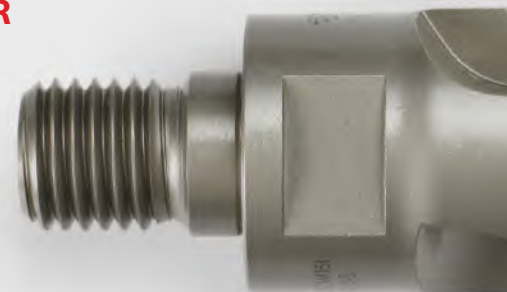
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**YG-1** INDEXABLE MILLING

# TPKT | TRUE 90° SHOULDER MILLING



## MODULAR HEAD



## END MILL

### TPKT 11

THICKNESS	AP
.169" 4.28mm	.275" 7mm



### TRUE 90° SHOULDER

Positive Insert

### TPKT 16

AP	THICKNESS
.433" 11mm	.212" 5.38mm

Larger Core →

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

→ **TPKT – 3 Cutting Edges**  
High Positive Insert for Low Cutting Forces

- ▶ **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

- ▶ **Maximized support behind the insert**  
Improves longevity of cutter body
- TRUE 90° SHOULDER Negative Insert**
- ▶ **3 face contact for maximum insert stability**  
Enhances tool life and component quality
- ▶ **Optimized coolant delivery**  
Improves chip and thermal evacuation
- ▶ **2-stage rake face**  
Optimized chip flow

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

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



- ▶ **Wide wiper**  
Class leading floor finish



- ▶ **Patent chip groove**  
Superior chip evacuation

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



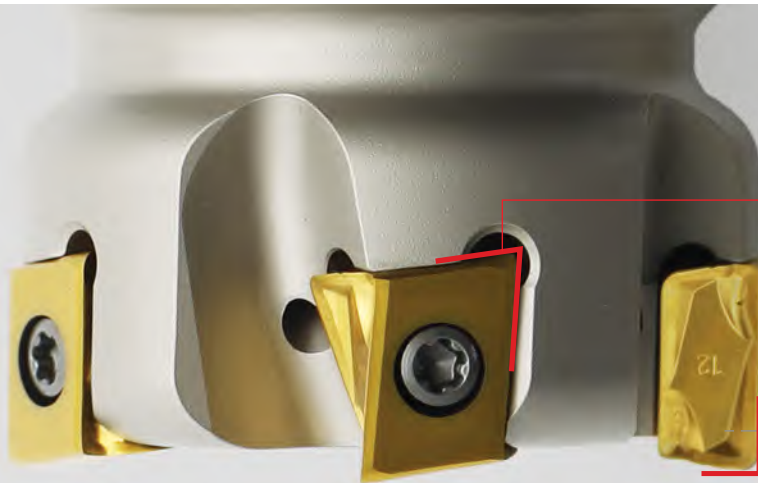
- ▶ **Thick insert**  
To maximize bulk strength yielding superior predictability and enhancing tool life

### END MILL



### MODULAR HEAD





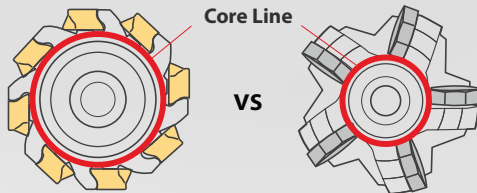
- ▶ **Higher clamping stability**  
Wedge shaped pocket

**TRUE 90° SHOULDER**  
**Negative Insert**



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

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



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



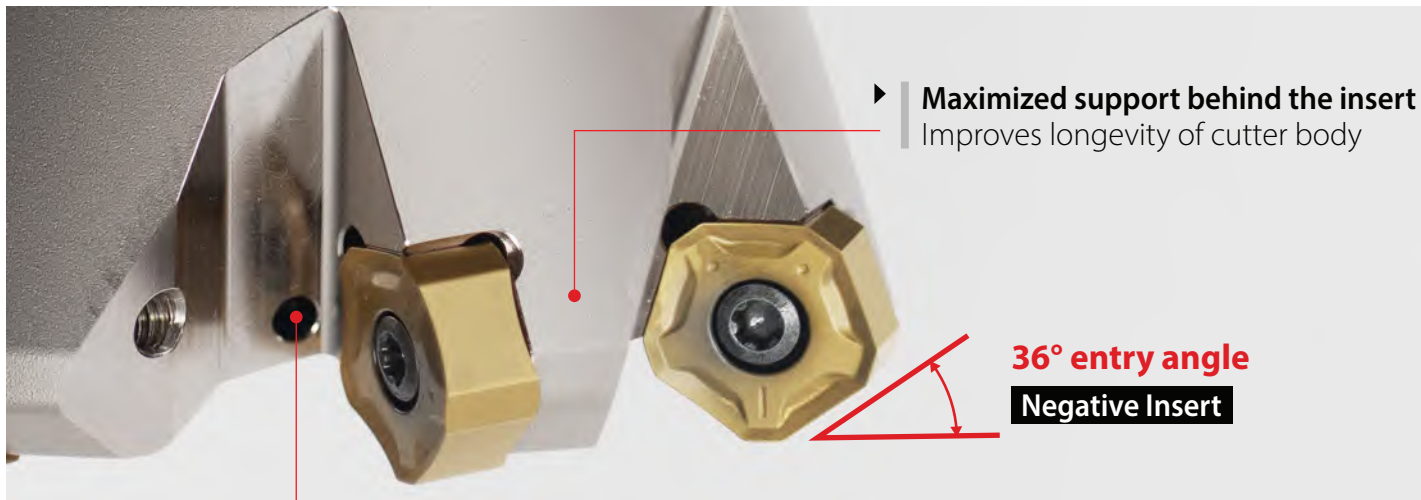
- ▶ **Thicker insert**  
Ultra rigidity

- ▶ **Wide wiper flat cutting edge**  
Excellent surface finish

- ▶ **Tangential clamping system**  
Rigid clamping and stable machining



# PNMU | FACE MILLING



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

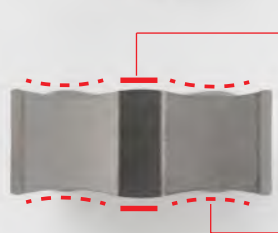


- ▶ **36-degree entry angle**  
Increased feed rate due to chip thinning, outstanding stability due to direction of force into the spindle.



- ▶ **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



**END MILL**

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

▶ **Corner Protection**  
To eliminate chipping



▶ **Wide Flank Face**  
Rigid Insert Clamping



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

▶ **Low Entering Angle**  
For high feed rate

**15° entry angle**  
**Negative Insert**

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



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



**MODULAR HEAD**



## → TRUE 90° SHOULDER MILLING



<b>AP Max</b>	7mm/.275"	11mm/.430"	11mm/.430"	11mm/.430"
<b>Feed rate/MRR</b>	Low	Low to Medium	Low to Medium	Medium to High
<b>Shoulder Finish</b>	Best	Best	Best	Good
<b>Floor Finish</b>	Good	Good	Good	Good
<b>Machine type</b>	Small	Small to Medium	Small to Medium	Medium to Large
<b>Setup Stability</b>	Low	Low to Decent	Low to Decent	Good to Great
<b>Spindle interface</b>	Small	Small to Medium	Small to Medium	Large
<b>Facemills</b>	2-5"	50-200mm/2-6"	50-200mm/2-6"	40-160mm/2-10"
<b>Endmills</b>	20-40mm/1.25-2"	32-40mm/1.25-2"	32-40mm/1.25-2"	—
<b>Modular</b>	— /1.25-1.5"	—	—	—

## → FACE MILLING & HIGH FEED MILLING



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

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POWER MILLING  
CHUCK



TAPPING ER  
CHUCK



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