



XSHLD Mini 6x90°- WNKU0606

High-Productivity 6-Edge Milling Solution

“Lower Cutting Forces · Higher Productivity .”

FAMILY · FACE & SHOULDER MILLING

A 6-edge double-sided insert engineered for productive face & shoulder milling. The 90° geometry and optimised XM chip-breaker cut forces and improve finish — a direct upgrade path from WNMX08 on general CNC machining centres.

QUICK SPECS

Insert Type	WNKU060608-XM
Cutting Edges	6 (Double-Sided)
Angle	90°
Thickness	06 mm
Ap Range	0.5 – 3.5 mm
Grades	XT830 · XT840 -C · XT930



KEY BENEFITS & PERFORMANCE



6 USABLE EDGES

Double-sided geometry gives the lowest cost-per-edge in its class.



90° CUTTING ANGLE

True shoulder & face milling capability in one insert.



AP 0.5–3.5 MM

Depth-of-cut flexibility from light finishing to medium roughing.



BROAD COVERAGE

Steel, cast iron, stainless & hardened materials — Ø25 to Ø80 mm bodies.

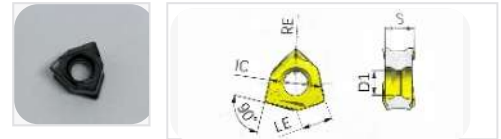
INSERT SPECIFICATION

INSERT CODE	GRADE	APPLICATION	AVAIL.
WNKU060608-XM-XT830	XT830	Steel • Cast Iron	●
WNKU060608-XM-XT840-C	XT840-C	Stainless • Heat-Resistant	●
WNKU060608-XM-XT930	XT930	Hardened CI • Hard Steel ≤55 HRC	●

● Stockable ○ Non-stockable

Insert seating: single screw clamp, Torx T15. One insert designation (WNKU060608-XM) services the entire body range.

INSERT – PICTORIAL VIEW



TOP – 6 EDGES

DIMENSIONAL DIAGRAM

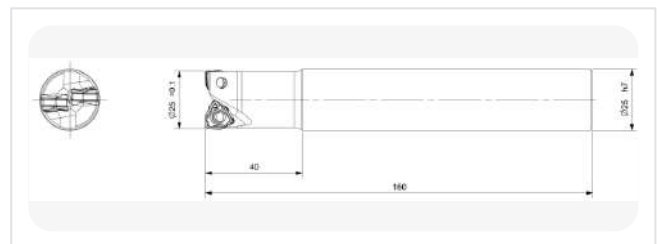
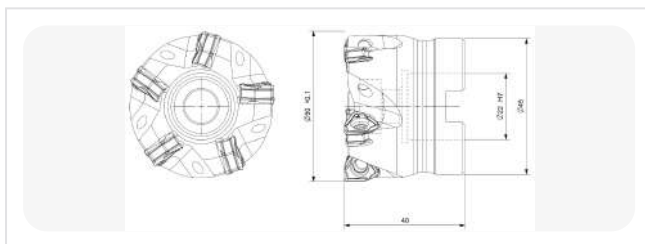
IC	LE	S	Re	D1
10	6.0	6.1	0.8	3.8

All dimensions in mm

WINKU060608-XM

Double-sided • 6 cutting edges • XM chip-breaker.

CUTTER BODY – 2D REFERENCE



CUTTER BODY RANGE

CUTTER BODY CODE	TYPE	Ø (MM)	ARBOR	Z	AVAIL.
XTEM-2525-Z2-160L-WNKU06	Endmill	Ø 25	-	2	●
XTEM-3232-Z3-160L-WNKU06	Endmill	Ø 32	-	3	●
XTSM-D40-A16-Z4-WNKU06	Face mill	Ø 40	16 mm	4	●
XTSM-D50-A22-Z5-WNKU06	Face mill	Ø 50	22 mm	5	●
XTSM-D63-A22-Z6-WNKU06	Face mill	Ø 63	22 mm	6	●
XTSM-D80-A27-Z7-WNKU06	Face mill	Ø 80	27 mm	7	●

● Stockable ○ Non-stockable

SPARES

Spare Part	Specification	Avail.
Screw	M4 × 11	●
Key	T15	●

☒ Stockable ☐ Non-stockable

■ SINGLE SCREW CLAMP · TORX T15

GRADE COMPARISON

PARAMETER	XT830	XT840-C	XT930
Grade Type	PVD Coated Carbide	PVD Coated Carbide	CVD+PVD Hybrid
Coating	TiAlN	AlTiN	MT-TiCN / Al ₂ O ₃
ISO Material Group	P K	K hard CI	M S
Workpiece Materials	Steel, Alloy Steel, Grey CI, Ductile CI	304/316 SS, Duplex SS, Heat-Resistant Steels	Chilled CI, Hardened Steel ≤55 HRC

CUTTING PARAMETERS

STARTING VALUES

CUTTING PARAMETERS — ADJUST PER MACHINE RIGIDITY & COOLANT

Parameter	XT830	XT840-C	XT930
Cutting Speed v_c (m/min)	80 – 150	100 – 220	100 – 200
Feed per Tooth f_z (mm)	0.05 – 0.20	0.04 – 0.15	0.04 – 0.12
Axial Depth a_p (mm)	0.5 – 3.5	0.5 – 2.5	0.5 – 1.5
Radial Depth a_e	Up to 0.8D	Up to 0.6D	Up to 0.5D
Dry / Wet Cutting	Both	Wet preferred	Dry preferred
Application Type	Roughing to Semi-finishing	Semi-finishing	Finishing / Semi-finish
Surface Finish R_a	≤ 3.2 μm	≤ 1.6 μm	≤ 0.8 μm
Hardness (HRC)	Up to 35	Up to 40	35 – 55



Cutting parameters are indicative starting values. Optimise based on machine rigidity, workpiece hardness, fixturing, and coolant availability.



CASE STUDY

WNKU0606 field trial vs Competitor (D)

INSERT TESTED WNKU060608-XM · XT840-C	MATERIAL & HARDNESS SG Iron	OPERATION Face Milling	FIELD TRIAL VS COMPETITOR (D)
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MACHINING PARAMETERS

Parameter	Competitor (D)	XCUT
Depth of Cut · a_p (mm)	2.5	2.5
Cutting Speed · V_c (m/min)	189	189
Feed · f_z (mm/tooth)	0.10	0.12

TOOL LIFE

No. of components per edge



At matched speed & depth of cut, WNKU0606 ran a 20% higher feed per tooth (0.12 vs 0.10 mm) — driving the cost saving while still extending edge life.



SG IRON COMPONENT

RESULT

Reduced cost by 20% & increased tool life by 17%

-20%

Cost per component

+17%

Tool life · 150 → 176

ABOUT XCUT TECHNOLOGIES

ENHANCING PRODUCTIVITY, DRIVING VALUES.

Founded in 1976 and relaunched as XCUT Technologies in 2017, we are an Indian precision cutting-tools company committed to enhancing productivity and driving values across Indian manufacturing. Our portfolio spans **Turning, Milling, Grooving, Drilling and Threading** solutions — engineered for real-world Indian machining conditions.

Innovative Solutions
Indian Values

CONTACT US

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DOCUMENT INFORMATION

Product	WNKU0606 – F&S Milling Insert
Document No.	XCUT-NP-WNKU0606-001
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