

# Mill 4™ -12KT

## A Full Tangential Shoulder Milling Solution

Kennametal's Mill 4-12KT requires up to 15% less horsepower, enabling increased feed rates even on 40 taper machines. Its proprietary insert design features a triangular shaped margin that provides unprecedented stability in steel and cast-iron applications and its minimal axial runout delivers excellent floor finish. With seven grades, seven corner radii and a depth-of-cut range up to .472" (12mm), the Mill 4-12KT can bring new versatility to your shoulder milling applications.



### Machinists can expect

- A proprietary insert design that delivers unprecedented stability in steel and cast-iron applications.
- A comprehensive portfolio that offers a wide range of standard inch and metric sizes.
- **NEW!** Precision pressed PU Geometry for the lowest cost per cutting edge.

# PSTS Inserts for Mill 4™-12KT

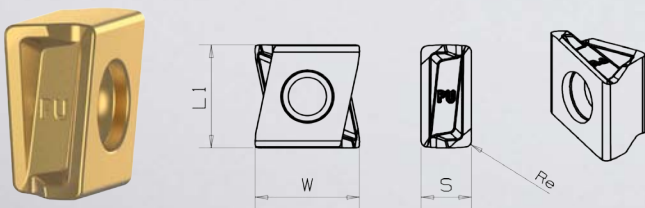
PSTS inserts further enhance the true, full-solution tangential milling platform Mill 4-12KT and deliver improved stability. The inserts deliver the lowest cost per cutting edge and increased metal removal rates, ideal for automotive, energy and general engineering when shoulder milling and slotting.



The new 4-edge inserts feature:

- Precision pressed PU Geometry for the lowest cost per cutting edge
- Strong cutting edges for higher productivity and increased MRRs

## NEW! Mill 4-12KT • Inserts • IC12



- first choice
- alternate choice

P	●	○	○	●	●	○	●
M	●	○	○	○	○	●	●
K	○	●	○	○	○	○	○
N	○	○	○	○	○	○	○
S	●	○	○	○	○	●	●
H	○	○	○	○	○	○	○

Catalog Number	LI		S		W		R <sub>e</sub>		CE	KC522M	KCK20B	KCPK30	KCPM40	KCSM40	KC725M
	mm	in	mm	in	mm	in	mm	in							
LNPQ120608ERPUKT4	13,00	0.512	6,35	0.250	13,39	0.527	0,8	0.031	4						

# Industries



## Mill 4™-12KT • INSERT SELECTION GUIDE • IC12

Material Group	Light Machining		Medium Machining		Heavy Machining	
P1-P2	.E..GE	KC522M	.E..PU	KCPM40	.E..HD	KCPM40
P3-P4	.E..GE	KC522M	.E..PU	KCPM40	.E..HD	KCPM40
P5-P6	.E..GE	KC522M	.E..PU	KC725M	.E..HD	KCPK30
M1-M2	.E..GE	KC522M	.E..PU	KCPM40	.E..HD	KCSM40
M3	.E..GE	KC522M	.E..PU	KCSM40	.E..HD	KCSM40
K1-K2	.E..GE	KCK15	.E..PU	KCK20B	.E..HD	KCK15
K3	.E..GE	KCK20B	.E..PU	KCK20B	.E..HD	KCK20B
S1-S2	.E..GE	KC522M	.E..PU	KCSM40	-	-
S3	.E..GE	KC522M	.E..GE	KCSM40	-	-
S4	.E..GE	KC522M	.E..GE	KCSM40	-	-

## Mill 4™-12KT • RECOMMENDED STARTING FEEDS [MM] • IC12 **METRIC**

Insert Geometry	Feed per Tooth (Fz) in Relation to % of Radial Engagement (ae)														
	10%			20%			30%			40%			50-100%		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
.E..GE	0.12	<b>0.33</b>	-	0.09	<b>0.25</b>	-	0.08	<b>0.22</b>	-	0.07	<b>0.2</b>	-	0.07	<b>0.2</b>	-
.E..PU	0.15	<b>0.35</b>	0.45	0.12	<b>0.3</b>	0.4	0.1	<b>0.25</b>	0.35	0.08	<b>0.2</b>	0.33	0.08	<b>0.2</b>	0.3
.E..HD	-	<b>0.35</b>	0.55	-	<b>0.3</b>	0.44	-	<b>0.25</b>	0.38	-	<b>0.2</b>	0.36	-	<b>0.2</b>	0.35

L = Light Machining; M = Medium Machining; H = Heavy Machining.

## Mill 4™-12KT • RECOMMENDED STARTING FEEDS [IPT] • IC12 **INCH**

Insert Geometry	Feed per Tooth (Fz) in Relation to % of Radial Engagement (ae)														
	10%			20%			30%			40%			50-100%		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
.E..GE	0.005	<b>0.013</b>	-	0.004	<b>0.010</b>	-	0.003	<b>0.009</b>	-	0.003	<b>0.008</b>	-	0.003	<b>0.008</b>	-
.E..PU	0.006	<b>0.014</b>	0.018	0.005	<b>0.012</b>	0.016	0.004	<b>0.010</b>	0.014	0.003	<b>0.008</b>	0.013	0.003	<b>0.008</b>	0.012
.E..HD	-	<b>0.014</b>	0.022	-	<b>0.012</b>	0.017	-	<b>0.010</b>	0.015	-	<b>0.008</b>	0.014	-	<b>0.008</b>	0.014

L = Light Machining; M = Medium Machining; H = Heavy Machining.

**.E..GE** geometry is the first choice for **stainless steels, high-temp alloys & light** applications.

**.E..PU** geometry is the first choice when machining **steels & cast iron** machining in **medium** applications.

**.E..HD** geometry is the first choice for **steels & cast iron** machining in **heavy** applications.

# EXPLORE PSTS INSERTS FOR MILL 4<sup>TM</sup> -12<sup>KT</sup>



LET'S TAKE YOUR MANUFACTURING  
TO THE NEXT LEVEL

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