



## Threading, Grooving, and Cut-Off

# Save up to 45% on Kennametal Tooling Kits for Threading, Grooving, and Cut-Off

### ***Special Offer!***

**A4™ reduces cycle times and eliminates turret indexes:** one tool for turning, facing, grooving, face-grooving, and cut-off applications!

**A2™ boasts superior tool life and unbeatable chip control:** positive rake cutting action combined with Kennametal's high performance KC5025 grade!

**Top Notch® is an excellent solution for shallow groove depth to width ratios of 1.5 or less:** rigid clamping system and 10 degree positive cutting action reduce forces and improve chip control!

**With the LT threading platform, get more parts per insert with superior chip control:** LT insert's three cutting edges and low-profile design are the best solution for most threading applications!

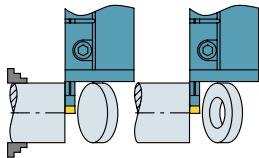
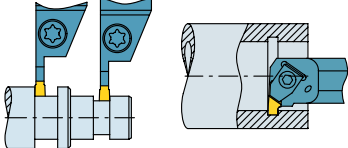
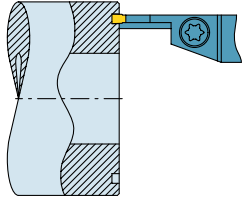


***Don't miss out on this exciting opportunity!***

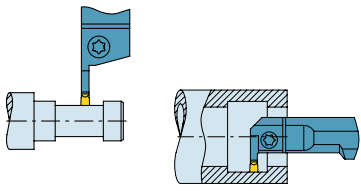
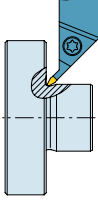
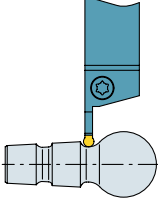
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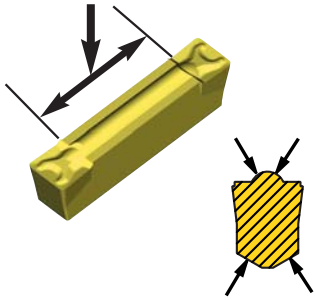
**Promotion Terms & Conditions:** 1) Offer valid from 2/15/2008 through 9/30/2008 and is subject to product availability. 2) Offer applies to standard catalog product only and is not valid in combination with any other promotional offer or tooling certificates. 3) Offer void where prohibited by law. All local, state, and federal laws apply. Other restrictions may apply. 4) Kennametal Inc. reserves the right to alter or cancel this promotion at any time and without further notice.

## Grooving & Cut-Off Application Guide

	Cut-Off	Grooving	Face Grooving
<b>Application</b>			
<b>TOP NOTCH Grooving</b> generally recommended for cutting depth/width ratios of 1.5 or less		<p><b>Inserts</b></p> <ul style="list-style-type: none"> <li>cutting widths from .031 to .375 inch (0,8 to 9,5 mm).</li> <li>cutting depths from .050 to .375 inch (1,27 to 9,5 mm).</li> <li>chip control, positive rake, and neutral flat top inserts are available.</li> </ul> <p><b>OD Application</b></p> <ul style="list-style-type: none"> <li>integral shank toolholders and KM® heads are available.</li> </ul> <p><b>ID Application</b></p> <ul style="list-style-type: none"> <li>boring bars with a .440 inch (11,2 mm) minimum bore diameter.</li> </ul>	<p><b>Minimum Face Groove Diameter Capabilities</b></p> <ul style="list-style-type: none"> <li>standard inserts: 2.125 to 13 inch (54 to 330 mm) depending on size.</li> <li>NF/NFD face grooving inserts: .940 to 2.25 inch (24 to 57 mm).</li> <li>all have unlimited maximum diameter.</li> </ul> <p><b>Cutting Width Range</b></p> <ul style="list-style-type: none"> <li>standard inserts: .031 to .375 inch (0,8 to 9,5 mm).</li> <li>NF/NFD face grooving inserts: .125 to .375 inch (3,2 to 9,5 mm).</li> </ul> <p><b>Cutting Depth Range</b></p> <ul style="list-style-type: none"> <li>standard inserts: .050 to .375 inch (1,27 to 9,5 mm).</li> <li>NF/NFD face grooving inserts: .150 to .250 inch (3,8 to 6,35 mm).</li> </ul>
<b>A4 Groove &amp; Turn</b>	<p><b>Cut-Off Capabilities</b></p> <ul style="list-style-type: none"> <li>cut-off width from .118 to .157 inch (3 to 4 mm).</li> <li>satisfies extreme demands for rigidity and dimensional accuracy.</li> <li>integral screw-clamping toolholders with .670 inch (17 mm) maximum cutting depth available.</li> <li>economical double-edge inserts.</li> </ul>	<p><b>Inserts</b></p> <ul style="list-style-type: none"> <li>cutting widths from .118 to .396 inch (3 to 10,05 mm).</li> <li>precision ground and molded inserts — all available with chip control.</li> </ul> <p><b>OD Application</b></p> <ul style="list-style-type: none"> <li>integral shank toolholders and modular KM heads are available.</li> <li>cutting depths from .55 to 1.02 inch (14 to 26 mm).</li> </ul> <p><b>ID Application</b></p> <ul style="list-style-type: none"> <li>boring bars with .984 inch (25 mm) minimum bore diameter.</li> <li>cutting widths from .118 to .250 inch (3 to 6,35 mm).</li> </ul>	<p><b>Minimum Face Groove Diameter Capabilities</b></p> <ul style="list-style-type: none"> <li>1.417 inch (36 mm) minimum diameter.</li> <li>unlimited maximum diameter.</li> </ul> <p><b>Cutting Width Range</b></p> <ul style="list-style-type: none"> <li>cutting widths from .118 to .199 inch (3 to 5,05 mm).</li> </ul> <p><b>Cutting Depth Range</b></p> <ul style="list-style-type: none"> <li>cutting depths of .276 to .748 inch (7 to 19 mm).</li> </ul>
<b>A2 Cut-Off</b>	<p><b>Cut-Off Capabilities</b></p> <ul style="list-style-type: none"> <li>cut-off widths from .063 to .315 inch (1,6 to 8 mm).</li> <li>left- and right-hand styles with 6° to 16° lead angles.</li> <li>self-clamping blades and screw-clamping integral shank toolholders are available.</li> <li>single-edge inserts for maximum depth capability.</li> </ul>		

# Technical Information

	Groove & Turn	Undercutting	Profiling
Application			
<b>TOP NOTCH Grooving</b> generally recommended for cutting depth/width ratios of 1.5 or less		<p><b>Top Notch Undercutting Capabilities</b></p> <ul style="list-style-type: none"> <li>• undercutting insert widths from .094 to .156 inch (2,4 to 4 mm).</li> <li>• economical double-ended inserts.</li> </ul>	<p><b>Recommended for Moderate to Heavy Stock Removal at Shallow Profile Depths</b></p> <p><b>Full Radius Inserts</b></p> <ul style="list-style-type: none"> <li>• cutting widths from .062 to .250 inch (1,57 to 6,35 mm).</li> <li>• cutting depths from .094 to .250 inch (2,39 to 6,35 mm).</li> </ul> <p><b>OD Application</b></p> <ul style="list-style-type: none"> <li>• integral shank toolholders and KM heads are available.</li> </ul>
<b>A4 Groove &amp; Turn</b>	<p><b>Recommended for Heavy Stock Removal, Particularly in Turning Applications</b></p> <p><b>Inserts</b></p> <ul style="list-style-type: none"> <li>• cutting widths from .118 to .396 inch (3 to 10,05 mm).</li> <li>• double-ended, precision ground, and molded inserts — all available with chip control.</li> </ul> <p><b>OD Application</b></p> <ul style="list-style-type: none"> <li>• integral shank toolholders and modular KM heads are available.</li> <li>• cutting depths from .55 to 1.02 inch (14 to 26 mm).</li> </ul> <p><b>ID Application</b></p> <ul style="list-style-type: none"> <li>• boring bars with .984 inch (25 mm) minimum bore diameter.</li> <li>• cutting widths from .118 to .250 inch (3 to 6,35 mm).</li> </ul>		<p><b>Recommended for Heavy Stock Removal</b></p> <p><b>Full Radius Inserts</b></p> <ul style="list-style-type: none"> <li>• cutting widths from .118 to .396 inch (3 to 10,05 mm).</li> </ul> <p><b>OD Application</b></p> <ul style="list-style-type: none"> <li>• integral shank toolholders and modular KM heads are available.</li> <li>• cutting depths from .55 to 1.02 inch (14 to 26 mm).</li> </ul>
<b>A2 Cut-Off</b>			

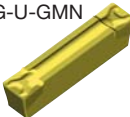
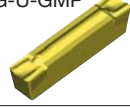
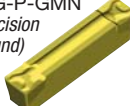


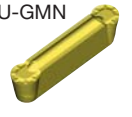
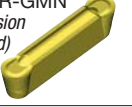
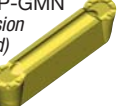
Kennametal's versatile **A4 Groove and Turn System** effectively performs a variety of operations, including turning, facing, profiling, OD grooving, face grooving, boring, ID grooving, and cutoff operations with a single tool. All of these operations are made possible because of A4's extremely stable clamping system.

The A4 insert design features a long clamp, a precision-ground 120° V-bottom prism seating surface, and a unique top rail that resists side deflection. These features enable the insert to perform at much higher feed rates and depths of cut in side turning applications, compared to other groove and turn systems.

**KC5025™** grade is the workhorse for our A4 product line and for grooving in general. Its PVD TiAlN coating, combined with a 10% cobalt substrate, provides excellent toughness and is a great choice for general-purpose applications.

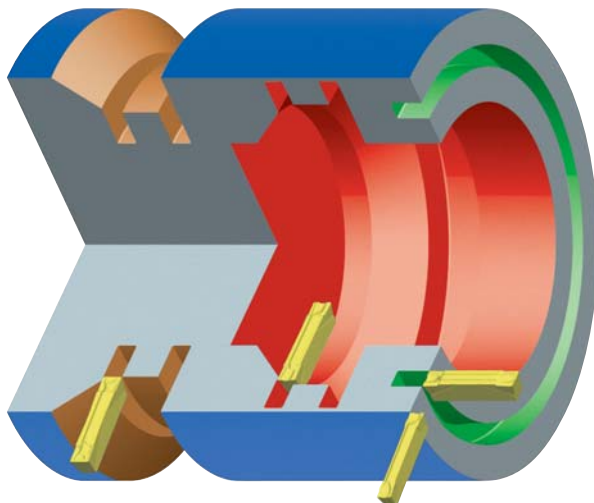
## A4 Chip Control Selection by Material

Chipbreaker Type	Application Range	Steel	Stainless Steel	Cast Iron	Non-Ferrous	High-Temp Alloy	Hardened Material
A4G-U-GMN 	<b>Groove/Turn</b> – stable cutting edge – for higher feed rates	●	●	●	●	●	●
A4G-U-GMP 	<b>Groove/Turn</b> – positive rake angle – reduced cutting force – small to medium feed rates	●	●	●	●	●	●
A4G-P-GMN (precision ground) 	<b>Groove/Turn</b> – stable cutting edge – general grooving for specific widths	●	●	●	●	●	●

Chipbreaker Type	Application Range	Steel	Stainless Steel	Cast Iron	Non-Ferrous	High-Temp Alloy	Hardened Material
A4R-U-GMN 	<b>Groove/Turn</b> – stable cutting edge – for higher feed rates	●	●	●	●	●	●
A4R-R-GMN (precision ground) 	<b>Groove/Turn</b> – positive rake angle – ground cutting edge	●	●	●	●	●	●
A4R-P-GMN (precision ground) 	<b>Groove/Turn</b> – stable cutting edge – general grooving for specific widths	●	●	●	●	●	●

Groove Depth Capabilities — The last two digits of the A4 toolholder designation indicate the maximum groove depth capability in millimeters:

14 mm = .550	19 mm = .750
17 mm = .670	20 mm = .790



## A4 Speed Quick Guide

grade	Steel	Stainless Steel	Cast Iron	Non-Ferrous	High-Temp Alloy	Hardened Material
KC5025	200–600	180–550	220–650	500–1800	85–280	45–150

Speed in sfm.

## A4 Feed Rate Quick Guide

insert	recommended feed rate by size (ipr)			
	3	4	5	6
-GMN	.003–.008	.004–.012	.005–.016	.005–.017
-GMP	.002–.007	.002–.010	.004–.014	.004–.015
-CF	.002–.006	.002–.009	—	—

NOTE: Recommendations given are for square-end A4 inserts. For full radius inserts, feed rates can be increased by 30%.

## Maximum Turn/Profile Depth (in.)

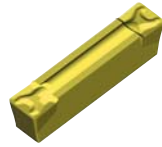
insert	3	4	5	6
-GMN				
-GMP	.070	.110	.140	.170

# A4 Ordering Information

## A4 GMN-style chipbreaker, precision-ground, inch

**\$109** each

Save up to 50%\*



A4G-P-GMN

Each kit includes one A4 toolholder, five inserts in the KC5025 grade, and one Torx wrench.

The GMN precision-ground geometry is designed to provide a very stable cutting action on all workpiece materials.

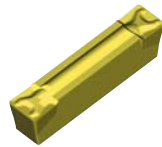


seat size	cutting width		insert radius	toolholder	insert style	grade KC5025	right hand order number	left hand order number
	inch	mm						
3/4" square x 5" long								
3	.125	3,18	.008 R	A4SM R/L 120314	A4G125I03P05GMN	●	KITL2309B	KITL2310B
3	.125	3,18	.016 R	A4SM R/L 120314	A4G125I03P1GMN	●	KITL2311B	KITL2312B
4	.187	4,75	.016 R	A4SM R/L 120414	A4G187I04P1GMN	●	KITL2315B	KITL2316B
4	.187	4,75	.032 R	A4SM R/L 120414	A4G187I04P2GMN	●	KITL2317B	KITL2318B
1" square x 6" long								
3	.125	3,18	.008 R	A4SM R/L 160317	A4G125I03P05GMN	●	KITL2321B	KITL2336B
3	.125	3,18	.016 R	A4SM R/L 160317	A4G125I03P1GMN	●	KITL2337B	KITL2338B
4	.187	4,75	.016 R	A4SM R/L 160417	A4G187I04P1GMN	●	KITL2324B	KITL2325B
4	.187	4,75	.032 R	A4SM R/L 160417	A4G187I04P2GMN	●	KITL2326B	KITL2327B

## A4 GMN-style chipbreaker, precision-molded

**\$109** each

Save up to 48%\*



A4G-U-GMN

Each kit includes one A4 toolholder, five inserts in the KC5025 grade, and one Torx wrench.

The GMN geometry is designed to provide a very stable cutting action on steel and cast iron.



seat size	cutting width		insert radius	toolholder	insert style	grade KC5025	right hand order number	left hand order number
	inch	mm						
3/4" square x 5" long								
3	.120	3,05	.008 R	A4SM R/L 120314	A4G0305M03U02GMN	●	KITL2000B	KITL2001B
3	.120	3,05	.016 R	A4SM R/L 120314	A4G0305M03U04GMN	●	KITL2002B	KITL2003B
4	.159	4,05	.016 R	A4SM R/L 120414	A4G0405M04U04GMN	●	KITL2006B	KITL2007B
4	.159	4,05	.031 R	A4SM R/L 120414	A4G0405M04U08GMN	●	KITL2008B	KITL2009B
5	.199	5,05	.016 R	A4SM R/L 120519	A4G0505M05U04GMN	●	KITL2012B	KITL2013B
5	.199	5,05	.031 R	A4SM R/L 120519	A4G0505M05U08GMN	●	KITL2014B	KITL2015B
1" square x 6" long								
3	.120	3,05	.008 R	A4SM R/L 160317	A4G0305M03U02GMN	●	KITL2018B	KITL2019B
3	.120	3,05	.016 R	A4SM R/L 160317	A4G0305M03U04GMN	●	KITL2020B	KITL2021B
4	.159	4,05	.016 R	A4SM R/L 160417	A4G0405M04U04GMN	●	KITL2024B	KITL2025B
4	.159	4,05	.031 R	A4SM R/L 160417	A4G0405M04U08GMN	●	KITL2026B	KITL2027B
5	.199	5,05	.016 R	A4SM R/L 160520	A4G0505M05U04GMN	●	KITL2030B	KITL2031B
5	.199	5,05	.031 R	A4SM R/L 160520	A4G0505M05U08GMN	●	KITL2032B	KITL2033B

\*Savings based on kit items if purchased individually at first-column list price. Limited time offer. Prices subject to change without notice. Prices in this catalog are applicable in both U.S. and Canada.

### A4 GMN-style chipbreaker, precision-ground, full radius, inch widths

**\$109** each  
 Save up to 48%\*



A4R-P-GMN

Each kit includes one A4 toolholder, five inserts in the KC5025 grade, and one Torx wrench.

The GMN precision-ground geometry is designed to provide a very stable cutting action on all workpiece materials.



seat size	cutting width		insert radius	toolholder	insert style	grade KC5025	right hand order number	left hand order number
inch	mm							
3/4" square x 5" long								
3	.125	3,18	full R	A4SM R/L 120314	A4R125I03P00GMN	●	<b>KITL2313B</b>	<b>KITL2314B</b>
4	.187	4,75	full R	A4SM R/L 120414	A4R187I04P00GMN	●	<b>KITL2319B</b>	<b>KITL2320B</b>
1" square x 6" long								
3	.125	3,18	full R	A4SM R/L 160317	A4R125I03P00GMN	●	<b>KITL2322B</b>	<b>KITL2323B</b>
4	.187	4,75	full R	A4SM R/L 160417	A4R187I04P00GMN	●	<b>KITL2328B</b>	<b>KITL2329B</b>

### A4 GMN-style chipbreaker, precision-molded, full radius

**\$109** each  
 Save up to 48%\*



A4R-U-GMN

Each kit includes one A4 toolholder, five inserts in the KC5025 grade, and one Torx wrench.

The GMN geometry is designed to provide a very stable cutting action on steel and cast iron.



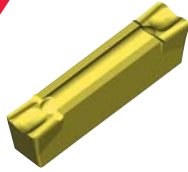
seat size	cutting width		insert radius	toolholder	insert style	grade KC5025	right hand order number	left hand order number
inch	mm							
3/4" square x 5" long								
3	.120	3,05	full R	A4SM R/L 120314	A4R0305M03U00GMN	●	<b>KITL2004B</b>	<b>KITL2005B</b>
4	.159	4,05	full R	A4SM R/L 120414	A4R0405M04U00GMN	●	<b>KITL2010B</b>	<b>KITL2011B</b>
5	.199	5,05	full R	A4SM R/L 120519	A4R0505M05U00GMN	●	<b>KITL2016B</b>	<b>KITL2017B</b>
1" square x 6" long								
3	.120	3,05	full R	A4SM R/L 160317	A4R0305M03U00GMN	●	<b>KITL2022B</b>	<b>KITL2023B</b>
4	.159	4,05	full R	A4SM R/L 160417	A4R0405M04U00GMN	●	<b>KITL2028B</b>	<b>KITL2029B</b>
5	.199	5,05	full R	A4SM R/L 160520	A4R0505M05U00GMN	●	<b>KITL2034B</b>	<b>KITL2035B</b>

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# A4 Ordering Information

## A4 GMP-style chipbreaker, precision-molded

**\$109** each  
Save up to 48%\*



A4G-U-GMP

Each kit includes one A4 toolholder, five inserts in the KC5025 grade, and one Torx wrench.

The GMP geometry is designed with a positive cutting action and is ideal for machining stainless steels, non-ferrous alloys, and high-temp alloys.



seat size	cutting width		insert radius	toolholder	insert style	grade KC5025	right hand order number	left hand order number
inch	mm							
3/4" square x 5" long								
3	.120	3,05	.008 R	A4SM R/L 120314	A4G0305M03U02GMP	●	KITL2036B	KITL2037B
3	.120	3,05	.016 R	A4SM R/L 120314	A4G0305M03U04GMP	●	KITL2038B	KITL2039B
4	.159	4,05	.016 R	A4SM R/L 120414	A4G0405M04U04GMP	●	KITL2042B	KITL2043B
4	.159	4,05	.031 R	A4SM R/L 120414	A4G0405M04U08GMP	●	KITL2044B	KITL2045B
5	.199	5,05	.016 R	A4SM R/L 120519	A4G0505M05U04GMP	●	KITL2048B	KITL2049B
5	.199	5,05	.031 R	A4SM R/L 120519	A4G0505M05U08GMP	●	KITL2050B	KITL2051B
1" square x 6" long								
3	.120	3,05	.008 R	A4SM R/L 160317	A4G0305M03U02GMP	●	KITL2054B	KITL2055B
3	.120	3,05	.016 R	A4SM R/L 160317	A4G0305M03U04GMP	●	KITL2056B	KITL2057B
4	.159	4,05	.016 R	A4SM R/L 160417	A4G0405M04U04GMP	●	KITL2060B	KITL2061B
4	.159	4,05	.031 R	A4SM R/L 160417	A4G0405M04U08GMP	●	KITL2062B	KITL2063B
5	.199	5,05	.016 R	A4SM R/L 160520	A4G0505M05U04GMP	●	KITL2066B	KITL2067B
5	.199	5,05	.031 R	A4SM R/L 160520	A4G0505M05U08GMP	●	KITL2068B	KITL2069B

## A4 GMP-style chipbreaker, precision-ground, full radius

**\$109** each  
Save up to 53%\*



A4R-P-GMP

Each kit includes one A4 toolholder, five inserts in the KC5025 grade, and one Torx wrench.

The GMP geometry is designed with a positive cutting action and is ideal for machining stainless steels, non-ferrous alloys, and high-temp alloys.



seat size	cutting width		insert radius	toolholder	insert style	grade KC5025	right hand order number	left hand order number
inch	mm							
3/4" square x 5" long								
3	.118	3,00	full R	A4SM R/L 120314	A4R0300M03P00GMP	●	KITL2040B	KITL2041B
4	.157	4,00	full R	A4SM R/L 120414	A4R0400M04P00GMP	●	KITL2046B	KITL2047B
5	.197	5,00	full R	A4SM R/L 120519	A4R0500M05P00GMP	●	KITL2052B	KITL2053B
1" square x 6" long								
3	.118	3,00	full R	A4SM R/L 160317	A4R0300M03P00GMP	●	KITL2058B	KITL2059B
4	.157	4,00	full R	A4SM R/L 160417	A4R0400M04P00GMP	●	KITL2064B	KITL2065B
5	.197	5,00	full R	A4SM R/L 160520	A4R0500M05P00GMP	●	KITL2070B	KITL2071B

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### A4 CF Cutoff-style inserts

**\$109** each  
 Save up to 50%\*



A4C-CF

Each kit includes one A4 toolholder, five inserts in the KC5025 grade, and one Torx wrench.

Our high-positive geometry CF inserts are specifically engineered for cutoff applications. Inserts are precision ground to a very sharp cutting edge for maximum performance across a wide range of cutoff applications.



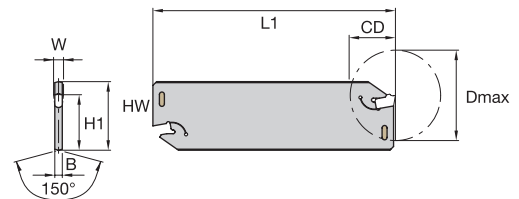
seat size	cutting width		insert radius	toolholder	insert style	grade KC5025	right hand order number	left hand order number
inch	mm							
3/4" square x 5" long								
3	.120	3,05	.008 R	A4SM R/L 120314	A4C0305N00CF02	●	<b>KITL2072B</b>	<b>KITL2073B</b>
4	.159	4,05	.008 R	A4SM R/L 120414	A4C0405N00CF02	●	<b>KITL2074B</b>	<b>KITL2075B</b>
1" square x 6" long								
3	.120	3,05	.008 R	A4SM R/L 160317	A4C0305N00CF02	●	<b>KITL2076B</b>	<b>KITL2077B</b>
4	.159	4,05	.008 R	A4SM R/L 160417	A4C0405N00CF02	●	<b>KITL2078B</b>	<b>KITL2079B</b>

\*Savings based on kit items if purchased individually at first-column list price. Limited time offer. Prices subject to change without notice. Prices in this catalog are applicable in both U.S. and Canada.

### A2 Cut-Off Selection Guide

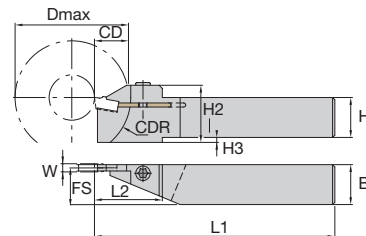
#### Feed Recommendations — *sfm (m/min)*

insert type	Steel	Stainless Steel	Cast Iron	Non-Ferrous	High-Temp Alloy	Hardened Material
A2-N00	<b>N-CR</b> .003-.102 (0,08-0,3)	<b>N-CF</b> .002-.005 (0,0-0,12)	<b>N-CM</b> .002-.008 (0,05-0,2)	<b>N-CF</b> .002-.007 (0,05-0,18)	<b>N-CF</b> .002-.004 (0,04-0,10)	CBN available upon request
	<b>N-CF</b> .002-.006 (0,05-0,15)					
A2-R06	<b>R/L-CR</b> .002-.005 (0,05-0,12)	<b>R/L-CF</b> .002-.003 (0,04-0,08)	<b>R/L-CM</b> .002-.005 (0,05-0,12)	<b>R/L-CF</b> .002-.004 (0,04-0,10)	<b>R/L-CF</b> .002-.003 (0,04-0,08)	CBN available upon request
	<b>R/L-CF</b> .002-.003 (0,04-0,08)					



#### Speed Recommendations — *sfm (m/min)*

insert type	Steel	Stainless Steel	Cast Iron	Non-Ferrous	High-Temp Alloy	Hardened Material
KC5025	265-560 (80-170)	265-500 (80-150)	230-500 (70-150)	500-980 (150-300)	80-250 (25-75)	—

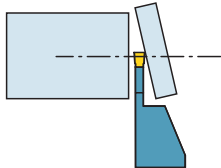


# A2 Ordering Information

## A2 Cutoff Blade Kits

**\$99** each

Save up to 38%\*



Each kit includes one A2 toolholder, five inserts, and one assembly wrench.

The A2 cutoff system features a positive insert stop that ensures proper center height and accurate insert indexing every time. Cutoff blades are made from high-quality tool steel that is heat-treated to 45–48 HRC for deflection-free, flat cutoff applications.

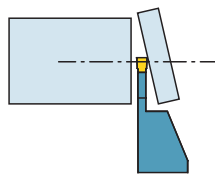


toolholder	HW	H1	L1	CD	insert	insert width	assembly wrench	grade KC5025	kit order number
blade size 26 (1.02" high x 4.33" long)									
A2BNSN26J03	1.02	.84	4.33	1.6	A2030N00CF02	.118	170.137	●	KITL2085B
A2BNSN26J03	1.02	.84	4.33	1.6	A2030N00CM02	.120	170.137	●	KITL2086B
A2BNSN26J03	1.02	.84	4.33	1.6	A2030N00CR02	.120	170.137	●	KITL2087B
A2BNSN26J03	1.02	.84	4.33	1.6	A2030R06CF02	.120	170.137	●	KITL2088B
A2BNSN26J03	1.02	.84	4.33	1.6	A2030R06CR03	.118	170.137	●	KITL2089B
A2BNSN26J04	1.02	.84	4.33	1.6	A2040N00CF02	.159	170.137	●	KITL2095B
A2BNSN26J04	1.02	.84	4.33	1.6	A2040N00CM02	.159	170.137	●	KITL2096B
A2BNSN26J04	1.02	.84	4.33	1.6	A2040N00CR02	.159	170.137	●	KITL2097B
blade size 32 (1.26" high x 5.91" long)									
A2BNSN32M03	1.26	.98	5.91	2.0	A2030N00CF02	.118	170.137	●	KITL2090B
A2BNSN32M03	1.26	.98	5.91	2.0	A2030N00CM02	.120	170.137	●	KITL2091B
A2BNSN32M03	1.26	.98	5.91	2.0	A2030N00CR02	.120	170.137	●	KITL2092B
A2BNSN32M03	1.26	.98	5.91	2.0	A2030R06CF02	.120	170.137	●	KITL2093B
A2BNSN32M03	1.26	.98	5.91	2.0	A2030R06CR03	.118	170.137	●	KITL2094B
A2BNSN32M04	1.26	.98	5.91	2.0	A2040N00CF02	.159	170.137	●	KITL2098B
A2BNSN32M04	1.26	.98	5.91	2.0	A2040N00CM02	.159	170.137	●	KITL2099B
A2BNSN32M04	1.26	.98	5.91	2.0	A2040N00CR02	.159	170.137	●	KITL2100B

## A2 Cutoff Toolholder Kits

**\$99** each

Save up to 46%\*



Each kit includes one A2 toolholder, five inserts in the KC5025 grade, and one Torx wrench.



toolholder	CD	D max	FS	insert	insert width	grade KC5025	right hand order number	left hand order number
3/4" square x 4 1/2" long, #3 seat size								
A3SC R/L 120316	.63	2.05	.705	A2030N00CF02	.118	●	KITL2115B	KITL2118B
A3SC R/L 120316	.63	2.05	.705	A2030N00CM02	.120	●	KITL2116B	KITL2119B
A3SC R/L 120316	.63	2.05	.705	A2030N00CR02	.120	●	KITL2117B	KITL2120B
A3SC R/L 120326	1.02	2.44	.705	A2030N00CF02	.118	●	KITL2121B	KITL2124B
A3SC R/L 120326	1.02	2.44	.705	A2030N00CM02	.120	●	KITL2122B	KITL2125B
A3SC R/L 120326	1.02	2.44	.705	A2030N00CR02	.120	●	KITL2123B	KITL2126B
1" square x 6" long, #3 seat size								
A3SC R/L 160316	.63	2.44	.955	A2030N00CF02	.118	●	KITL2103B	KITL2106B
A3SC R/L 160316	.63	2.44	.955	A2030N00CM02	.120	●	KITL2104B	KITL2107B
A3SC R/L 160316	.63	2.44	.955	A2030N00CR02	.120	●	KITL2105B	KITL2108B
A3SC R/L 160326	1.02	2.44	.955	A2030N00CF02	.118	●	KITL2109B	KITL2112B
A3SC R/L 160326	1.02	2.44	.955	A2030N00CM02	.120	●	KITL2110B	KITL2113B
A3SC R/L 160326	1.02	2.44	.955	A2030N00CR02	.120	●	KITL2111B	KITL2114B

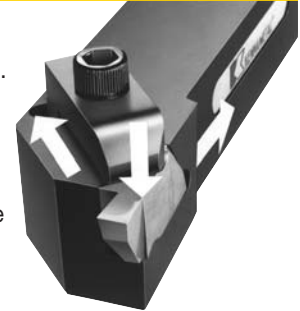
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### Top Notch Grooving Quick Machining Guide

	Steel	Stainless Steel	Cast Iron	Non-Ferrous	High-Temp Alloy
NG-K feed recommendation (ipr)	.003-.011	.0025-.008	.003-.011	.003-.012	.002-.008
	Steel	Stainless Steel	Cast Iron	Non-Ferrous	High-Temp Alloy
KC5025 speed recommendation (sfm)	200-525	160-400	230-500	200-1000	35-200
KC5010 speed recommendation (sfm)	200-650	160-550	260-720	500-2400	50-360

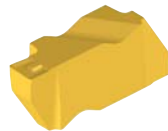
**Top Notch Tooling Kits are available in more than 150 styles, sizes, and groove widths of tools in our two newest grades, the KC5010 and KC5025 grades.**

The highly accurate Top Notch locking system pulls the insert down and back into the toolholder's double-wall pocket. The insert is precisely positioned and securely clamped by multi-directional locking forces to provide superior resistance to side thrust and radial cutting forces. The result: more grooves per cutting edge. Our exclusive molded chip-control geometries and superior grade technologies help to make Top Notch the most popular grooving system.



### NG-2K

**\$99** each  
**Save up to 44%\***



Each kit includes one Top Notch toolholder and five inserts in the KC5010 or KC5025 grades.



toolholder	insert	insert width	grade		right hand order number	left hand order number
			KC5010	KC5025		
3/4" square x 4 1/2" long						
NS R/L 122B	NG2031 R/L K	.031		●	KITL2261B	KITL2267B
NS R/L 122B	NG2031 R/L K	.031	●		KITL2264B	KITL2270B
NS R/L 122B	NG2047 R/L K	.047		●	KITL2262B	KITL2268B
NS R/L 122B	NG2047 R/L K	.047	●		KITL2265B	KITL2271B
NS R/L 122B	NG2062 R/L K	.062		●	KITL2263B	KITL2269B
NS R/L 122B	NG2062 R/L K	.062	●		KITL2266B	KITL2272B
1" square x 5" long						
NS R/L 162C	NG2031 R/L K	.031		●	KITL2249B	KITL2255B
NS R/L 162C	NG2031 R/L K	.031	●		KITL2252B	KITL2258B
NS R/L 162C	NG2047 R/L K	.047		●	KITL2250B	KITL2256B
NS R/L 162C	NG2047 R/L K	.047	●		KITL2253B	KITL2259B
NS R/L 162C	NG2062 R/L K	.062		●	KITL2251B	KITL2257B
NS R/L 162C	NG2062 R/L K	.062	●		KITL2254B	KITL2260B

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# Top Notch Ordering Information

## NG-3K

**\$99** each  
Save up to 45%\*



Each kit includes one Top Notch toolholder and five inserts in the KC5010 or KC5025 grades.



toolholder	insert	insert width	grade		right hand order number	left hand order number
			KC5010	KC5025		
<b>3/4" square x 4" long</b>						
NS R/L 123A	NG3047 R/L K	.047		●	KITL2193B	KITL2207B
NS R/L 123A	NG3047 R/L K	.047	●		KITL2200B	KITL2214B
NS R/L 123A	NG3062 R/L K	.062		●	KITL2194B	KITL2208B
NS R/L 123A	NG3062 R/L K	.062	●		KITL2201B	KITL2215B
NS R/L 123A	NG3094 R/L K	.094		●	KITL2195B	KITL2209B
NS R/L 123A	NG3094 R/L K	.094	●		KITL2202B	KITL2216B
NS R/L 123A	NG3125 R/L K	.125		●	KITL2196B	KITL2210B
NS R/L 123A	NG3125 R/L K	.125	●		KITL2203B	KITL2217B
<b>3/4" square x 4 1/2" long</b>						
NS R/L 123B	NG3047 R/L K	.047		●	KITL2221B	KITL2235B
NS R/L 123B	NG3047 R/L K	.047	●		KITL2228B	KITL2242B
NS R/L 123B	NG3062 R/L K	.062		●	KITL2222B	KITL2236B
NS R/L 123B	NG3062 R/L K	.062	●		KITL2229B	KITL2243B
NS R/L 123B	NG3094 R/L K	.094		●	KITL2223B	KITL2237B
NS R/L 123B	NG3094 R/L K	.094	●		KITL2230B	KITL2244B
NS R/L 123B	NG3125 R/L K	.125		●	KITL2224B	KITL2238B
NS R/L 123B	NG3125 R/L K	.125	●		KITL2231B	KITL2245B
<b>1" square x 5" long</b>						
NS R/L 163C	NG3047 R/L K	.047		●	KITL2165B	KITL2179B
NS R/L 163C	NG3047 R/L K	.047	●		KITL2172B	KITL2186B
NS R/L 163C	NG3062 R/L K	.062		●	KITL2166B	KITL2180B
NS R/L 163C	NG3062 R/L K	.062	●		KITL2173B	KITL2187B
NS R/L 163C	NG3094 R/L K	.094		●	KITL2167B	KITL2181B
NS R/L 163C	NG3094 R/L K	.094	●		KITL2174B	KITL2188B
NS R/L 163C	NG3125 R/L K	.125		●	KITL2168B	KITL2182B
NS R/L 163C	NG3125 R/L K	.125	●		KITL2175B	KITL2189B
<b>1" square x 6" long</b>						
NS R/L 163D	NG3047 R/L K	.047		●	KITL2137B	KITL2151B
NS R/L 163D	NG3047 R/L K	.047	●		KITL2144B	KITL2158B
NS R/L 163D	NG3062 R/L K	.062		●	KITL2138B	KITL2152B
NS R/L 163D	NG3062 R/L K	.062	●		KITL2145B	KITL2159B
NS R/L 163D	NG3094 R/L K	.094		●	KITL2139B	KITL2153B
NS R/L 163D	NG3094 R/L K	.094	●		KITL2146B	KITL2160B
NS R/L 163D	NG3125 R/L K	.125		●	KITL2140B	KITL2154B
NS R/L 163D	NG3125 R/L K	.125	●		KITL2147B	KITL2161B

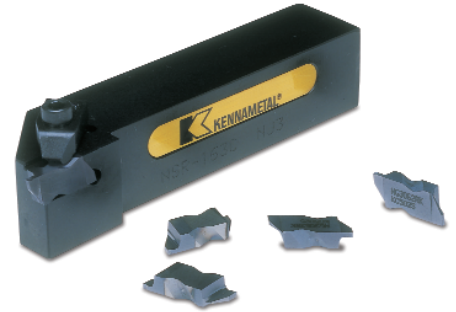
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### NR-3K

**\$99** each  
 Save up to 45%\*



Each kit includes one Top Notch toolholder and five inserts in the KC5010 or KC5025 grades.



toolholder	insert	insert width	grade		right hand order number	left hand order number
			KC5010	KC5025		
3/4" square x 4" long						
NS R/L 123A	NR3031 R/L K	.062		●	KITL2197B	KITL2211B
NS R/L 123A	NR3031 R/L K	.062	●		KITL2204B	KITL2218B
NS R/L 123A	NR3047 R/L K	.094		●	KITL2198B	KITL2212B
NS R/L 123A	NR3047 R/L K	.094	●		KITL2205B	KITL2219B
NS R/L 123A	NR3062 R/L K	.125		●	KITL2199B	KITL2213B
NS R/L 123A	NR3062 R/L K	.125	●		KITL2206B	KITL2220B
3/4" square x 4 1/2" long						
NS R/L 123B	NR3031 R/L K	.062		●	KITL2225B	KITL2239B
NS R/L 123B	NR3031 R/L K	.062	●		KITL2232B	KITL2246B
NS R/L 123B	NR3047 R/L K	.094		●	KITL2226B	KITL2240B
NS R/L 123B	NR3047 R/L K	.094	●		KITL2233B	KITL2247B
NS R/L 123B	NR3062 R/L K	.125		●	KITL2227B	KITL2241B
NS R/L 123B	NR3062 R/L K	.125	●		KITL2234B	KITL2248B
1" square x 5" long						
NS R/L 163C	NR3031 R/L K	.062		●	KITL2169B	KITL2183B
NS R/L 163C	NR3031 R/L K	.062	●		KITL2176B	KITL2190B
NS R/L 163C	NR3047 R/L K	.094		●	KITL2170B	KITL2184B
NS R/L 163C	NR3047 R/L K	.094	●		KITL2177B	KITL2191B
NS R/L 163C	NR3062 R/L K	.125		●	KITL2171B	KITL2185B
NS R/L 163C	NR3062 R/L K	.125	●		KITL2178B	KITL2192B
1" square x 6" long						
NS R/L 163D	NR3031 R/L K	.062		●	KITL2141B	KITL2155B
NS R/L 163D	NR3031 R/L K	.062	●		KITL2148B	KITL2162B
NS R/L 163D	NR3047 R/L K	.094		●	KITL2142B	KITL2156B
NS R/L 163D	NR3047 R/L K	.094	●		KITL2149B	KITL2163B
NS R/L 163D	NR3062 R/L K	.125		●	KITL2143B	KITL2157B
NS R/L 163D	NR3062 R/L K	.125	●		KITL2150B	KITL2164B

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***Kennametal Tooling Kits provide a significant savings compared to the individual purchase of tool components. They also are a fast, economical way to employ the newest cutting tool technologies, and take your shop's productivity to the next level!***

# Top Notch Ordering Information

## NG-1L

**\$109** each  
Save up to 40%\*



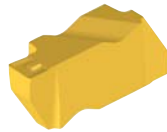
Each kit includes one Top Notch grooving bar and five Top Notch inserts in the KC5025 grade.



grooving bar	insert	insert width	grade KC5025	kit order number
3/8" diameter x 6" long				
A06NER1	NG1031L	.031	●	KITL2273B
A06NER1	NG1047L	.047	●	KITL2274B
A06NER1	NG1062L	.062	●	KITL2275B
A06NER1	NG1094L	.094	●	KITL2276B
1/2" diameter x 8" long				
A08NER1	NG1031L	.031	●	KITL2277B
A08NER1	NG1047L	.047	●	KITL2278B
A08NER1	NG1062L	.062	●	KITL2279B
A08NER1	NG1094L	.094	●	KITL2280B

## NG-2K

**\$119-**  
**\$139** each  
Save up to 45%\*



Each kit includes one Top Notch grooving bar and five Top Notch inserts in the KC5025 grade.



grooving bar	insert	insert width	grade KC5025	kit order number	price
1/2" diameter x 8" long					
A08NER2	NG2031LK	.031	●	KITL2281B	\$119
A08NER2	NG2047LK	.047	●	KITL2282B	\$119
A08NER2	NG2062LK	.062	●	KITL2283B	\$119
A08NER2	NG2094LK	.094	●	KITL2284B	\$119
5/8" diameter x 10" long					
A10NER2	NG2031LK	.031	●	KITL2285B	\$129
A10NER2	NG2047LK	.047	●	KITL2286B	\$129
A10NER2	NG2062LK	.062	●	KITL2287B	\$129
A10NER2	NG2094LK	.094	●	KITL2288B	\$129
3/4" diameter x 10" long					
A12NER2	NG2031LK	.031	●	KITL2289B	\$139
A12NER2	NG2047LK	.047	●	KITL2290B	\$139
A12NER2	NG2062LK	.062	●	KITL2291B	\$139
A12NER2	NG2094LK	.094	●	KITL2292B	\$139

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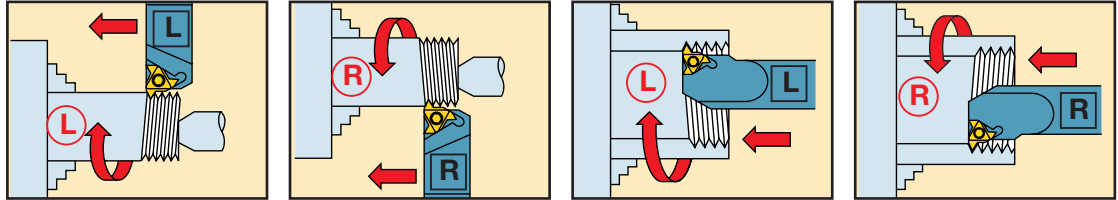
## LT Selection Guide

### Threading Method and Hand of Tooling

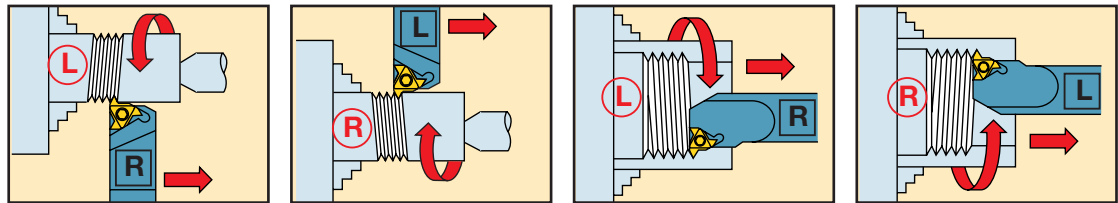
(L) or (R) – hand of thread

(L) or (R) – hand of holder/insert

• Feed direction toward the chuck – standard helix



• Feed direction away from the chuck – reverse helix

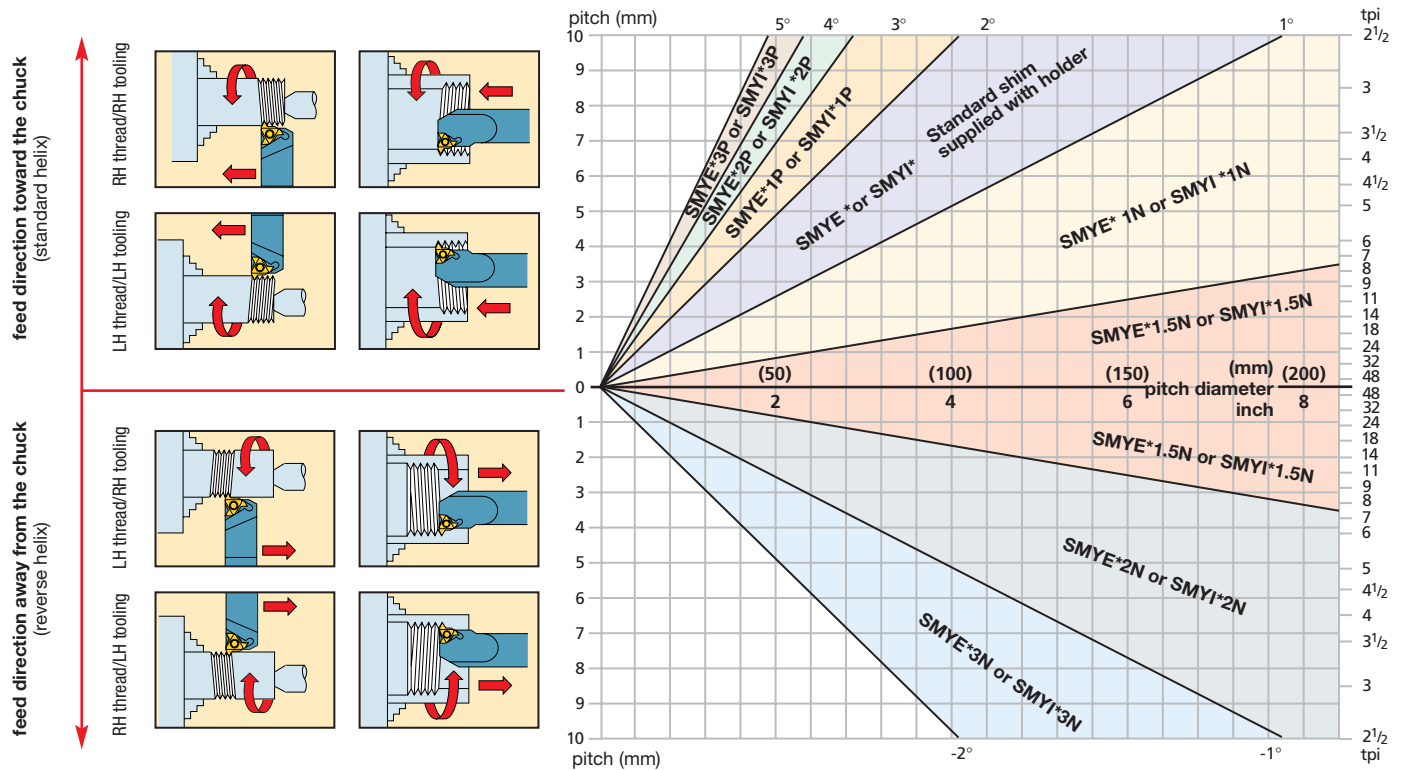


### Select Appropriate Shim

#### Required information:

- thread form (tpi or pitch)
- pitch diameter
- helix method (hand of tool, feed direction, hand of thread)

Select the proper shim: SMYE – for external RH or internal LH  
SMYI – for internal RH or external LH



\*denotes shim size: 3 = insert size 16 (3/8 in. D)  
4 = insert size 22 (1/2 in. D)

# LT Technical Information

## Speed Recommendations — *sfm (m/min)*

workpiece materials	Steel	Stainless Steel	Cast Iron	Non-Ferrous	High-Temp Alloy
Kenna Perfect First Choice	KC5025 130–650 (40–200)	KC5025 130–450 (40–135)	KC5025 200–475 (60–145)	KC5025 160–1150 (50–360)	KC5025 35–330 (10–100)

## LT Laydown Triangle OD Threading

**\$99** each

Save up to 40%\*



Each kit includes one LT Toolholder and three LT inserts in the KC5025 grade.



toolholder	insert	pitch	EX	E	grade KC5025	right hand order number	left hand order number
3/4" square shank x 5.0" long							
LSAS R/L 123	LT16E R/L 10ISO	1,00	.027	.027	●	KITL2400B	KITL2401B
LSAS R/L 123	LT16E R/L 125ISO	1,25	.031	.035	●	KITL2402B	KITL2403B
LSAS R/L 123	LT16E R/L 15ISO	1,50	.031	.039	●	KITL2404B	KITL2405B
LSAS R/L 123	LT16E R/L 175ISO	1,75	.035	.047	●	KITL2406B	KITL2407B
LSAS R/L 123	LT16E R/L 20ISO	2,00	.039	.051	●	KITL2408B	KITL2409B
LSAS R/L 123	LT16E R/L 25ISO	2,50	.043	.059	●	KITL2410B	KITL2411B
LSAS R/L 123	LT16E R/L 30ISO	3,00	.047	.063	●	KITL2412B	KITL2413B

## LT Laydown Triangle ID Threading

**\$139** each

Save up to 40%\*



Each kit includes one LT Toolholder and three LT inserts in the KC5025 grade.



toolholder	insert	pitch	EX	E	grade KC5025	right hand order number	left hand order number
3/4" diameter x 7.0" long							
S1012LSE R/L 3	LT16N R/L 15ISO	1,50	.031	.039	●	KITL2428B	KITL2429B
S1012LSE R/L 3	LT16N R/L 20ISO	2,00	.035	.043	●	KITL2430B	KITL2431B
S1012LSE R/L 3	LT16N R/L 30ISO	3,00	.043	.059	●	KITL2432B	KITL2433B
3/4" diameter x 7.0" long							
S1212LSE R/L 3	LT16N R/L 15ISO	1,50	.031	.039	●	KITL2434B	KITL2435B
S1212LSE R/L 3	LT16N R/L 20ISO	2,00	.035	.043	●	KITL2436B	KITL2437B
S1212LSE R/L 3	LT16N R/L 30ISO	3,00	.043	.059	●	KITL2438B	KITL2439B

\*Savings based on kit items if purchased individually at first-column list price. Limited time offer. Prices subject to change without notice. Prices in this catalog are applicable in both U.S. and Canada.

# Kennametal Tooling Kits

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