

RAPID THREAD™



New design indexable threadmilling inserts and tool holders allow for a profitable and effective way to produce external and internal applications quickly while generating superior surface finish.

Diameters:

.312", .375", .500", .625", .750",
1.000", 1.250", 1.500"

Insert Sizes:

12 mm (0.472"), 14 mm (0.551"),
21 mm (0.827"), 30 mm (1.181"),
40 mm (1.575")

Thread Forms:

UN, ISO, NPT, NPTF, W, BSPT,
NPS, NPSF, ABUT, PG

Applications:

All threading applications
performed on a milling machine

Materials:

Steel, stainless steel, cast iron,
aluminum, titanium, and other high
temperature or nickel-based alloys

Series:

MTE D - End mill, Steel, Single Eff.
MTE D-2 - End mill, Steel, Two Eff.
MTE D-C - End mill, Carbide, Single Eff.
MTF D - Shell mill, Steel



Series Features:

- New design for all threadmilling inserts and tool holders
- New easy to decipher nomenclature
- Additional thread forms now available
- Nickel-plated tool holders provide resistance to corrosion/abrasion
- Improved rigidity
- Improved chip removal



HIGHLIGHTS

Ingersoll Cutting Tools has implemented a new design change that affects all indexable threadmilling inserts and tool holders.

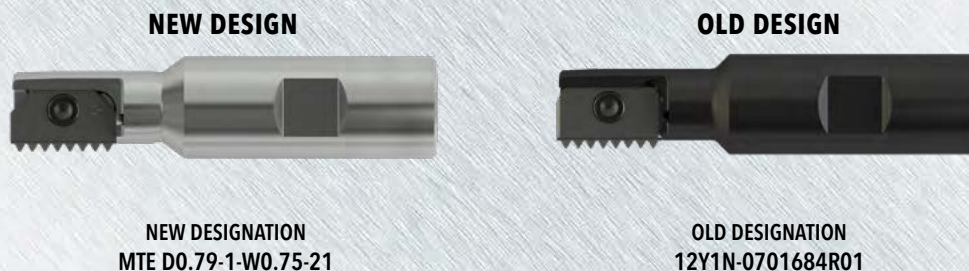
Inserts

The new design inserts can be identified by the two rear chamfers along with new designations defined by "-1"



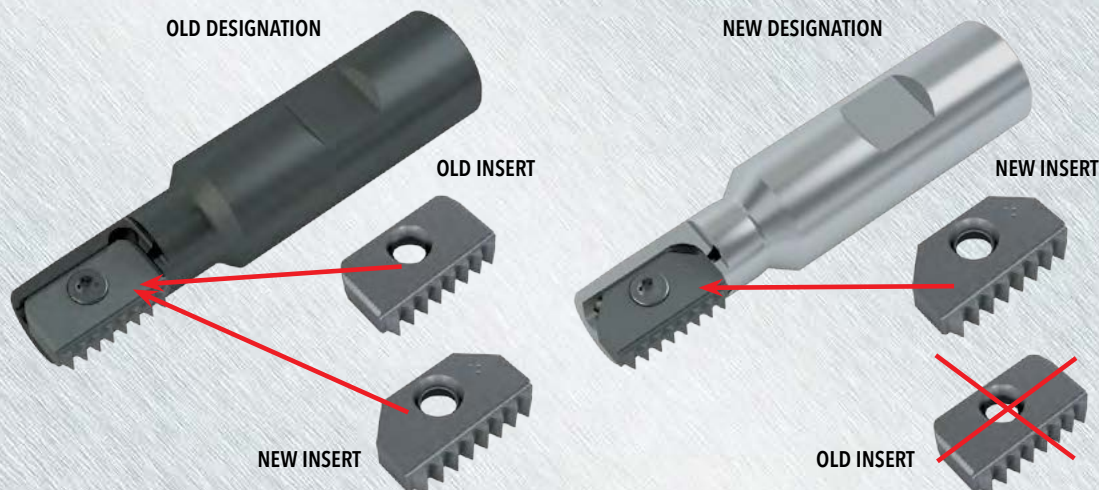
Tool Holders

Tool holder pockets have also been modified to accommodate the new design inserts. Bodies were redesigned for higher rigidity. Nickel plating provides more resistance to corrosion and abrasion for better chip flow.



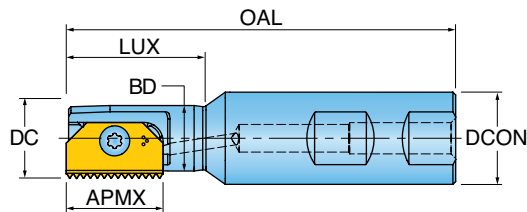
IMPORTANT NOTE:

The old inserts can only be clamped onto the older tools, while the new inserts can be clamped on either the new or old tools. Attached are the catalog pages of the new inserts and tools, and a list of the new item designations and catalog numbers vs. the old ones.



SERIES MTE D

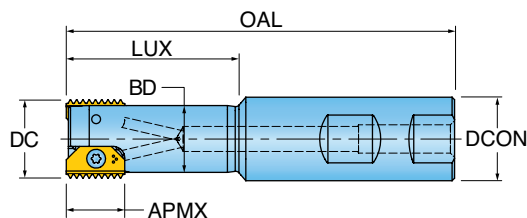
INDEXABLE THREAD MILL HOLDERS - WELDON STEEL



Part Number	DC Cutting Dia.	APMX Depth of Cut Max.	INSL Insert Length	LUX Usable Length Max.	OAL Overall Length	BD Body Diameter	ZEFF Effective Flutes	DCON Shank Dia.
MTE D0.375-A-W0.75-12	0.375	0.472	0.472 (12 mm)	0.55	3.35	0.30	1	0.750
MTE D0.39-1-W0.75-12	0.390	0.472	0.472 (12 mm)	0.64	3.35	0.30	1	0.750
MTE D0.50-1-W0.75-14	0.500	0.551	0.551 (14 mm)	0.70	2.95	0.37	1	0.750
MTE D0.54-1-W0.75-14	0.540	0.551	0.551 (14 mm)	0.77	2.98	0.38	1	0.750
MTE D0.57-1-W0.75-14	0.570	0.551	0.551 (14 mm)	1.00	3.20	0.41	1	0.750
MTE D0.67-1-W0.75-14	0.670	0.551	0.551 (14 mm)	1.18	3.35	0.51	1	0.750
MTE D0.79-1-W0.75-21	0.790	0.827	0.827 (21 mm)	1.57	3.70	0.59	1	0.750
MTE D0.94-1-W0.75-21	0.940	0.827	0.827 (21 mm)	-	5.00	-	1	0.750
MTE D1.16-1-W1.00-30	1.156	1.181	1.181 (30 mm)	1.96	4.25	0.87	1	1.000
MTE D1.25-1-W1.00-30	1.250	1.181	1.181 (30 mm)	-	6.00	-	1	1.000
MTE D1.50-1-W1.25-30	1.500	1.181	1.181 (30 mm)	-	6.00	-	1	1.250
MTE D1.75-1-W1.50-40	1.750	1.575	1.575 (40 mm)	3.31	6.00	1.38	1	1.500

SERIES MTE D-2

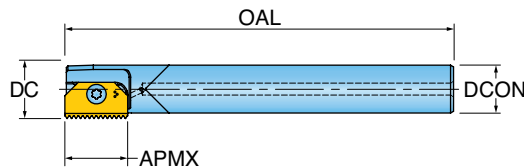
MULTI-FLUTE INDEXABLE THREAD MILL HOLDERS - WELDON STEEL



Part Number	DC Cutting Dia.	APMX Depth of Cut Max.	INSL Insert Length	LUX Usable Length Max.	OAL Overall Length	BD Body Diameter	ZEFF Effective Flutes	DCON Shank Dia.
MTE D0.79-2-W0.75-14	0.790	0.551	0.551 (14 mm)	1.54	3.66	0.63	2	0.750
MTE D1.18-2-W1.00-21	1.180	0.827	0.827 (21 mm)	1.97	4.25	0.95	2	1.000
MTE D1.56-2-W1.25-30	1.560	1.181	1.181 (30 mm)	2.84	5.13	1.18	2	1.250
MTE D2.00-2-W1.50-40	2.000	1.575	1.575 (40 mm)	3.35	6.00	1.48	2	1.500

SERIES MTE D-C

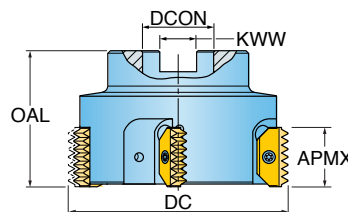
INDEXABLE THREAD MILL HOLDERS - CYLINDRICAL CARBIDE



Part Number	DC Cutting Dia.	APMX Depth of Cut Max.	INSL Insert Length	OAL Overall Length	ZEFF Effective Flutes	DCON Shank Dia.
MTE D0.39-1-C12C-12	0.390	0.472	0.472 (12 mm)	5.13	1	0.312
MTE D0.50-1-C.375C-14	0.500	0.551	0.551 (14 mm)	6.13	1	0.375
MTE D0.62-1-C.500C-14	0.620	0.551	0.551 (14 mm)	7.05	1	0.500
MTE D0.82-1-C.625C-21	0.820	0.827	0.827 (21 mm)	8.12	1	0.625

SERIES MTF D (SHELL MILL)

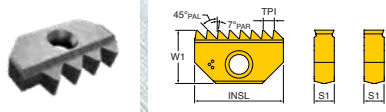
INDEXABLE SHELL MILL HOLDERS - MULTI-FLUTE



Part Number	DC Cutting Dia.	APMX Depth of Cut Max.	INSL Insert Length	OAL Overall Length	ZEFF Effective Flutes	DCON Shank Dia.	KWW Keyway	WT Weight (lbs.)
MTF D2.50-5-.75-21	2.500	0.827	0.827 (21 mm)	2.00	5	0.750	0.312	1.01
MTF D2.50-4-.75-30	2.500	1.181	1.181 (30 mm)	1.97	4	0.750	0.312	1.43
MTF D3.15-4-1.25-40	3.150	1.575	1.575 (40 mm)	2.00	4	1.250	0.500	4.63
MTF D4.00-4-1.25-30	4.000	1.181	1.181 (30 mm)	2.00	4	1.250	0.500	4.63
MTF D4.00-4-1.25-40	4.000	1.575	1.575 (40 mm)	2.00	4	1.250	0.500	4.63

ABUT (EXTERNAL & INTERNAL) INSERTS

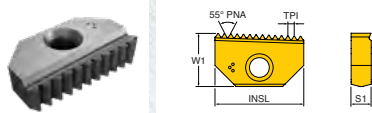
LYEU_AB



Part Number	TPI Threads Per Inch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU21080AB-1	8	0.472	0.827 (21mm)	0.185	•	
LYEU21100AB-1	10	0.472	0.827 (21mm)	0.185	•	
LYEU21120AB-1	12	0.472	0.827 (21mm)	0.185	•	
LYEU21160AB-1	16	0.472	0.827 (21mm)	0.185	•	
LYEU30040AB-1	4	0.630	1.181 (30mm)	0.217	•	
LYEU30060AB-1	6	0.630	1.181 (30mm)	0.217	•	
LYEU30080AB-1	8	0.630	1.181 (30mm)	0.217	•	
LYEU30100AB-1	10	0.630	1.181 (30mm)	0.217	•	
LYEU30120AB-1	12	0.630	1.181 (30mm)	0.217	•	
LYEU30160AB-1	16	0.630	1.181 (30mm)	0.217	•	
LYEU40040AB-1	4	0.787	1.575 (40mm)	0.248	•	

BSPT (EXTERNAL & INTERNAL) INSERTS

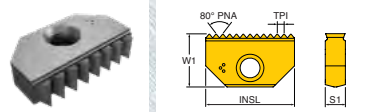
LYEU_BT



Part Number	TPI Threads Per Inch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU12190BT-1	19	0.256	0.472 (12mm)	0.114	•	
LYEU14140BT-1	14	0.311	0.551 (14mm)	0.126	•	
LYEU14190BT-1	19	0.311	0.551 (14mm)	0.126	•	
LYEU21110BT-1	11	0.496	0.827 (21mm)	0.189	•	
LYEU21140BT-1	14	0.496	0.827 (21mm)	0.189	•	
LYEU30110BT-1	11	0.657	1.181 (30mm)	0.220	•	
LYEU40110BT-1	11	0.819	1.575 (40mm)	0.252	•	

PG (EXTERNAL & INTERNAL) INSERTS

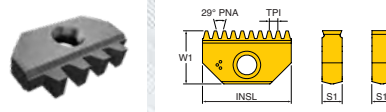
LYEU_PG



Part Number	TPI Threads Per Inch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU14180PG-1	18	0.311	0.551 (14mm)	0.126	•	
LYEU21160PG-1	16	0.496	0.827 (21mm)	0.189	•	
LYEU21180PG-1	18	0.496	0.827 (21mm)	0.189	•	
LYEU30160PG-1	16	0.657	1.181 (30mm)	0.220	•	

ACME (INTERNAL) INSERTS

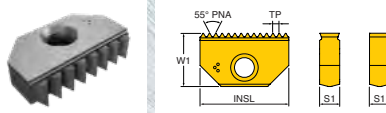
LYEU_AC



Part Number	TPI Threads Per Inch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU21100AC-1	10	0.472	0.827 (21mm)	0.185	•	
LYEU21120AC-1	12	0.472	0.827 (21mm)	0.185	•	
LYEU30040AC-1	4	0.630	1.181 (30mm)	0.217	•	
LYEU30050AC-1	5	0.630	1.181 (30mm)	0.217	•	
LYEU30060AC-1	6	0.630	1.181 (30mm)	0.217	•	
LYEU30080AC-1	8	0.630	1.181 (30mm)	0.217	•	
LYEU30100AC-1	10	0.630	1.181 (30mm)	0.217	•	
LYEU30120AC-1	12	0.630	1.181 (30mm)	0.217	•	
LYEU40030AC-1	3	0.787	1.575 (40mm)	0.248	•	
LYEU40035AC-1	3.5	0.787	1.575 (40mm)	0.248	•	

W (EXTERNAL & INTERNAL) INSERTS

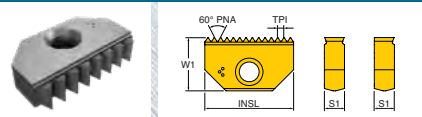
LYEU_BW



Part Number	TP Thread Pitch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU12190BW-1	19.00	0.256	0.472 (12mm)	0.114	•	
LYEU14140BW-1	14.00	0.311	0.551 (14mm)	0.126	•	
LYEU14160BW-1	16.00	0.311	0.551 (14mm)	0.126	•	
LYEU14190BW-1	19.00	0.311	0.551 (14mm)	0.126	•	
LYEU14200BW-1	20.00	0.311	0.551 (14mm)	0.126	•	
LYEU14240BW-1	24.00	0.311	0.551 (14mm)	0.126	•	
LYEU21110BW-1	11.00	0.496	0.827 (21mm)	0.189	•	
LYEU21140BW-1	14.00	0.496	0.827 (21mm)	0.189	•	
LYEU21160BW-1	16.00	0.496	0.827 (21mm)	0.189	•	
LYEU21190BW-1	19.00	0.496	0.827 (21mm)	0.189	•	
LYEU21200BW-1	20.00	0.496	0.827 (21mm)	0.189	•	
LYEU30110BW-1	11.00	0.657	1.181 (30mm)	0.220	•	
LYEU30140BW-1	14.00	0.657	1.181 (30mm)	0.220	•	
LYEU30160BW-1	16.00	0.657	1.181 (30mm)	0.220	•	
LYEU40080BW-1	8.00	0.819	1.575 (40mm)	0.252	•	
LYEU40110BW-1	11.00	0.819	1.575 (40mm)	0.252	•	

NPS (EXTERNAL & INTERNAL) INSERTS

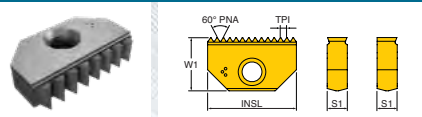
LYEU_NS



Part Number	TPI Threads Per Inch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU12180NS-1	18	0.256	0.472 (12mm)	0.114	•	
LYEU14140NS-1	14	0.311	0.551 (14mm)	0.126	•	
LYEU14180NS-1	18	0.311	0.551 (14mm)	0.126	•	
LYEU21115NS-1	11.5	0.496	0.827 (21mm)	0.189	•	
LYEU21140NS-1	14	0.472	0.827 (21mm)	0.185	•	
LYEU30080NS-1	8	0.630	1.181 (30mm)	0.217	•	
LYEU30115NS-1	11.5	0.630	1.181 (30mm)	0.217	•	
LYEU40080NS-1	8	0.787	1.575 (40mm)	0.248	•	
LYEU40115NS-1	11.5	0.787	1.575 (40mm)	0.248	•	

NPSF (EXTERNAL & INTERNAL) INSERTS

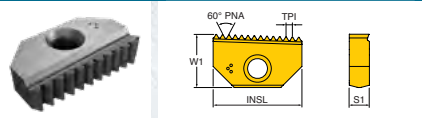
LYEU_NSF



Part Number	TPI Threads Per Inch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU12180NSF-1	18	0.248	0.472 (12mm)	0.114	•	
LYEU14140NSF-1	14	0.295	0.551 (14mm)	0.122	•	
LYEU14180NSF-1	18	0.295	0.551 (14mm)	0.122	•	
LYEU21115NSF-1	11.5	0.472	0.827 (21mm)	0.185	•	
LYEU21140NSF-1	14	0.472	0.827 (21mm)	0.185	•	
LYEU30080NSF-1	8	0.630	1.181 (30mm)	0.217	•	
LYEU30115NSF-1	11.5	0.630	1.181 (30mm)	0.217	•	
LYEU40080NSF-1	8	0.787	1.575 (40mm)	0.248	•	
LYEU40115NSF-1	11.5	0.787	1.575 (40mm)	0.248	•	

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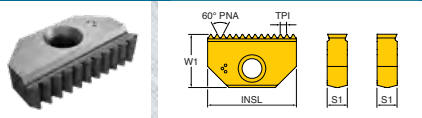
LYEU_NT



Part Number	TPI Threads Per Inch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU12180NT-1	18	0.256	0.472 (12mm)	0.114	•	
LYEU14140NT-1	14	0.311	0.551 (14mm)	0.126	•	
LYEU14180NT-1	18	0.311	0.551 (14mm)	0.126	•	
LYEU21115NT-1	11.5	0.496	0.827 (21mm)	0.189	•	
LYEU21140NT-1	14	0.496	0.827 (21mm)	0.189	•	
LYEU30080NT-1	8	0.657	1.181 (30mm)	0.220	•	
LYEU30115NT-1	11.5	0.657	1.181 (30mm)	0.220	•	
LYEU40080NT-1	8	0.819	1.575 (40mm)	0.252	•	
LYEU40115NT-1	11.5	0.819	1.575 (40mm)	0.252	•	

NPTF (EXTERNAL & INTERNAL) INSERTS

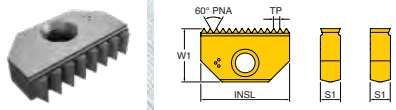
LYEU_NF



Part Number	TPI Threads Per Inch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU12180NF-1	18	0.256	0.472 (12mm)	0.114	•	
LYEU14140NF-1	14	0.311	0.551 (14mm)	0.126	•	
LYEU14180NF-1	18	0.311	0.551 (14mm)	0.126	•	
LYEU21115NF-1	11.5	0.496	0.827 (21mm)	0.189	•	
LYEU21140NF-1	14	0.496	0.827 (21mm)	0.189	•	
LYEU30080NF-1	8	0.630	1.181 (30mm)	0.217	•	
LYEU30115NF-1	11.5	0.657	1.181 (30mm)	0.220	•	
LYEU40080NF-1	8	0.787	1.575 (40mm)	0.248	•	
LYEU40115NF-1	11.5	0.787	1.575 (40mm)	0.248	•	

ISO (INTERNAL) INSERTS

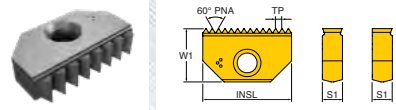
LYEU_IS



Part Number	TP Thread Pitch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU12050IS-1	0.50	0.256	0.472 (12mm)	0.114	•	
LYEU12075IS-1	0.75	0.256	0.472 (12mm)	0.114	•	
LYEU12100IS-1	1.00	0.256	0.472 (12mm)	0.114	•	
LYEU12125IS-1	1.25	0.256	0.472 (12mm)	0.114	•	
LYEU12150IS-1	1.50	0.256	0.472 (12mm)	0.114	•	
LYEU12175IS-1	1.75	0.256	0.472 (12mm)	0.114	•	
LYEU14050IS-1	0.50	0.311	0.551 (14mm)	0.126	•	
LYEU14075IS-1	0.75	0.311	0.551 (14mm)	0.126	•	
LYEU14100IS-1	1.00	0.311	0.551 (14mm)	0.126	•	
LYEU14125IS-1	1.25	0.311	0.551 (14mm)	0.126	•	
LYEU14150IS-1	1.50	0.311	0.551 (14mm)	0.126	•	
LYEU14175IS-1	1.75	0.311	0.551 (14mm)	0.126	•	
LYEU14200IS-1	2.00	0.311	0.551 (14mm)	0.126	•	
LYEU14250IS-1	2.50	0.311	0.551 (14mm)	0.126	•	
LYEU21100IS-1	1.00	0.496	0.827 (21mm)	0.189	•	
LYEU21150IS-1	1.50	0.496	0.827 (21mm)	0.189	•	
LYEU21175IS-1	1.75	0.496	0.827 (21mm)	0.189	•	
LYEU21200IS-1	2.00	0.496	0.827 (21mm)	0.189	•	
LYEU21250IS-1	2.50	0.496	0.827 (21mm)	0.189	•	
LYEU21300IS-1	3.00	0.496	0.827 (21mm)	0.189	•	
LYEU21350IS-1	3.50	0.496	0.827 (21mm)	0.189	•	
LYEU30150IS-1	1.50	0.657	1.181 (30mm)	0.220	•	
LYEU30200IS-1	2.00	0.657	1.181 (30mm)	0.220	•	
LYEU30300IS-1	3.00	0.657	1.181 (30mm)	0.220	•	
LYEU30350IS-1	3.50	0.657	1.181 (30mm)	0.220	•	
LYEU30400IS-1	4.00	0.657	1.181 (30mm)	0.220	•	
LYEU30450IS-1	4.50	0.657	1.181 (30mm)	0.220	•	
LYEU30500IS-1	5.00	0.657	1.181 (30mm)	0.220	•	
LYEU40150IS-1	1.50	0.819	1.575 (40mm)	0.252	•	
LYEU40200IS-1	2.00	0.819	1.575 (40mm)	0.252	•	
LYEU40300IS-1	3.00	0.819	1.575 (40mm)	0.252	•	
LYEU40350IS-1	3.50	0.819	1.575 (40mm)	0.252	•	
LYEU40400IS-1	4.00	0.819	1.575 (40mm)	0.252	•	
LYEU40450IS-1	4.50	0.819	1.575 (40mm)	0.252	•	
LYEU40500IS-1	5.00	0.819	1.575 (40mm)	0.252	•	
LYEU40550IS-1	5.50	0.819	1.575 (40mm)	0.252	•	
LYEU40600IS-1	6.00	0.819	1.575 (40mm)	0.252	•	

ISO (EXTERNAL) INSERTS

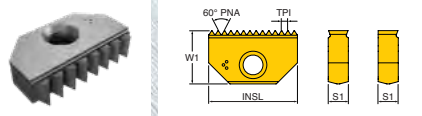
LYEU_IS-X



Part Number	TP Thread Pitch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU14075IS-X-1	0.75	0.311	0.551 (14mm)	0.126	•	
LYEU14100IS-X-1	1.00	0.311	0.551 (14mm)	0.126	•	
LYEU14125IS-X-1	1.25	0.311	0.551 (14mm)	0.126	•	
LYEU14150IS-X-1	1.50	0.311	0.551 (14mm)	0.126	•	
LYEU14175IS-X-1	1.75	0.311	0.551 (14mm)	0.126	•	
LYEU14200IS-X-1	2.00	0.311	0.551 (14mm)	0.126	•	
LYEU14250IS-X-1	2.50	0.311	0.551 (14mm)	0.126	•	
LYEU21100IS-X-1	1.00	0.496	0.827 (21mm)	0.189	•	
LYEU21150IS-X-1	1.50	0.496	0.827 (21mm)	0.189	•	
LYEU21200IS-X-1	2.00	0.496	0.827 (21mm)	0.189	•	
LYEU21250IS-X-1	2.50	0.496	0.827 (21mm)	0.189	•	
LYEU21300IS-X-1	3.00	0.496	0.827 (21mm)	0.189	•	
LYEU30150IS-X-1	1.50	0.657	1.181 (30mm)	0.220	•	
LYEU30200IS-X-1	2.00	0.657	1.181 (30mm)	0.220	•	
LYEU30300IS-X-1	3.00	0.657	1.181 (30mm)	0.220	•	
LYEU30350IS-X-1	3.50	0.657	1.181 (30mm)	0.220	•	
LYEU30400IS-X-1	4.00	0.657	1.181 (30mm)	0.220	•	
LYEU40150IS-X-1	1.50	0.819	1.575 (40mm)	0.252	•	
LYEU40200IS-X-1	2.00	0.819	1.575 (40mm)	0.252	•	
LYEU40300IS-X-1	3.00	0.819	1.575 (40mm)	0.252	•	
LYEU40400IS-X-1	4.00	0.819	1.575 (40mm)	0.252	•	
LYEU40500IS-X-1	5.00	0.819	1.575 (40mm)	0.252	•	
LYEU40600IS-X-1	6.00	0.819	1.575 (40mm)	0.252	•	

UN (INTERNAL) INSERTS

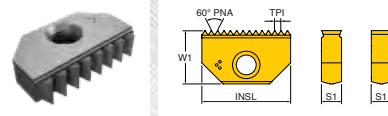
LYEU_UN



Part Number	TPI Threads Per Inch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU12160UN-1	16	0.256	0.472 (12mm)	0.114	•	
LYEU12180UN-1	18	0.256	0.472 (12mm)	0.114	•	
LYEU12200UN-1	20	0.256	0.472 (12mm)	0.114	•	
LYEU12240UN-1	24	0.256	0.472 (12mm)	0.114	•	
LYEU12280UN-1	28	0.256	0.472 (12mm)	0.114	•	
LYEU12320UN-1	32	0.256	0.472 (12mm)	0.114	•	
LYEU14100UN-1	10	0.311	0.551 (14mm)	0.126	•	
LYEU14110UN-1	11	0.311	0.551 (14mm)	0.126	•	
LYEU14120UN-1	12	0.311	0.551 (14mm)	0.126	•	
LYEU14140UN-1	14	0.311	0.551 (14mm)	0.126	•	
LYEU14160UN-1	16	0.311	0.551 (14mm)	0.126	•	
LYEU14180UN-1	18	0.311	0.551 (14mm)	0.126	•	
LYEU14200UN-1	20	0.311	0.551 (14mm)	0.126	•	
LYEU14240UN-1	24	0.311	0.551 (14mm)	0.126	•	
LYEU14270UN-1	27	0.311	0.551 (14mm)	0.126	•	
LYEU14280UN-1	28	0.311	0.551 (14mm)	0.126	•	
LYEU14320UN-1	32	0.311	0.551 (14mm)	0.126	•	
LYEU21070UN-1	7	0.496	0.827 (21mm)	0.189	•	
LYEU21080UN-1	8	0.496	0.827 (21mm)	0.189	•	
LYEU21100UN-1	10	0.496	0.827 (21mm)	0.189	•	
LYEU21120UN-1	12	0.496	0.827 (21mm)	0.189	•	
LYEU21140UN-1	14	0.496	0.827 (21mm)	0.189	•	
LYEU21160UN-1	16	0.496	0.827 (21mm)	0.189	•	
LYEU21180UN-1	18	0.496	0.827 (21mm)	0.189	•	
LYEU21200UN-1	20	0.496	0.827 (21mm)	0.189	•	
LYEU21240UN-1	24	0.496	0.827 (21mm)	0.189	•	
LYEU30050UN-1	5	0.657	1.181 (30mm)	0.220	•	
LYEU30060UN-1	6	0.657	1.181 (30mm)	0.220	•	
LYEU30080UN-1	8	0.657	1.181 (30mm)	0.220	•	
LYEU30100UN-1	10	0.657	1.181 (30mm)	0.220	•	
LYEU30120UN-1	12	0.657	1.181 (30mm)	0.220	•	
LYEU30140UN-1	14	0.657	1.181 (30mm)	0.220	•	
LYEU30160UN-1	16	0.657	1.181 (30mm)	0.220	•	
LYEU30180UN-1	18	0.657	1.181 (30mm)	0.220	•	
LYEU30200UN-1	20	0.657	1.181 (30mm)	0.220	•	
LYEU40040UN-1	4	0.819	1.575 (40mm)	0.252	•	
LYEU40045UN-1	4.5	0.819	1.575 (40mm)	0.252	•	
LYEU40060UN-1	6	0.819	1.575 (40mm)	0.252	•	
LYEU40080UN-1	8	0.819	1.575 (40mm)	0.252	•	
LYEU40110UN-1	10	0.819	1.575 (40mm)	0.252	•	
LYEU40120UN-1	12	0.819	1.575 (40mm)	0.252	•	
LYEU40140UN-1	14	0.819	1.575 (40mm)	0.252	•	
LYEU40160UN-1	16	0.819	1.575 (40mm)	0.252	•	

UN (EXTERNAL) INSERTS

LYEU_UN-X



Part Number	TPI Threads Per Inch	W1 Insert Width	INSL Insert Length	S1 Overall Insert Thickness	Grade	IN2005
LYEU14120UN-X-1	12	0.311	0.551 (14mm)	0.126	•	
LYEU14140UN-X-1	14	0.311	0.551 (14mm)	0.126	•	
LYEU14160UN-X-1	16	0.311	0.551 (14mm)	0.126	•	
LYEU14180UN-X-1	18	0.311	0.551 (14mm)	0.126	•	
LYEU14200UN-X-1	20	0.311	0.551 (14mm)	0.126	•	
LYEU14240UN-X-1	24	0.311	0.551 (14mm)	0.126	•	
LYEU14280UN-X-1	28	0.311	0.551 (14mm)	0.126	•	
LYEU14320UN-X-1	32	0.311	0.551 (14mm)	0.126	•	
LYEU21100UN-X-1	10	0.496	0.827 (21mm)	0.189	•	
LYEU21120UN-X-1	12	0.496	0.827 (21mm)	0.189	•	
LYEU21140UN-X-1	14	0.496	0.827 (21mm)	0.189	•	
LYEU21160UN-X-1	16	0.496	0.827 (21mm)	0.189	•	
LYEU21180UN-X-1	18	0.496	0.827 (21mm)	0.189	•	
LYEU21200UN-X-1	20	0.496	0.827 (21mm)	0.189	•	
LYEU21240UN-X-1	24	0.496	0.827 (21mm)	0.189	•	
LYEU30060UN-X-1	6	0.657	1.181 (30mm)	0.220	•	
LYEU30080UN-X-1	8	0.657	1.181 (30mm)	0.220	•	
LYEU30100UN-X-1	10	0.657	1.181 (30mm)	0.220	•	
LYEU30120UN-X-1	12	0.657	1.181 (30mm)	0.220	•	
LYEU30140UN-X-1	14	0.657	1.181 (30mm)	0.220	•	
LYEU30160UN-X-1	16	0.657	1.181 (30mm)	0.220	•	
LYEU30180UN-X-1	18	0.657	1.181 (30mm)	0.220	•	
LYEU30200UN-X-1	20	0.657	1.181 (30mm)	0.220	•	
LYEU40060UN-X-1	6	0.819	1.575 (40mm)	0.252	•	
LYEU40080UN-X-1	8	0.819	1.575 (40mm)	0.252	•	
LYEU40110UN-X-1	11	0.819	1.575 (40mm)	0.252	•	
LYEU40120UN-X-1	12	0.819	1.575 (40mm)	0.252	•	
LYEU40140UN-X-1	14	0.819	1.575 (40mm)	0.252	•	
LYEU40160UN-X-1	16	0.819	1.575 (40mm)	0.252	•	

MACHINING DATA FOR INDEXABLE INSERT THREADING TOOLS

Main ISO-group	Workpiece Material	Condition	Material Group	Tensile Strength (N/mm ²)	Hardness	IN 2005	
						Cutting speed (SFM)	
P	Non-alloy Steel, Cast Steel, Free Cutting Steel	< 0,25 % C	Annealed	1	420	125	330-1085
		>= 0,25 % C	Annealed	2	650	190	265-690
		< 0,55 % C	Quenched and Tempered	3	850	250	215-600
		>= 0,55 % C	Annealed	4	750	220	360-590
	Low Alloy Steel and Cast Steel (with less than 5 % C)	Quenched and Tempered	5	1000	300	315-525	
		Annealed	6	600	200	300-525	
		Quenched and Tempered	7	930	275	215-660	
		Quenched and Tempered	8	1000	300	230-690	
	High Alloy Steel, Cast Steel and Tool Steel	Quenched and Tempered	9	1200	350	315-525	
		Annealed	10	680	200	430-600	
		Quenched and Tempered	11	1100	325	245-330	
M	Stainless Steel and Cast Steel	Ferritic, martensitic	12	680	200	360-600	
		Martensitic	13	820	240	230-510	
		Austenitic	14	600	180	280-330	
K	Gray Cast Iron (GG)	Ferritic	15	-	180	230-495	
		Pearlitic	16	-	260	360-500	
	Cast Iron Nodular (GGG)	Ferritic	17	-	160	400-525	
		Pearlitic	18	-	250	245-525	
	Malleable Cast Iron	Ferritic	19	-	130	400-525	
		Pearlitic	20	-	230	360-500	
N	Aluminum-wrought Alloy	Uncured	21	-	60	525-985	
		Cured	22	-	100	525-985	
	Aluminum Cast Alloy	<=12 % Si	Uncured	23	-	75	525-985
		Cured	24	-	90	525-985	
	>12 % Si	High temperature	25	-	130	525-985	
		Free cutting	26	-	110	525-985	
	Copper Alloys	>1% Pb	Brass	27	-	90	525-985
		Electrolytic copper	28	-	100	525-985	
		Duroplastics, fiber plastics	29	-	-	525-985	
	Hard Rubber	30	-	-	330-1315		
S	High Temp Alloys	Fe-based	Annealed	31	-	200	65-330
			Cured	32	-	280	65-330
		Ni/Co-based	Annealed	33	-	250	65-330
			Cured	34	-	350	65-330
			Cast	35	-	320	65-330
	Titanium & Titanium Alloys		36	RM 400	-	65-330	
		Alpha & beta alloys, cured	37	RM 1050	-	65-330	
H	Hardened Steel	Hardened	38	-	55 HRC	180-215	
		Hardened	39	-	60 HRC	150-180	
	Chilled Cast Iron	Cast	40	-	400	300-345	
	Cast Iron Nodular (GGG)	Hardened	41	-	55 HRC	180-215	

* For application specific feed rates, please refer to RapidThread Advisor - http://www.imc-companies.com/mtin_usa/

NEW/OLD PART NUMBERS

MTE D

OLD Item Number		NEW Item Number	Part Number
3323190	➡➡➡➡➡	2945072	MTE D0.375-A-W0.75-12
3346927	➡➡➡➡➡	2945174	MTE D0.39-1-W0.75-12
3346920	➡➡➡➡➡	2945168	MTE D0.50-1-W0.75-14
3320040	➡➡➡➡➡	2945033	MTE D0.54-1-W0.75-14
3108492	➡➡➡➡➡	2945000	MTE D0.57-1-W0.75-14
3346926	➡➡➡➡➡	2945173	MTE D0.67-1-W0.75-14
3346910	➡➡➡➡➡	2945167	MTE D0.79-1-W0.75-21
3346922	➡➡➡➡➡	2945169	MTE D0.94-1-W0.75-21
3323480	➡➡➡➡➡	2945114	MTE D1.16-1-W1.00-30
3346925	➡➡➡➡➡	2945172	MTE D1.25-1-W1.00-30
3323481	➡➡➡➡➡	2945115	MTE D1.50-1-W1.25-30
3323565	➡➡➡➡➡	2945163	MTE D1.75-1-W1.50-40

MTE D-2

OLD Item Number		NEW Item Number	Part Number
3346928	➡➡➡➡➡	2945175	MTE D0.79-2-W0.75-14
3320210	➡➡➡➡➡	2945060	MTE D1.18-2-W1.00-21
3346930	➡➡➡➡➡	2945176	MTE D1.56-2-W1.25-30
3323566	➡➡➡➡➡	2945164	MTE D2.00-2-W1.50-40

MTE D-C

OLD Item Number		NEW Item Number	Part Number
3323191	➡➡➡➡➡	2945073	MTE D0.39-1-C12C-12
3346923	➡➡➡➡➡	2945170	MTE D0.50-1-C.375C-14
3346924	➡➡➡➡➡	2945171	MTE D0.62-1-C.500C-14
3108493	➡➡➡➡➡	2945001	MTE D0.82-1-C.625C-21

MTF D

OLD Item Number		NEW Item Number	Part Number
3320209	➡➡➡➡➡	2945059	MTF D2.50-5-.75-21
3323478	➡➡➡➡➡	2945112	MTF D2.50-4-.75-30
3323479	➡➡➡➡➡	2945113	MTF D4.00-4-1.25-30
3323562	➡➡➡➡➡	2945161	MTF D4.00-4-1.25-40
3323563	➡➡➡➡➡	2945162	MTF D3.15-4-1.25-40

NEW/OLD PART NUMBERS

ABUT (AM. BUTTRESS) THREADFORM

OLD Item Number		NEW Item Number	Part Number
3323493	➡➡➡➡➡	2945116	LYEU21100AB-1
3323494	➡➡➡➡➡	2945117	LYEU21120AB-1
3323495	➡➡➡➡➡	2945118	LYEU21160AB-1
3323496	➡➡➡➡➡	2945119	LYEU21080AB-1
3323378	➡➡➡➡➡	2945104	LYEU30100AB-1
3323379	➡➡➡➡➡	2945105	LYEU30120AB-1
3323447	➡➡➡➡➡	2945106	LYEU30160AB-1
5569496	➡➡➡➡➡	6230331	LYEU30040AB-1
5569519	➡➡➡➡➡	6258517	LYEU30060AB-1
3323448	➡➡➡➡➡	2945107	LYEU30080AB-1
3323553	➡➡➡➡➡	2945160	LYEU40040AB-1

ACME THREADFORM

OLD Item Number		NEW Item Number	Part Number
3323497	➡➡➡➡➡	2945120	LYEU21100AC-1
3323498	➡➡➡➡➡	2945121	LYEU21120AC-1
3323368	➡➡➡➡➡	2945094	LYEU30040AC-1
3323370	➡➡➡➡➡	2945096	LYEU30050AC-1
3323369	➡➡➡➡➡	2945095	LYEU30060AC-1
3323371	➡➡➡➡➡	2945097	LYEU30080AC-1
3323366	➡➡➡➡➡	2945092	LYEU30100AC-1
3323367	➡➡➡➡➡	2945093	LYEU30120AC-1
3323537	➡➡➡➡➡	2945147	LYEU40030AC-1
3323539	➡➡➡➡➡	2945148	LYEU40035AC-1

BSPT THREADFORM

OLD Item Number		NEW Item Number	Part Number
3323185	➡➡➡➡➡	6198605	LYEU12190BT-1
5669466	➡➡➡➡➡	6196547	LYEU14140BT-1
3320026	➡➡➡➡➡	6198606	LYEU14190BT-1
5669484	➡➡➡➡➡	6198608	LYEU21110BT-1
3320126	➡➡➡➡➡	6198607	LYEU21140BT-1
3323449	➡➡➡➡➡	6198609	LYEU30110BT-1
3323551	➡➡➡➡➡	6198610	LYEU40110BT-1

PG THREADFORM

OLD Item Number		NEW Item Number	Part Number
3320025	➡➡➡➡➡	6198611	LYEU14180PG-1
3320133	➡➡➡➡➡	6198613	LYEU21160PG-1
3320134	➡➡➡➡➡	6198612	LYEU21180PG-1
3323452	➡➡➡➡➡	6198614	LYEU30160PG-1

NPS THREADFORM

OLD Item Number		NEW Item Number	Part Number
3323130	➡➡➡➡➡	6269114	LYEU12180NS-1
3320032	➡➡➡➡➡	2945032	LYEU14140NS-1
3320031	➡➡➡➡➡	6271062	LYEU14180NS-1
3320128	➡➡➡➡➡	6271064	LYEU21115NS-1
3320129	➡➡➡➡➡	6269115	LYEU21140NS-1
3323373	➡➡➡➡➡	6271066	LYEU30115NS-1
3323376	➡➡➡➡➡	6269116	LYEU30080NS-1
3323542	➡➡➡➡➡	6269117	LYEU40115NS-1
3323543	➡➡➡➡➡	6269118	LYEU40080NS-1

NPSF THREADFORM

OLD Item Number		NEW Item Number	Part Number
3323136	➡➡➡➡➡	6269120	LYEU12180NSF-1
3320030	➡➡➡➡➡	6271061	LYEU14140NSF-1
3320029	➡➡➡➡➡	6271063	LYEU14180NSF-1
3320130	➡➡➡➡➡	6271065	LYEU21115NSF-1
3320132	➡➡➡➡➡	6269119	LYEU21140NSF-1
3323374	➡➡➡➡➡	6269121	LYEU30115NSF-1

NEW/OLD PART NUMBERS

NPT THREADFORM

OLD Item Number		NEW Item Number	Part Number
5669450	➡➡➡➡➡	6198587	LYEU12180NT-1
5669458	➡➡➡➡➡	6198588	LYEU14140NT-1
5669467	➡➡➡➡➡	6197615	LYEU14180NT-1
5669476	➡➡➡➡➡	6198590	LYEU21115NT-1
5669479	➡➡➡➡➡	6198589	LYEU21140NT-1
5669491	➡➡➡➡➡	6198591	LYEU30115NT-1
5669493	➡➡➡➡➡	6198592	LYEU30080NT-1
3223546	➡➡➡➡➡	6198594	LYEU40115NT-1
3323547	➡➡➡➡➡	6198595	LYEU40080NT-1

NPTF THREADFORM

OLD Item Number		NEW Item Number	Part Number
3323149	➡➡➡➡➡	6198596	LYEU12180NF-1
3320028	➡➡➡➡➡	6198598	LYEU14140NF-1
3320027	➡➡➡➡➡	6198597	LYEU14180NF-1
5669478	➡➡➡➡➡	6198600	LYEU21115NF-1
3320125	➡➡➡➡➡	6198599	LYEU21140NF-1
3323375	➡➡➡➡➡	6198601	LYEU30115NF-1
3323372	➡➡➡➡➡	6198602	LYEU30080NF-1
3323550	➡➡➡➡➡	6198604	LYEU40080NF-1
3323549	➡➡➡➡➡	6198603	LYEU40115NF-1

W (WHITWORTH) THREADFORM

OLD Item Number		NEW Item Number	Part Number
5669451	➡➡➡➡➡	6198574	LYEU12190BW-1
5669460	➡➡➡➡➡	6195698	LYEU14140BW-1
3320024	➡➡➡➡➡	6198577	LYEU14160BW-1
5669464	➡➡➡➡➡	6197994	LYEU14190BW-1
3320021	➡➡➡➡➡	6198576	LYEU14200BW-1
3320023	➡➡➡➡➡	6198575	LYEU14240BW-1
5669474	➡➡➡➡➡	6198580	LYEU21110BW-1
5669480	➡➡➡➡➡	6197723	LYEU21140BW-1
3320121	➡➡➡➡➡	6196999	LYEU21160BW-1
3320122	➡➡➡➡➡	6198579	LYEU21190BW-1
3320123	➡➡➡➡➡	6198578	LYEU21200BW-1
3323450	➡➡➡➡➡	6198582	LYEU30140BW-1
3323451	➡➡➡➡➡	6198581	LYEU30160BW-1
5669492	➡➡➡➡➡	6198583	LYEU30110BW-1
3323540	➡➡➡➡➡	6198584	LYEU40110BW-1
3323541	➡➡➡➡➡	6198585	LYEU40080BW-1

NEW/OLD PART NUMBERS

ISO INTERNAL THREADFORM

OLD Item Number		NEW Item Number	Part Number
3323073	➡➡➡➡➡	6198452	LYEU12050IS-1
3323071	➡➡➡➡➡	6198453	LYEU12075IS-1
5669448	➡➡➡➡➡	6198454	LYEU12100IS-1
5669453	➡➡➡➡➡	6198455	LYEU12125IS-1
5669449	➡➡➡➡➡	6198456	LYEU12150IS-1
5669471	➡➡➡➡➡	6198457	LYEU14050IS-1
3343806	➡➡➡➡➡	6342188	LYEU121750IS-1
5669468	➡➡➡➡➡	6198458	LYEU14075IS-1
5669327	➡➡➡➡➡	6198459	LYEU14100IS-1
3319983	➡➡➡➡➡	6198460	LYEU14125IS-1
5669321	➡➡➡➡➡	6198461	LYEU14150IS-1
3319986	➡➡➡➡➡	6198462	LYEU14175IS-1
5669332	➡➡➡➡➡	6196969	LYEU14200IS-1
5669457	➡➡➡➡➡	6198463	LYEU14250IS-1
5669329	➡➡➡➡➡	6196987	LYEU21100IS-1
5669323	➡➡➡➡➡	6197773	LYEU21150IS-1
3320075	➡➡➡➡➡	6198464	LYEU21175IS-1
5669334	➡➡➡➡➡	6197707	LYEU21200IS-1
5669483	➡➡➡➡➡	6197929	LYEU21250IS-1
5669475	➡➡➡➡➡	6198465	LYEU21300IS-1
5669477	➡➡➡➡➡	6198466	LYEU21350IS-1
5669326	➡➡➡➡➡	6198467	LYEU30150IS-1
5669336	➡➡➡➡➡	6198468	LYEU30200IS-1
5669488	➡➡➡➡➡	6198469	LYEU30300IS-1
3323362	➡➡➡➡➡	6198470	LYEU30350IS-1
5669486	➡➡➡➡➡	6198472	LYEU30400IS-1
5669489	➡➡➡➡➡	6196369	LYEU30450IS-1
5669490	➡➡➡➡➡	6196370	LYEU30500IS-1
3323517	➡➡➡➡➡	6198473	LYEU40150IS-1
5669500	➡➡➡➡➡	6198474	LYEU40200IS-1
3323518	➡➡➡➡➡	6198475	LYEU40300IS-1
3323519	➡➡➡➡➡	6198476	LYEU40350IS-1
5669499	➡➡➡➡➡	6198477	LYEU40400IS-1
3323520	➡➡➡➡➡	6198478	LYEU40450IS-1
3323522	➡➡➡➡➡	6198479	LYEU40500IS-1
3323524	➡➡➡➡➡	6198480	LYEU40550IS-1
5669497	➡➡➡➡➡	6198481	LYEU40600IS-1

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OLD Item Number		NEW Item Number	Part Number
3319979	➡➡➡➡➡	6198484	LYEU14075IS-X-1
5669328	➡➡➡➡➡	6198121	LYEU14100IS-X-1
3319980	➡➡➡➡➡	6198490	LYEU14125IS-X-1
5669322	➡➡➡➡➡	6198491	LYEU14150IS-X-1
3319981	➡➡➡➡➡	6198492	LYEU14175IS-X-1
5669331	➡➡➡➡➡	6196194	LYEU14200IS-X-1
3319982	➡➡➡➡➡	6198493	LYEU14250IS-X-1
5669330	➡➡➡➡➡	6198494	LYEU21100IS-X-1
5669324	➡➡➡➡➡	6198495	LYEU21150IS-X-1
5669333	➡➡➡➡➡	6198497	LYEU21200IS-X-1
3320073	➡➡➡➡➡	6198498	LYEU21250IS-X-1
3320074	➡➡➡➡➡	6197993	LYEU21300IS-X-1
5669325	➡➡➡➡➡	6198499	LYEU30150IS-X-1
5669335	➡➡➡➡➡	6196988	LYEU30200IS-X-1
3323363	➡➡➡➡➡	6198500	LYEU30300IS-X-1
3323364	➡➡➡➡➡	6198501	LYEU30350IS-X-1
3323365	➡➡➡➡➡	6198502	LYEU30400IS-X-1
3323531	➡➡➡➡➡	6198503	LYEU40150IS-X-1
3323532	➡➡➡➡➡	6198504	LYEU40200IS-X-1
3323533	➡➡➡➡➡	6198505	LYEU40300IS-X-1
3323534	➡➡➡➡➡	6198506	LYEU40400IS-X-1
3323535	➡➡➡➡➡	6198507	LYEU40500IS-X-1
3323536	➡➡➡➡➡	6198508	LYEU40600IS-X-1

NEW/OLD PART NUMBERS

UN INTERNAL THREADFORM			
OLD Item Number		NEW Item Number	Part Number
3323108	➡➡➡➡➡	6198514	LYEU12160UN-1
5669452	➡➡➡➡➡	6198513	LYEU12180UN-1
3323090	➡➡➡➡➡	6198512	LYEU12200UN-1
3323078	➡➡➡➡➡	6198511	LYEU12240UN-1
3323077	➡➡➡➡➡	6198510	LYEU12280UN-1
3323075	➡➡➡➡➡	6198509	LYEU12320UN-1
5669463	➡➡➡➡➡	6198522	LYEU14100UN-1
5669469	➡➡➡➡➡	6198521	LYEU14110UN-1
5669461	➡➡➡➡➡	6196968	LYEU14120UN-1
5669462	➡➡➡➡➡	6196361	LYEU14140UN-1
5669459	➡➡➡➡➡	6198520	LYEU14160UN-1
5669465	➡➡➡➡➡	6198519	LYEU14180UN-1
3319999	➡➡➡➡➡	6197564	LYEU14200UN-1
3320001	➡➡➡➡➡	6198518	LYEU14240UN-1
3320018	➡➡➡➡➡	6198517	LYEU14270UN-1
3320019	➡➡➡➡➡	6198516	LYEU14280UN-1
3320020	➡➡➡➡➡	6198515	LYEU14320UN-1
5669481	➡➡➡➡➡	6198527	LYEU21070UN-1
5669473	➡➡➡➡➡	6195699	LYEU21080UN-1
3320095	➡➡➡➡➡	6197616	LYEU21100UN-1
5669518	➡➡➡➡➡	6197708	LYEU21120UN-1
5669485	➡➡➡➡➡	6198526	LYEU21140UN-1
5669482	➡➡➡➡➡	6196365	LYEU21160UN-1
3320105	➡➡➡➡➡	6198525	LYEU21180UN-1
3320106	➡➡➡➡➡	6198524	LYEU21200UN-1
3320107	➡➡➡➡➡	6198523	LYEU21240UN-1
3323343	➡➡➡➡➡	6198536	LYEU30050UN-1
5669495	➡➡➡➡➡	6198535	LYEU30060UN-1
5669487	➡➡➡➡➡	6198534	LYEU30080UN-1
3323337	➡➡➡➡➡	6198533	LYEU30100UN-1
5669494	➡➡➡➡➡	6198532	LYEU30120UN-1
3323339	➡➡➡➡➡	6198531	LYEU30140UN-1
3323340	➡➡➡➡➡	6198530	LYEU30160UN-1
3323341	➡➡➡➡➡	6198529	LYEU30180UN-1
3323342	➡➡➡➡➡	6198528	LYEU30200UN-1
3323507	➡➡➡➡➡	6198544	LYEU40040UN-1
3323508	➡➡➡➡➡	6198543	LYEU40045UN-1
3323509	➡➡➡➡➡	6198542	LYEU40060UN-1
5669498	➡➡➡➡➡	6198541	LYEU40080UN-1
3323502	➡➡➡➡➡	6198540	LYEU40110UN-1
3323504	➡➡➡➡➡	6198539	LYEU40120UN-1
3323505	➡➡➡➡➡	6198538	LYEU40140UN-1
3323506	➡➡➡➡➡	6198537	LYEU40160UN-1

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OLD Item Number		NEW Item Number	Part Number
3319987	➡➡➡➡➡	6198546	LYEU14120UN-X-1
3319988	➡➡➡➡➡	6198551	LYEU14140UN-X-1
3319989	➡➡➡➡➡	6198548	LYEU14160UN-X-1
3319990	➡➡➡➡➡	6198549	LYEU14180UN-X-1
3319991	➡➡➡➡➡	6198550	LYEU14200UN-X-1
3319997	➡➡➡➡➡	6198547	LYEU14240UN-X-1
3319998	➡➡➡➡➡	6198552	LYEU14280UN-X-1
5669470	➡➡➡➡➡	6198545	LYEU14320UN-X-1
3320079	➡➡➡➡➡	6198559	LYEU21100UN-X-1
3320082	➡➡➡➡➡	6198558	LYEU21120UN-X-1
3320087	➡➡➡➡➡	6198557	LYEU21140UN-X-1
3320088	➡➡➡➡➡	6198556	LYEU21160UN-X-1
3320090	➡➡➡➡➡	6198555	LYEU21180UN-X-1
3320091	➡➡➡➡➡	6198554	LYEU21200UN-X-1
3320093	➡➡➡➡➡	6198553	LYEU21240UN-X-1
3323350	➡➡➡➡➡	6198567	LYEU30060UN-X-1
3323351	➡➡➡➡➡	6198566	LYEU30080UN-X-1
3323344	➡➡➡➡➡	6198565	LYEU30100UN-X-1
3323352	➡➡➡➡➡	6198564	LYEU30120UN-X-1
3323346	➡➡➡➡➡	6198563	LYEU30140UN-X-1
3323347	➡➡➡➡➡	6198562	LYEU30160UN-X-1
3323348	➡➡➡➡➡	6198561	LYEU30180UN-X-1
3323349	➡➡➡➡➡	6198560	LYEU30200UN-X-1
3323510	➡➡➡➡➡	6198571	LYEU40110UN-X-1
3323511	➡➡➡➡➡	6198570	LYEU40120UN-X-1
3323512	➡➡➡➡➡	6198569	LYEU40140UN-X-1
3323514	➡➡➡➡➡	6198568	LYEU40160UN-X-1
3323515	➡➡➡➡➡	6198573	LYEU40060UN-X-1
3323516	➡➡➡➡➡	6198572	LYEU40080UN-X-1