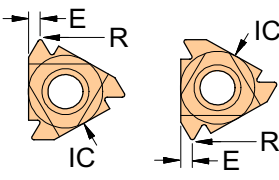
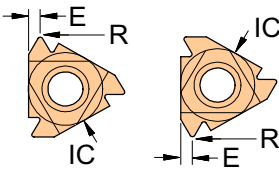
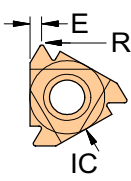
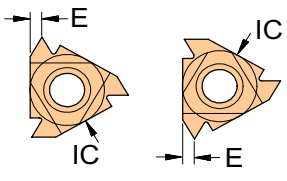
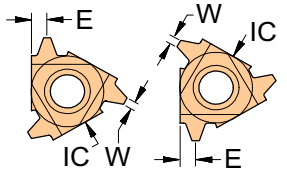


## 21 LAYDOWN THREADING INSERTS

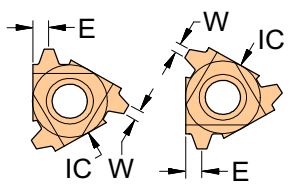
Style:	Insert Description		Dimensions				Grades		
<b>Partial Profile 60°</b>	External RH	Internal RH	PITCH	R	E	IC	123	156	323F
 <p>External RH    Internal RH</p> <p>Call for Availability On Left Hand Inserts</p>	NA	<b>11NR A60</b>	16 - 48	.003	.039	.250	<b>S</b>	LS	LS
	<b>16ER A60</b>	<b>16NR A60</b>	16 - 48	.003	.039	.375	<b>S</b>	LS	LS
		<b>16NR A60</b>	TPI	.003			<b>S</b>	LS	LS
	<b>16ER AG60</b>	<b>16NR AG60</b>	8 - 48	.003	.059	.375	<b>S</b>	LS	<b>S</b>
		<b>16NR AG60</b>	TPI	.003			<b>S</b>	LS	<b>S</b>
	<b>16ER G60</b>	<b>16NR G60</b>	8 - 14	.007	.059	.375	LS	LS	LS
		<b>16NR G60</b>	TPI	.005			LS	LS	LS
	<b>22ER N60</b>	<b>22NR N60</b>	5 - 7	.016	.098	.500	LS	LS	LS
		<b>22NR N60</b>	TPI	.010			LS	LS	LS
	<b>27ER Q60</b>	<b>27NR Q60</b>	4 - 4.5	.025	.126	.625	LS	LS	LS
	<b>27NR Q60</b>	TPI	.012			LS	LS	LS	
<b>Style:</b>	<b>Insert Description</b>		<b>Dimensions</b>				<b>Grades</b>		
<b>Full Profile 60°</b>	External RH	Internal RH	PITCH	R *	E	IC	123	156	323F
 <p>External RH    Internal RH</p> <p>Call for Availability On Left Hand Inserts</p> <p>* Insert Nose Radius: Internal = .125 x Pitch External = .1443 x Pitch</p>	<b>16ER 40UN</b>	<b>16NR 40UN</b>	40		.020	.375	LS	LS	LS
		<b>16NR 40UN</b>	TPI				LS	LS	LS
	<b>16ER 36UN</b>	<b>16NR 36UN</b>	36		.020	.375	LS	LS	LS
		<b>16NR 36UN</b>	TPI				LS	LS	LS
	<b>16ER 32UN</b>	<b>16NR 32 UN</b>	32		.020	.375	<b>S</b>	LS	LS
		<b>16NR 32 UN</b>	TPI				<b>S</b>	LS	LS
	<b>16ER 28UN</b>	<b>16NR 28UN</b>	28		.020	.375	<b>S</b>	LS	LS
		<b>16NR 28UN</b>	TPI				<b>S</b>	LS	LS
	<b>16ER 24UN</b>	<b>16NR 24UN</b>	24		.031	.375	<b>S</b>	LS	LS
		<b>16NR 24UN</b>	TPI				<b>S</b>	LS	LS
	<b>16ER 20UN</b>	<b>16NR 20UN</b>	20		.031	.375	<b>S</b>	LS	<b>S</b>
		<b>16NR 20UN</b>	TPI				<b>S</b>	LS	<b>S</b>
	<b>16ER 18UN</b>	<b>16NR 18UN</b>	18		.031	.375	<b>S</b>	LS	LS
		<b>16NR 18UN</b>	TPI				<b>S</b>	LS	LS
	<b>16ER 16UN</b>	<b>16NR 16UN</b>	16		.031	.375	<b>S</b>	LS	<b>S</b>
		<b>16NR 16UN</b>	TPI				<b>S</b>	LS	<b>S</b>
	<b>16ER 14UN</b>	<b>16NR 14UN</b>	14		.059	.375	<b>S</b>	LS	LS
		<b>16NR 14UN</b>	TPI				<b>S</b>	LS	LS
	<b>16ER 13UN</b>	<b>16NR 13UN</b>	13		.059	.375	LS	LS	LS
		<b>16NR 13UN</b>	TPI				LS	LS	LS
	<b>16ER 12UN</b>	<b>16NR 12UN</b>	12		.059	.375	<b>S</b>	LS	<b>S</b>
		<b>16NR 12UN</b>	TPI				<b>S</b>	LS	<b>S</b>
	<b>16ER 10UN</b>	<b>16NR 10UN</b>	10		.059	.375	LS	LS	LS
		<b>16NR 10UN</b>	TPI				LS	LS	LS
	<b>16ER 9UN</b>	<b>16NR 9UN</b>	9		.059	.375	LS	LS	LS
		<b>16NR 9UN</b>	TPI				LS	LS	LS
	<b>16ER 8UN</b>	<b>16NR 8UN</b>	8		.059	.375	LS	LS	LS
		<b>16NR 8UN</b>	TPI				LS	LS	LS
<b>22ER 7UN</b>	<b>22NR 7UN</b>	7		.098	.500	LS	LS	LS	
	<b>22NR 7UN</b>	TPI				LS	LS	LS	
<b>22ER 6UN</b>	<b>22NR 6UN</b>	6		.098	.500	LS	LS	LS	
	<b>22NR 6UN</b>	UN				LS	LS	LS	
<b>22ER 5UN</b>	<b>22NR 5UN</b>	5		.098	.500	LS	LS	LS	
	<b>22NR 5UN</b>	UN				LS	LS	LS	
<b>S = Stock Standard      LS = Limited Stock or Non-Stock - Call for Availability</b>									

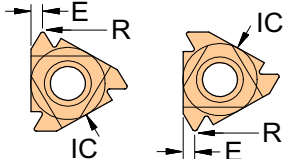
# LAYDOWN THREADING INSERTS 22

Style:	Insert Description		Dimensions				Grades		
<b>Full Profile UNJ</b>	External RH	Internal RH	PITCH	R	E	IC	123	156	323F
 <p>External RH</p> <p>Controlled Root Radius UNJ Threading Inserts</p>	<b>16ER 32UNJ</b>	NA	32 UNJ	.0047	.020	.375	LS	LS	LS
	<b>16ER 28UNJ</b>	NA	28 UNJ	.0054	.020	.375	LS	LS	LS
	<b>16ER 24UNJ</b>	NA	24 UNJ	.0063	.031	.375	LS	LS	LS
	<b>16ER 20UNJ</b>	NA	20UNJ	.0075	.031	.375	LS	LS	LS
	<b>16ER 18UNJ</b>	NA	18 UNJ	.0083	.031	.375	LS	LS	LS
	<b>16ER 16UNJ</b>	NA	16 UNJ	.0094	.031	.375	LS	LS	LS
	<b>16ER 14UNJ</b>	NA	14 UNJ	.0107	.059	.375	LS	LS	LS
	<b>16ER 12UNJ</b>	NA	12 UNJ	.0125	.059	.375	LS	LS	LS
	<b>16ER 10UNJ</b>	NA	10 UNJ	.0150	.059	.375	LS	LS	LS
	<b>16ER 8UNJ</b>	NA	8 UNJ	.0188	.059	.375	LS	LS	LS
<b>Style:</b>	<b>Insert Description</b>		<b>Dimensions</b>				<b>Grades</b>		
<b>Full Profile NPT</b>	External RH	Internal RH	PITCH	R	E	IC	123	156	323F
 <p>External RH    Internal RH</p>	<b>16ER 27NPT</b>		27	NA	.020	.375	<b>S</b>	LS	LS
		<b>16NR 27NPT</b>	NPT				LS	LS	LS
	<b>16ER 18NPT</b>		18		.031	.375	<b>S</b>	LS	LS
		<b>16NR 18NPT</b>	NPT				<b>S</b>	LS	LS
	<b>16ER 14NPT</b>		14		.059	.375	<b>S</b>	LS	LS
		<b>16NR 14NPT</b>	NPT				<b>S</b>	LS	LS
	<b>16ER 11.5NPT</b>		11.5		.059	.375	<b>S</b>	LS	LS
		<b>16NR 11.5NPT</b>	NPT				<b>S</b>	LS	LS
	<b>16ER 8NPT</b>		8		.063	.375	LS	LS	LS
		<b>16NR 8NPT</b>	NPT				LS	LS	LS
<b>Style:</b>	<b>Insert Description</b>		<b>Dimensions</b>				<b>Grades</b>		
<b>Full Profile Acme</b>	External RH	Internal RH	PITCH	W	E	IC	123	156	323F
 <p>External RH    Internal RH</p>	<b>16ER 16 ACME</b>		16	.0206	.031	.375	LS	LS	LS
		<b>16NR 16 ACME</b>	ACME				LS	LS	LS
	<b>16ER 14 ACME</b>		14	.0239	.059	.375	LS	LS	LS
		<b>16NR 14 ACME</b>	ACME				LS	LS	LS
	<b>16ER 12 ACME</b>		12	.0283	.059	.375	LS	LS	LS
		<b>16NR 12 ACME</b>	ACME				LS	LS	LS
	<b>16ER 10 ACME</b>		10	.0319	.059	.375	LS	LS	LS
		<b>16NR 10 ACME</b>	ACME				LS	LS	LS
	<b>16ER 8 ACME</b>		8	.0411	.059	.375	LS	LS	LS
		<b>16NR 8 ACME</b>	ACME				LS	LS	LS
	<b>22ER 6 ACME</b>		6	.0566	.098	.500	LS	LS	LS
		<b>22NR 6 ACME</b>	ACME				LS	LS	LS
	<b>22ER 5 ACME</b>		5	.0689	.091	.500	LS	LS	LS
		<b>22NR 5 ACME</b>	ACME				LS	LS	LS
	<b>27ER 4 ACME</b>		4	.0875	.118	.625	LS	LS	LS

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## 23 LAYDOWN THREADING INSERTS

Style:	Insert Description		Dimensions				Grades		
Full Profile Stub Acme	External RH	Internal RH	PITCH	W	E	IC	123	156	323F
 <p>External RH    Internal RH</p>	<b>16ER 16STACME</b>		16	.0238	.039	.375	LS	LS	LS
		<b>16NR 16STACME</b>	ST ACME				LS	LS	LS
	<b>16ER 14STACME</b>		14	.0276	.051	.375	LS	LS	LS
		<b>16NR 14STACME</b>	ST ACME				LS	LS	LS
	<b>16ER 12STACME</b>		12	.0326	.059	.375	LS	LS	LS
		<b>16NR 12STACME</b>	ST ACME				LS	LS	LS
	<b>16ER 10STACME</b>		10	.0370	.059	.375	LS	LS	LS
		<b>16NR 10STACME</b>	ST ACME				LS	LS	LS
	<b>16ER 8STACME</b>		8	.0476	.063	.375	LS	LS	LS
		<b>16NR 8STACME</b>	ST ACME				LS	LS	LS
	<b>22ER 6TSACME</b>		6	.0652	.091	.500	LS	LS	LS
		<b>22NR 6STACME</b>	ST ACME				LS	LS	LS
	<b>22ER 5STACME</b>		5	.0793	.079	.500	LS	LS	LS
		<b>22NR 5STACME</b>	ST ACME				LS	LS	LS
<b>27ER 4STACME</b>		4	.1004	.102	.625	LS	LS	LS	
	<b>27NR 4STACME</b>	ST ACME				LS	LS	LS	

Style:	Insert Description		Dimensions				Grades		
Full Profile ISO Metric	External RH	Internal RH	PITCH	R *	E	IC	123	156	323F
 <p>External RH    Internal RH</p> <p>Call for Availability On Left Hand Inserts</p> <p>* Insert Nose Radius: Internal = .125 x Pitch External = .1443 x Pitch</p>	<b>16ER 0.50 ISO</b>		0.50		.020	.375	LS	LS	LS
		<b>16NR 0.50 ISO</b>	mm				LS	LS	LS
	<b>16ER 0.75 ISO</b>		0.75		.020	.375	LS	LS	LS
		<b>16NR 0.75 ISO</b>	mm				LS	LS	LS
	<b>16ER 1.00 ISO</b>		1.00		.031	.375	LS	LS	LS
		<b>16NR 1.00 ISO</b>	mm				LS	LS	LS
	<b>16ER 1.25 ISO</b>		1.25		.031	.375	LS	LS	LS
		<b>16NR 1.25 ISO</b>	mm				LS	LS	LS
	<b>16ER 1.50 ISO</b>		1.50		.059	.375	LS	LS	LS
		<b>16NR 1.50 ISO</b>	mm				LS	LS	LS
	<b>16ER 1.75 ISO</b>		1.75		.059	.375	LS	LS	LS
		<b>16NR 1.75 ISO</b>	mm				LS	LS	LS
	<b>16ER 2.00 ISO</b>		2.00		.059	.375	LS	LS	LS
		<b>16NR 2.00 ISO</b>	mm				LS	LS	LS
	<b>16ER 2.50 ISO</b>		2.50		.059	.375	LS	LS	LS
		<b>16NR 2.50 ISO</b>	mm				LS	LS	LS
<b>16ER 3.00 ISO</b>		3.00		.059	.375	LS	LS	LS	
	<b>16NR 3.00 ISO</b>	mm				LS	LS	LS	

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