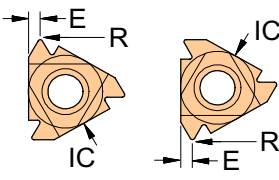
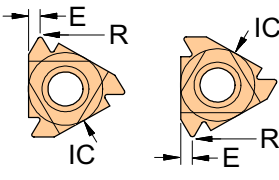
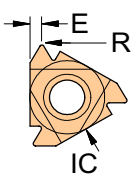
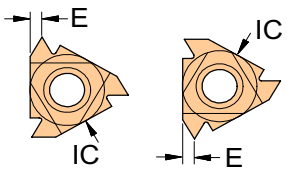
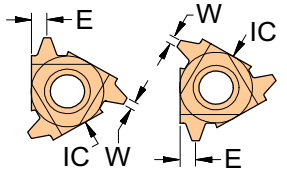


21 LAYDOWN THREADING INSERTS

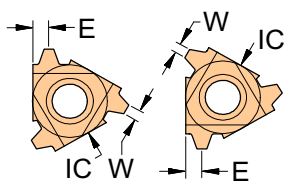
Style:	Insert Description		Dimensions				Grades		
Partial Profile 60°	External RH	Internal RH	PITCH	R	E	IC	123	156	323F
 <p>External RH Internal RH</p> <p>Call for Availability On Left Hand Inserts</p>	NA	11NR A60	16 - 48	.003	.039	.250	S	LS	LS
	16ER A60	16NR A60	16 - 48	.003	.039	.375	S	LS	LS
		16NR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

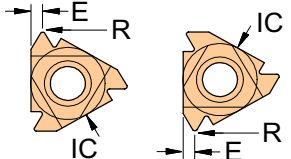
LAYDOWN THREADING INSERTS 22

Style:	Insert Description		Dimensions				Grades		
Full Profile UNJ	External RH	Internal RH	PITCH	R	E	IC	123	156	323F
 <p>External RH</p> <p>Controlled Root Radius UNJ Threading Inserts</p>	16ER 32UNJ	NA	32 UNJ	.0047	.020	.375	LS	LS	LS
	16ER 28UNJ	NA	28 UNJ	.0054	.020	.375	LS	LS	LS
	16ER 24UNJ	NA	24 UNJ	.0063	.031	.375	LS	LS	LS
	16ER 20UNJ	NA	20UNJ	.0075	.031	.375	LS	LS	LS
	16ER 18UNJ	NA	18 UNJ	.0083	.031	.375	LS	LS	LS
	16ER 16UNJ	NA	16 UNJ	.0094	.031	.375	LS	LS	LS
	16ER 14UNJ	NA	14 UNJ	.0107	.059	.375	LS	LS	LS
	16ER 12UNJ	NA	12 UNJ	.0125	.059	.375	LS	LS	LS
	16ER 10UNJ	NA	10 UNJ	.0150	.059	.375	LS	LS	LS
	16ER 8UNJ	NA	8 UNJ	.0188	.059	.375	LS	LS	LS
Style:	Insert Description		Dimensions				Grades		
Full Profile NPT	External RH	Internal RH	PITCH	R	E	IC	123	156	323F
 <p>External RH Internal RH</p>	16ER 27NPT		27	NA	.020	.375	S	LS	LS
		16NR 27NPT	NPT				LS	LS	LS
	16ER 18NPT		18		.031	.375	S	LS	LS
		16NR 18NPT	NPT				S	LS	LS
	16ER 14NPT		14		.059	.375	S	LS	LS
		16NR 14NPT	NPT				S	LS	LS
	16ER 11.5NPT		11.5		.059	.375	S	LS	LS
		16NR 11.5NPT	NPT				S	LS	LS
	16ER 8NPT		8		.063	.375	LS	LS	LS
		16NR 8NPT	NPT				LS	LS	LS
Style:	Insert Description		Dimensions				Grades		
Full Profile Acme	External RH	Internal RH	PITCH	W	E	IC	123	156	323F
 <p>External RH Internal RH</p>	16ER 16 ACME		16	.0206	.031	.375	LS	LS	LS
		16NR 16 ACME	ACME				LS	LS	LS
	16ER 14 ACME		14	.0239	.059	.375	LS	LS	LS
		16NR 14 ACME	ACME				LS	LS	LS
	16ER 12 ACME		12	.0283	.059	.375	LS	LS	LS
		16NR 12 ACME	ACME				LS	LS	LS
	16ER 10 ACME		10	.0319	.059	.375	LS	LS	LS
		16NR 10 ACME	ACME				LS	LS	LS
	16ER 8 ACME		8	.0411	.059	.375	LS	LS	LS
		16NR 8 ACME	ACME				LS	LS	LS
	22ER 6 ACME		6	.0566	.098	.500	LS	LS	LS
		22NR 6 ACME	ACME				LS	LS	LS
	22ER 5 ACME		5	.0689	.091	.500	LS	LS	LS
		22NR 5 ACME	ACME				LS	LS	LS
	27ER 4 ACME		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>	16ER 16STACME		16	.0238	.039	.375	LS	LS	LS
		16NR 16STACME	ST ACME				LS	LS	LS
	16ER 14STACME		14	.0276	.051	.375	LS	LS	LS
		16NR 14STACME	ST ACME				LS	LS	LS
	16ER 12STACME		12	.0326	.059	.375	LS	LS	LS
		16NR 12STACME	ST ACME				LS	LS	LS
	16ER 10STACME		10	.0370	.059	.375	LS	LS	LS
		16NR 10STACME	ST ACME				LS	LS	LS
	16ER 8STACME		8	.0476	.063	.375	LS	LS	LS
		16NR 8STACME	ST ACME				LS	LS	LS
	22ER 6TSACME		6	.0652	.091	.500	LS	LS	LS
		22NR 6STACME	ST ACME				LS	LS	LS
	22ER 5STACME		5	.0793	.079	.500	LS	LS	LS
		22NR 5STACME	ST ACME				LS	LS	LS
27ER 4STACME		4	.1004	.102	.625	LS	LS	LS	
	27NR 4STACME	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>	16ER 0.50 ISO		0.50		.020	.375	LS	LS	LS
		16NR 0.50 ISO	mm				LS	LS	LS
	16ER 0.75 ISO		0.75		.020	.375	LS	LS	LS
		16NR 0.75 ISO	mm				LS	LS	LS
	16ER 1.00 ISO		1.00		.031	.375	LS	LS	LS
		16NR 1.00 ISO	mm				LS	LS	LS
	16ER 1.25 ISO		1.25		.031	.375	LS	LS	LS
		16NR 1.25 ISO	mm				LS	LS	LS
	16ER 1.50 ISO		1.50		.059	.375	LS	LS	LS
		16NR 1.50 ISO	mm				LS	LS	LS
	16ER 1.75 ISO		1.75		.059	.375	LS	LS	LS
		16NR 1.75 ISO	mm				LS	LS	LS
	16ER 2.00 ISO		2.00		.059	.375	LS	LS	LS
		16NR 2.00 ISO	mm				LS	LS	LS
	16ER 2.50 ISO		2.50		.059	.375	LS	LS	LS
		16NR 2.50 ISO	mm				LS	LS	LS
16ER 3.00 ISO		3.00		.059	.375	LS	LS	LS	
	16NR 3.00 ISO	mm				LS	LS	LS	

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