



CNC CARBIDE INSERTS

HIGH PERFORMANCE



 **Tel:** + 86 731 28835861

 **Email:** Maria@msutools.com/info@msutools.com

 **Address:** Building No.3, Lishe Road No.1,
Hetang District, Zhuzhou City, Hunan Province,
China Zipcode: 412000



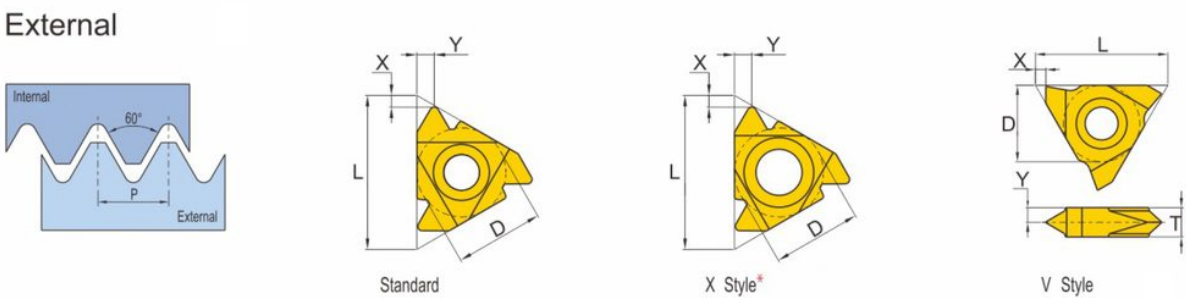
We are a specialized supplier of high-performance carbide CNC cutting tools, dedicated to supporting the precision machining, metalworking, and manufacturing industries. Our product lineup includes solid carbide **end mills, drills, inserts, and custom cutting solutions designed for high-speed, high-precision CNC applications.** With a focus on durability, accuracy, and efficiency, our tools are engineered to meet the rigorous demands of industries such as automotive, aerospace, mold and die, and general engineering. Whether for roughing or finishing operations, we deliver reliable tooling solutions that enhance productivity and ensure superior machining results. Backed by technical expertise and a commitment to quality, we aim to be your trusted partner in advanced machining performance.



Threading Turning Tools

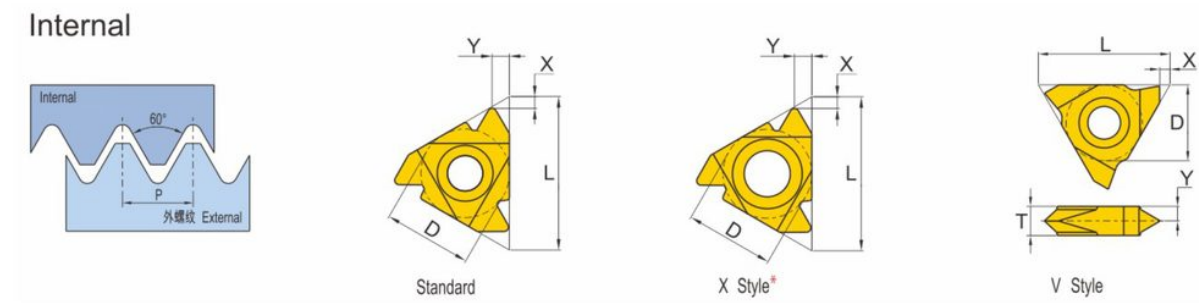


Partial Profile 60° Inserts



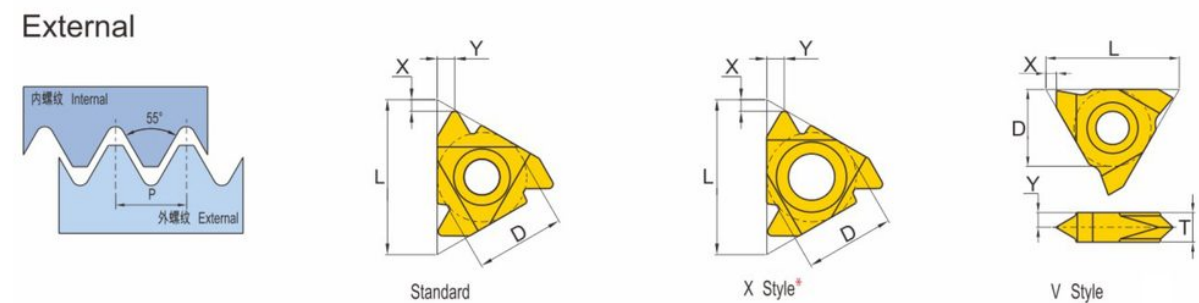
Inserts shape	D	Pitch		Ordering code		Dimension			
		mm	TPI	Right hand	Left hand	L	X	Y	T
Standard	1/4"	0.5~1.5	48~16	11ER A60	11EL A60	11	0.80	0.90	3.20
		0.5~1.5	48~16	16ER A60	16ER A60	16	0.80	0.90	3.65
	3/8"	0.5~3.0	48~8	16ER AG60	16EL AG60	16	1.20	1.70	3.65
		1.75~3.0	14~8	16ER G60	16EL G60	16	1.20	1.70	3.65
	1/2"	3.5~5.0	7~5	22ER N60	22EL N60	22	1.70	2.50	4.76
	5/8"	5.5~6.0	4.5~4	27ER Q60	27EL Q60	27	2.10	3.10	6.35
X style	3/8"	0.5~1.5	48~16	16XER A60	16XEL A60	16	0.80	0.90	4.30
		0.5~3.0	48~8	16XER AG60	16XEL AG60	16	1.20	1.70	4.30
		1.75~3.0	14~8	16XER G60	16XEL G60	16	1.20	1.70	4.30
	1/2"	3.5~5.0	7~5	22XER N60	22XEL N60	22	1.70	2.50	5.90
V style	5/8"	6.0~10	4~2.5	27VER V60	27VEL V60	27	0.6	5.2	10.0

Partial Profile 60° Inserts



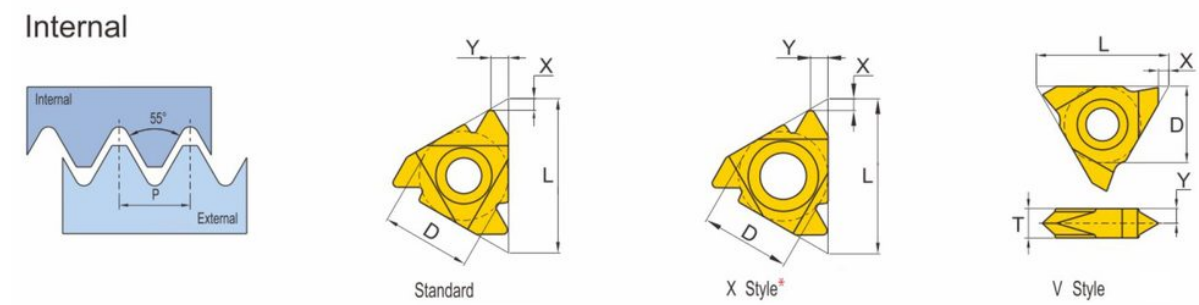
Inserts shape	D	Pitch		Ordering code		Dimension			
		mm	TPI	Right hand	Left hand	L	X	Y	T
 	5/32"	0.5~1.25	48~20	06NR A60	06NL A60	6	0.6	0.6	1.90
	3/16"	0.5~1.5	48~16	08NR A60	08NL A60	8	0.6	0.7	2.20
	1/4"	0.5~1.5	48~16	11NR A60	11NL A60	11	0.8	0.9	3.20
	3/8"	0.5~1.5	48~16	16NR A60	16NL A60	16	0.8	0.9	3.65
		0.5~3.0	48~8	16NR AG60	16NL AG60	16	1.2	1.7	3.65
		1.75~3.0	14~8	16NR G60	16NL G60	16	1.2	1.7	3.65
	1/2"	3.5~5.0	7~5	22NR N60	22NL N60	22	1.7	2.5	4.76
 	5/8"	5.5~6.0	4.5~4	27NR Q60	27NL Q60	27	1.8	2.7	6.35
	3/8"	0.5~1.5	48~16	11XNR A60	11XNL A60	11	0.8	0.9	3.39
	1/2"	0.5~1.5	48~16	16XNR A60	16XNL A60	16	0.8	0.9	4.30
		0.5~3.0	48~8	16XNR AG60	16XNL AG60	16	1.2	1.7	4.30
		1.75~3.0	14~8	16XNR G60	16XNL G60	16	1.2	1.7	4.30
	1/2"	3.5~5.0	7~5	22XNR N60	22XNL N60	22	1.7	2.5	5.90
 	5/8"	6.0~10	4~2.5	27VNR V60	27VNL V60	27	0.6	5.2	8.70

Partial Profile 55° Inserts



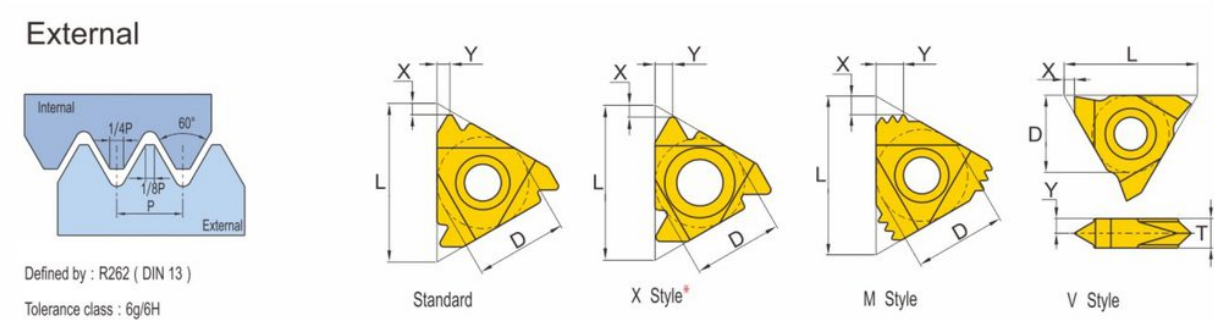
Inserts shape	D	Pitch		Ordering code		Dimension			
		mm	TPI	Right hand	Left hand	L	X	Y	T
 	1/4"	0.5~1.5	48~16	11ER A55	11EL A55	11	0.8	0.9	3.20
	3/8"	0.5~1.5	48~16	16ER A55	16EL A55	16	0.8	0.9	3.65
		0.5~3.0	48~8	16ER AG55	16EL AG55	16	1.2	1.7	3.65
		1.75~3.0	14~8	16ER G55	16EL G55	16	1.2	1.7	3.65
	1/2"	3.5~5.0	7~5	22ER N55	22EL N55	22	1.7	2.5	4.76
	5/8"	5.5~6.0	45~4	27ER QG55	22EL Q55	27	2.0	2.9	6.35
 	3/8"	0.5~1.5	48~16	16XER A55	16XEL A55	16	0.8	0.9	4.30
		0.5~3.0	48~16	16XER AG55	16XEL AG55	16	1.2	1.7	4.30
		1.75~3.0	48~8	16XER G55	16XEL G55	16	1.2	1.7	4.30
	1/2"	3.5~5.0	14~8	22XER N55	22XEL N55	22	1.7	2.5	5.90
 	5/8"	6.0~9	4~2.5	27VER V55	27VEL V55	27	1	4.3	8.70

Partial Profile 60° Inserts



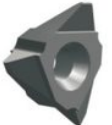
Inserts shape	D	Pitch		Ordering code		Dimension			
		mm	TPI	Right hand	Left hand	L	X	Y	T
Standard	5/32"	0.5~1.25	48~20	06NR A55	06NL A55	6	0.6	0.6	1.90
	3/16"	0.5~1.5	48~16	08NR A55	08NL A55	8	0.6	0.7	2.20
	1/4"	0.5~1.5	48~16	11NR A55	11NL A55	11	0.8	0.9	3.20
	3/8"	0.5~1.5	48~16	16NR A55	16NL A55	16	0.8	0.9	3.65
		0.5~3.0	48~8	16NR AG55	16NL AG55	16	1.2	1.7	3.65
		1.75~3.0	14~8	16NR G55	16NL G55	16	1.2	1.7	3.65
	1/2"	3.5~5.0	7~5	22NR N55	22NL N55	22	1.7	2.5	4.76
X style	1/4"	0.5~1.25	48~16	11XNR A55	11XNL A55	11	0.8	0.9	3.39
	3/8"	0.5~1.5	48~16	16XNR A55	16XNL A55	16	0.8	0.9	4.30
		0.5~3.0	48~8	16XNR AG55	16XNL AG55	16	1.2	1.7	4.30
		1.75~3.0	14~8	16XNR G55	16XNL G55	16	1.2	1.7	4.30
	1/2"	3.5~5.0	7~5	22XNR N55	22XNL N55	22	1.7	2.5	5.90
V style	5/8"	6.0~9	4~2.5	27VNR V55	27VNL V55	27	1.0	4.3	8.70

ISO Metric Full Profile Inserts



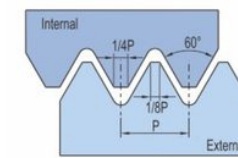
Inserts shape	D	Pitch	Ordering code		Dimension			
		mm	Right hand	Left hand	L	X	Y	T
Standard	1/4"	0.5	11ER0.50 ISO	11EL0.50 ISO	11	0.6	0.6	3.20
		0.75	11ER0.75 ISO	11EL0.75 ISO	11	0.6	0.6	3.20
		1	11ER1.00 ISO	11EL1.00 ISO	11	0.7	0.7	3.20
		1.25	11ER1.25 ISO	11EL1.25 ISO	11	0.8	0.9	3.20
		1.5	11ER1.50 ISO	11EL1.50 ISO	11	0.8	1.0	3.20
		1.75	11ER1.75 ISO	11EL1.75 ISO	11	0.8	1.1	3.20
	3/8"	0.5	16ER0.50 ISO	16EL0.50 ISO	16	0.6	0.6	3.65
		0.75	16ER0.75 ISO	16EL0.75 ISO	16	0.6	0.6	3.65
		1	16ER1.00 ISO	16EL1.00 ISO	16	0.7	0.7	3.65
		1.25	16ER1.25 ISO	16EL1.25 ISO	16	0.8	0.9	3.65
		1.5	16ER1.50 ISO	16EL1.50 ISO	16	0.8	1.0	3.65
		1.75	16ER1.75 ISO	16EL1.75 ISO	16	0.9	1.2	3.65
	1/2"	2	16ER2.00 ISO	16EL2.00 ISO	16	1.0	1.3	3.65
		2.5	16ER2.50 ISO	16EL2.50 ISO	16	1.1	1.5	3.65
		3	16ER3.00 ISO	16EL3.00 ISO	16	1.2	1.6	3.65
		3.5	22ER3.50 ISO	22EL3.50 ISO	22	1.6	2.3	4.76
		4	22ER4.00 ISO	22EL4.00 ISO	22	1.6	2.3	4.76
		4.5	22ER4.50 ISO	22EL4.50 ISO	22	1.7	2.4	4.76
	5/8"	5	22ER5.00 ISO	22EL5.00 ISO	22	1.7	2.5	4.76
		5.5	27ER5.50 ISO	27EL5.50 ISO	27.5	1.9	2.7	6.35
	X style	6	27ER6.00 ISO	27EL6.00 ISO	27.5	2.0	2.9	6.35
		0.5	16XER0.50 ISO	16XEL0.50 ISO	16	0.6	0.6	4.30
		0.75	16XER0.75 ISO	16XEL0.75 ISO	16	0.6	0.6	4.30
		1	16XER1.00 ISO	16XEL1.00 ISO	16	0.7	0.7	4.30
		1.25	16XER1.25 ISO	16XEL1.25 ISO	16	0.8	0.9	4.30
		1.5	16XER1.50 ISO	16XEL1.50 ISO	16	0.8	1.0	4.30
		1.75	16XER1.75 ISO	16XEL1.75 ISO	16	0.9	1.2	4.30
		2	16XER2.00 ISO	16XEL2.00 ISO	16	1.0	1.3	4.30
		2.5	16XER2.50 ISO	16XEL2.50 ISO	16	1.1	1.5	4.30
		3	16XER3.00 ISO	16XEL3.00 ISO	16	1.2	1.6	4.30

ISO Metric Full Profile Inserts (Con't)

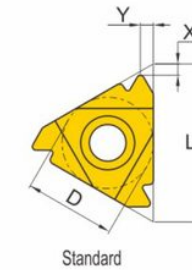
Inserts shape	D	Pitch	Ordering code		Dimension			
		mm	Right hand	Left hand	L	X	Y	T
	1/2"	3.5	22XER3.50 ISO	22XEL3.50 ISO	22	1.6	2.3	5.90
		4	22XER4.00 ISO	22XEL4.00 ISO	22	1.6	2.3	5.90
		4.5	22XER4.50 ISO	22XEL4.50 ISO	22	1.7	2.4	5.90
		5	22XER5.00 ISO	22XEL5.00 ISO	22	1.7	2.5	5.90
	3/8"	0.50	16VER0.50 ISO	16VEL0.50 ISO	16	1.1	3.0	3.65
		0.75	16VER0.75 ISO	16VEL0.75 ISO	16	1.1	3.0	3.65
		1.00	16VER1.00 ISO	16VEL1.00 ISO	16	1.1	2.9	3.65
		1.25	16VER1.25 ISO	16VEL1.25 ISO	16	1.1	2.7	3.65
		1.50	16VER1.50 ISO	16VEL1.50 ISO	16	1.1	2.6	3.65
		1.75	16VER1.75 ISO	16VEL1.75 ISO	16	1.1	2.5	3.65
		2.00	16VER2.00 ISO	16VEL2.00 ISO	16	1.1	2.3	3.65
		2.50	16VER2.50 ISO	16VEL2.50 ISO	16	1.1	2.1	3.65
	5/8"	3.00	16VER3.00 ISO	16VEL3.00 ISO	16	1.1	2.0	3.65
		6.00	27VER6.00 ISO	27VEL6.00 ISO	27	1.0	3.3	6.35
	3/8"	8.00	27VER8.00 ISO	27VEL8.00 ISO	27	1.0	4.3	8.70
		10.00	27VER10.0 ISO	27VEL10.0 ISO	27	1.0	5.2	10.0
	1/2"	1.00	16ER1.0 ISO3M		16	1.7	2.6	3.65
		1.50	16ER1.5 ISO2M		16	1.6	2.4	3.65
	5/8"	1.50	22ER1.5 ISO3M		22	2.4	3.8	4.76
		2.00	22ER2.0 ISO2M		22	2.0	3.0	4.76
		2.00	22ER2.0 ISO3M		22	3.1	4.9	4.76
	1"	3.00	27ER3.0 ISO2M		27	2.7	4.3	6.35

ISO Metric Full Profile Inserts

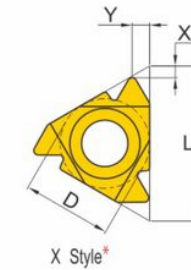
Internal



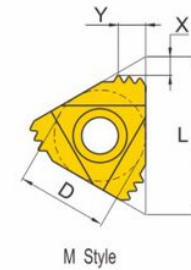
Defined by : R262 (DIN 13)
Tolerance class : 6g/6H



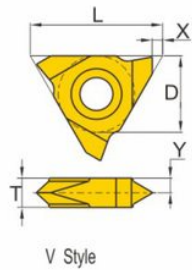
Standard



X Style*



M Style



V Style

Inserts shape	D	Pitch	Ordering code		Dimension			
		mm	Right hand	Left hand	L	X	Y	T
	5/32"	0.50	06NR0.50 ISO	06NL0.50 ISO	6	0.9	0.5	1.90
		0.75	06NR0.75 ISO	06NL0.75 ISO	6	0.8	0.5	1.90
		1.00	06NR1.00 ISO	06NL1.00 ISO	6	0.7	0.6	1.90
		1.25	06NR1.25 ISO	06NL1.25 ISO	6	0.6	0.6	1.90
	3/16"	0.50	08NR0.50 ISO	08NL0.50 ISO	8	0.6	0.5	2.20
		0.75	08NR0.75 ISO	08NL0.75 ISO	8	0.6	0.5	2.20
		1.00	08NR1.00 ISO	08NL1.00 ISO	8	0.6	0.6	2.20
		1.25	08NR1.25 ISO	08NL1.25 ISO	8	0.6	0.7	2.20
		1.50	08NR1.50 ISO	08NL1.50 ISO	8	0.6	0.7	2.20
		1.75	08NR1.75 ISO	08NL1.75 ISO	8	0.6	0.8	2.20
	1/4"	0.50	11NR0.50 ISO	11NL0.50 ISO	11	0.6	0.6	3.20
		0.75	11NR0.75 ISO	11NL0.75 ISO	11	0.6	0.6	3.20
		1.00	11NR1.00 ISO	11NL1.00 ISO	11	0.6	0.7	3.20
		1.25	11NR1.25 ISO	11NL1.25 ISO	11	0.8	0.9	3.20
		1.50	11NR1.50 ISO	11NL1.50 ISO	11	0.8	1.0	3.20
		1.75	11NR1.75 ISO	11NL1.75 ISO	11	0.9	1.1	3.20
		2.00	11NR2.00 ISO	11NL2.00 ISO	11	1.0	1.3	3.20
	3/8"	0.50	16NR0.50 ISO	16NL0.50 ISO	16	0.6	0.6	3.65
		0.75	16NR0.75 ISO	16NL0.75 ISO	16	0.6	0.6	3.65
		1.00	16NR1.00 ISO	16NL1.00 ISO	16	0.6	0.7	3.65
		1.25	16NR1.25 ISO	16NL1.25 ISO	16	0.8	0.9	3.65
		1.50	16NR1.50 ISO	16NL1.50 ISO	16	0.8	1.0	3.65
		1.75	16NR1.75 ISO	16NL1.75 ISO	16	0.9	1.2	3.65
		2.00	16NR2.00 ISO	16NL2.00 ISO	16	1.0	1.3	3.65
		2.50	16NR2.50 ISO	16NL2.50 ISO	16	1.1	1.5	3.65
		3.00	16NR3.00 ISO	16NL3.00 ISO	16	1.1	1.5	3.65
	1/2"	3.50	22NR3.50 ISO	22NL3.50 ISO	22	1.6	2.3	4.76
		4.00	22NR4.00 ISO	22NL4.00 ISO	22	1.6	2.3	4.76
		4.50	22NR4.50 ISO	22NL4.50 ISO	22	1.6	2.4	4.76
		5.00	22NR5.00 ISO	22NL5.00 ISO	22	1.6	2.5	4.76
	5/8"	5.50	27NR5.50 ISO	27NL5.50 ISO	27	1.9	2.7	6.35
		6.00	27NR6.00 ISO	27NL6.00 ISO	27	2.0	2.9	6.35

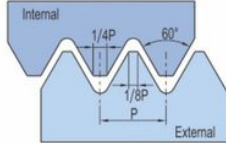
ISO Metric Full Profile Inserts

Inserts shape	D	Pitch	Ordering code		Dimension			
		mm	Right hand	Left hand	L	X	Y	T
X Style 	1/4"	0.50	11XNR0.50 ISO	11XNL0.50 ISO	11	0.6	0.6	3.39
		0.75	11XNR0.75 ISO	11XNL0.75 ISO	11	0.6	0.6	3.39
		1.00	11XNR1.00 ISO	11XNL1.00 ISO	11	0.6	0.7	3.39
		1.25	11XNR1.25 ISO	11XNL1.25 ISO	11	0.8	0.9	3.39
		1.50	11XNR1.50 ISO	11XNL1.50 ISO	11	0.8	1.0	3.39
		1.75	11XNR1.75 ISO	11XNL1.75 ISO	11	0.9	1.1	3.39
		2.00	11XNR2.00 ISO	11XNL2.00 ISO	11	1.0	1.3	3.39
	3/8"	0.50	16XNR0.50 ISO	16XNL0.50 ISO	16	0.6	0.6	4.30
		0.75	16XNR0.75 ISO	16XNL0.75 ISO	16	0.6	0.6	4.30
		1.00	16XNR1.00 ISO	16XNL1.00 ISO	16	0.6	0.7	4.30
		1.25	16XNR1.25 ISO	16XNL1.25 ISO	16	0.8	0.9	4.30
		1.50	16XNR1.50 ISO	16XNL1.50 ISO	16	0.8	1.0	4.30
		1.75	16XNR1.75 ISO	16XNL1.75 ISO	16	0.9	1.2	4.30
		2.00	16XNR2.00 ISO	16XNL2.00 ISO	16	1.0	1.3	4.30
		2.50	16XNR2.50 ISO	16XNL2.50 ISO	16	1.1	1.5	4.30
		3.00	16XNR3.00 ISO	16XNL3.00 ISO	16	1.1	1.5	4.30
	1/2"	3.50	22XNR3.50 ISO	22XNL3.50 ISO	22	1.6	2.3	5.90
		4.00	22XNR4.00 ISO	22XNL4.00 ISO	22	1.6	2.3	5.90
		4.50	22XNR4.50 ISO	22XNL4.50 ISO	22	1.6	2.4	5.90
		5.00	22XNR5.00 ISO	22XNL5.00 ISO	22	1.6	2.5	5.90
V Style 	3/8"	0.50	16VNR0.50 ISO	16VNL0.50 ISO	16	1.1	3.00	3.65
		0.75	16VNR0.75 ISO	16VNL0.75 ISO	16	1.1	3.00	3.65
		1.00	16VNR1.00 ISO	16VNL1.00 ISO	16	1.1	2.90	3.65
		1.25	16VNR1.25 ISO	16VNL1.25 ISO	16	1.1	2.70	3.65
		1.50	16VNR1.50 ISO	16VNL1.50 ISO	16	1.1	2.60	3.65
		1.75	16VNR1.75 ISO	16VNL1.75 ISO	16	1.1	2.45	3.65
		2.00	16VNR2.00 ISO	16VNL2.00 ISO	16	1.1	2.30	3.65
		2.50	16VNR2.50 ISO	16VNL2.50 ISO	16	1.1	2.10	3.65
		3.00	16VNR3.00 ISO	16VNL3.00 ISO	16	1.1	2.00	3.65
	5/8"	6.00	27VNR6.00 ISO	27VNL6.00 ISO	27	1.0	3.30	6.35
		8.00	27VNR8.00 ISO	27VNL8.00 ISO	27	1.0	4.30	8.70
		10.0	27VNR10.0 ISO	27VNL10.0 ISO	27	1.0	5.20	10.0
M Style 	3/8"	1.00	16NR1.0 ISO3M		16	1.8	2.60	3.65
		1.50	16NR1.5 ISO2M		16	1.6	2.40	3.65
	1/2"	1.50	22NR1.5 ISO3M		22	2.5	3.80	4.76
		2.00	22NR2.0 ISO2M		22	2.1	3.10	4.76
		2.00	22NR2.0 ISO3M		22	3.2	5.10	4.76
	5/8"	3.00	27NR3.0 ISO2M		27	3.0	4.60	6.35

UN-60° American UN Full Profile Inserts

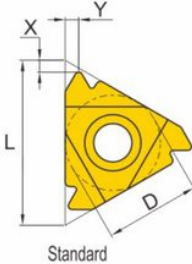
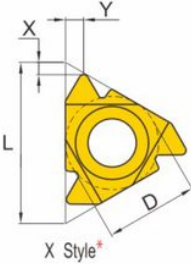
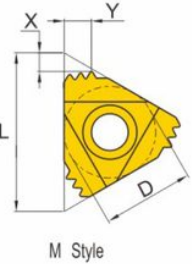
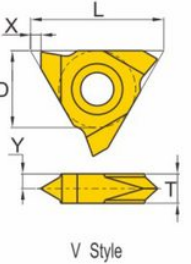
External

UNC UNF UNEF UNS



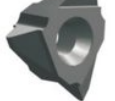
Defined by : ANSI B 1.1:74

Tolerance class : 2A/2B

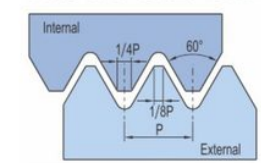
Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
Standard 	1/4'	32	11ER32 UN	11EL32 UN	11	0.6	0.6	3.20
		28	11ER28 UN	11EL28 UN	11	0.6	0.7	3.20
		24	11ER24 UN	11EL24 UN	11	0.7	0.8	3.20
		20	11ER20 UN	11EL20 UN	11	0.8	0.9	3.20
		18	11ER18 UN	11EL18 UN	11	0.8	1.0	3.20
		16	11ER16 UN	11EL16 UN	11	0.9	1.1	3.20
	3/8"	32	16ER32 UN	16EL32 UN	16	0.6	0.6	3.65
		28	16ER28 UN	16EL28 UN	16	0.6	0.7	3.65
		24	16ER24 UN	16EL24 UN	16	0.7	0.8	3.65
		20	16ER20 UN	16EL20 UN	16	0.8	0.9	3.65
		18	16ER18 UN	16EL18 UN	16	0.8	1.0	3.65
		16	16ER16 UN	16EL16 UN	16	0.9	1.1	3.65
		14	16ER14 UN	16EL14 UN	16	1.0	1.2	3.65
		13	16ER13 UN	16EL13 UN	16	1.1	1.3	3.65
		12	16ER12 UN	16EL12 UN	16	1.1	1.4	3.65
		11.5	16ER11.5 UN	16EL11.5 UN	16	1.1	1.4	3.65
		11	16ER11 UN	16EL11 UN	16	1.1	1.5	3.65
		10	16ER10 UN	16EL10 UN	16	1.1	1.5	3.65
		9	16ER9 UN	16EL9 UN	16	1.2	1.7	3.65
		8	16ER8 UN	16EL8 UN	16	1.2	2.0	3.65
	1/2"	7	22ER7 UN	22EL7 UN	22	1.6	2.3	4.76
		6	22ER6 UN	22EL6 UN	22	1.6	2.3	4.76
		5	22ER5 UN	22EL5 UN	22	1.7	2.5	4.76
	5/8"	4.5	27ER4.5 UN	27EL4.5 UN	27	1.9	2.7	6.35
		4	27ER4 UN	27EL4 UN	27	2.1	3.0	6.35

UN-60° American UN Full Profile Inserts (Con't)

Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
 	3/8"	32	16XER32 UN	16XEL32 UN	16	0.6	0.6	4.30
		28	16XER28 UN	16XEL28 UN	16	0.6	0.7	4.30
		24	16XER24 UN	16XEL24 UN	16	0.7	0.8	4.30
		20	16XER20 UN	16XEL20 UN	16	0.8	0.9	4.30
		18	16XER18 UN	16XEL18 UN	16	0.8	1.0	4.30
		16	16XER16 UN	16XEL16 UN	16	0.9	1.1	4.30
		14	16XER14 UN	16XEL14 UN	16	1.0	1.2	4.30
		13	16XER13 UN	16XEL13 UN	16	1.1	1.3	4.30
		12	16XER12 UN	16XEL12 UN	16	1.1	1.4	4.30
		11.5	16XER11.5 UN	16XEL11.5 UN	16	1.1	1.4	4.30
		11	16XER11 UN	16XEL11 UN	16	1.1	1.5	4.30
		10	16XER10 UN	16XEL10 UN	16	1.1	1.5	4.30
 	3/8"	9	16XER9 UN	16XEL9 UN	16	1.2	1.7	4.30
		8	16XER8 UN	16XEL8 UN	16	1.2	2.0	4.30
		32	16VER32 UN	16VEL32 UN	16	1.1	3.0	3.65
		28	16VER28 UN	16VEL28 UN	16	1.1	3.0	3.65
		24	16VER24 UN	16VEL24 UN	16	1.1	2.9	3.65
		20	16VER20 UN	16VEL20 UN	16	1.1	2.7	3.65
		18	16VER18 UN	16VEL18 UN	16	1.1	2.6	3.65
		16	16VER16 UN	16VEL16 UN	16	1.1	2.5	3.65
		14	16VER14 UN	16VEL14 UN	16	1.1	2.4	3.65
		12	16VER12 UN	16VEL12 UN	16	1.1	2.2	3.65
		10	16VER10 UN	16VEL10 UN	16	1.1	2.1	3.65
		8	16VER8 UN	16VEL8 UN	16	1.1	2.0	3.65
	1/2"	7	22VER7 UN	22VER7 UN	22	1.1	2.5	4.76
	3/8"	16	22ER16UN2M		16	1.7	2.5	3.65
		16	22ER16UN3M		22	2.6	4.1	4.76
		12	22ER12UN2M		22	2.1	3.2	4.76
		12	22ER12UN3M		22	3.4	5.3	4.76
	5/8"	8	27ER8UN2M		27	3.2	5.0	6.35

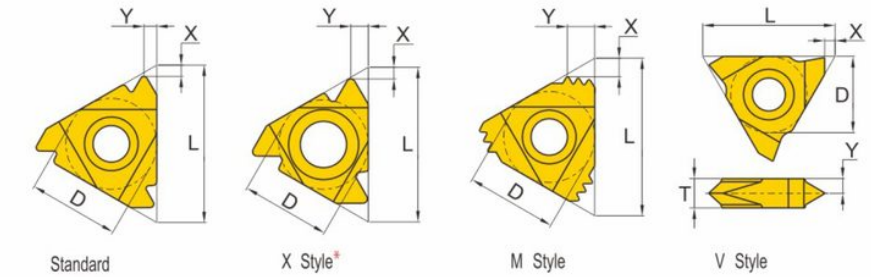
UN-60° American UN Full Profile Inserts

Internal
UNC UNF UNEF UNS



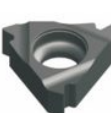
Defined by : ANSI B 1.1:74

Tolerance class : 2A/2B



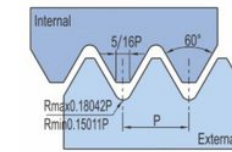
Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
 	5/32"	32	06NR32 UN	06NL32 UN	6	0.8	0.5	1.90
		28	06NR28 UN	06NL28 UN	6	0.8	0.6	1.90
		24	06NR24 UN	06NL24 UN	6	0.7	0.6	1.90
		20	06NR20 UN	06NL20 UN	6	0.6	0.6	1.90
		18	06NR18 UN	06NL18 UN	6	0.6	0.7	1.90
		16	06NR16 UN	06NL16 UN	6	0.6	0.7	1.90
	3/16"	32	08NR32 UN	08NL32 UN	8	0.6	0.5	2.20
		28	08NR28 UN	08NL28 UN	8	0.6	0.6	2.20
		24	08NR24 UN	08NL24 UN	8	0.6	0.6	2.20
		20	08NR20 UN	08NL20 UN	8	0.6	0.7	2.20
		18	08NR18UN	08NL18UN	8	0.6	0.7	2.20
		16	08NR16 UN	08NL16 UN	8	0.6	0.7	2.20
	1/4"	14	08NR14 UN	08NL14 UN	8	0.6	0.8	2.20
		32	11NR32 UN	11NL32 UN	11	0.6	0.6	3.20
		28	11NR28 UN	11NL28 UN	11	0.6	0.7	3.20
		24	11NR24 UN	11NL24 UN	11	0.7	0.8	3.20
		20	11NR20 UN	11NL20 UN	11	0.8	0.9	3.20
		18	11NR18 UN	11NL18 UN	11	0.8	1.0	3.20
	3/8"	16	11NR16 UN	11NL16 UN	11	0.9	1.1	3.20
		32	16NR32 UN	16NL32 UN	16	0.6	0.6	3.65
		28	16NR28 UN	16NL28 UN	16	0.6	0.7	3.65
		24	16NR24 UN	16NL24 UN	16	0.7	0.8	3.65
		20	16NR20 UN	16NL20 UN	16	0.8	0.9	3.65
		18	16NR18 UN	16NL18 UN	16	0.8	1.0	3.65
		16	16NR16 UN	16NL16 UN	16	0.9	1.1	3.65
		14	16NR14 UN	16NL14 UN	16	1.0	1.2	3.65
		13	16NR13 UN	16NL13 UN	16	1.0	1.3	3.65
		12	16NR12 UN	16NL12 UN	16	1.1	1.4	3.65
		11	16NR11 UN	16NL11 UN	16	1.1	1.5	3.65
		10	16NR10 UN	16NL10 UN	16	1.1	1.5	3.65
		9	16NR9 UN	16NL9 UN	16	1.2	1.7	3.65
		8	16NR8 UN	16NL8 UN	16	1.2	2.0	3.65

UN-60° American UN Full Profile Inserts (Con't)

Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
 	1/2"	7	22NR7 UN	22NL7 UN	22	1.6	2.3	4.76
		6	22NR6 UN	22NL6 UN	22	1.6	2.3	4.76
		5	22NR5 UN	22NL5 UN	22	1.7	2.5	4.76
	5/8"	4.5	22NR4.5 UN	22NL4.5 UN	27	1.9	2.7	6.35
		4	22NR4 UN	22NL4 UN	27	2.1	3.0	6.35
		32	11XNR32 UN	11XNL32 UN	11	0.6	0.6	3.39
	1/4"	28	11XNR28 UN	11XNL28 UN	11	0.6	0.7	3.39
		24	11XNR24 UN	11XNL24 UN	11	0.7	0.8	3.39
		20	11XNR20 UN	11XNL20 UN	11	0.8	0.9	3.39
		18	11XNR18 UN	11XNL18 UN	11	0.8	1.0	3.39
		16	11XNR16 UN	11XNL16 UN	11	0.9	1.1	3.39
		32	16XNR32 UN	16XNL32 UN	16	0.6	0.6	4.30
 	3/8"	28	16XNR28 UN	16XNL28 UN	16	0.6	0.7	4.30
		24	16XNR24 UN	16XNL24 UN	16	0.7	0.8	4.30
		20	16XNR20 UN	16XNL20 UN	16	0.8	0.9	4.30
		18	16XNR18 UN	16XNL18 UN	16	0.8	1.0	4.30
		16	16XNR16 UN	16XNL16 UN	16	0.9	1.1	4.30
		14	16XNR14 UN	16XNL14 UN	16	1.0	1.2	4.30
		13	16XNR13 UN	16XNL13 UN	16	1.0	1.3	4.30
		12	16XNR12 UN	16XNL12 UN	16	1.1	1.4	4.30
		11	16XNR11 UN	16XNL11 UN	16	1.1	1.5	4.30
		10	16XNR10 UN	16XNL10 UN	16	1.1	1.5	4.30
 	5/8"	9	16XNR9 UN	16XNL9 UN	16	1.2	1.7	4.30
		8	16XNR8 UN	16XNL8 UN	16	1.2	2.0	4.30
		4	27VNR4 UN	27VNL4 UN	27	1.0	3.3	6.35
		3	27VNR3 UN	27VNL3 UN	27	1.0	4.3	8.70
 	3/8"	16	16NR16UN2M		16	1.7	2.4	3.65
		16	22NR16UN3M		22	2.5	4.0	4.76
	1/2"	12	22NR16UN2M		22	2.1	3.2	4.76
		12	22NR16UN3M		22	3.3	5.2	4.76
	5/8"	8	27NR8UN2M		27	3.2	4.8	6.35

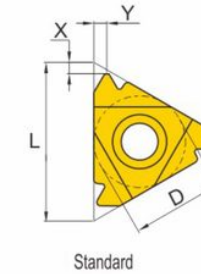
UNJ Aviation Thread Inserts

External
UNJC UNJF UNJEF UNJS



Defined by : MIL-S-8879C

Tolerance class : 3A/3B

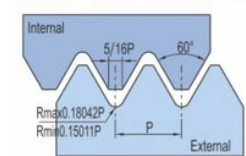


Standard

Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
 	1/4'	28	11ER28 UNJ	11EL28 UNJ	11	0.7	0.7	3.20
		24	11ER24 UNJ	11EL24 UNJ	11	0.7	0.8	3.20
		20	11ER20 UNJ	11EL20 UNJ	11	0.8	0.9	3.20
		18	11ER18 UNJ	11EL18 UNJ	11	0.8	1.0	3.20
		16	11ER16 UNJ	11EL16 UNJ	11	0.9	1.1	3.20
		14	11ER14 UNJ	11EL14 UNJ	11	1.0	1.2	3.20
	3/8"	28	16ER28 UNJ	16EL28 UNJ	16	0.7	0.7	3.65
		24	16ER24 UNJ	16EL24 UNJ	16	0.7	0.8	3.65
		20	16ER20 UNJ	16EL20 UNJ	16	0.8	0.9	3.65
		18	16ER18 UNJ	16EL18 UNJ	16	0.8	1.0	3.65
		16	16ER16 UNJ	16EL16 UNJ	16	0.9	1.1	3.65
		14	16ER14 UNJ	16EL14 UNJ	16	1.0	1.2	3.65
		13	16ER13 UNJ	16EL13 UNJ	16	1.0	1.3	3.65
		12	16ER12 UNJ	16EL12 UNJ	16	1.1	1.3	3.65
		11	16ER11 UNJ	16EL11 UNJ	16	1.2	1.5	3.65
		10	16ER10 UNJ	16EL10 UNJ	16	1.2	1.5	3.65
		9	16ER9 UNJ	16EL9 UNJ	16	1.3	1.7	3.65
		8	16ER8 UNJ	16EL8 UNJ	16	1.2	1.6	3.65
	1/2"	7	22ER7 UNJ	22EL7 UNJ	22	1.7	2.3	4.76
		6	22ER6 UNJ	22EL6 UNJ	22	1.6	2.3	4.76
		5	22ER5 UNJ	22EL5 UNJ	22	1.8	2.5	4.76
	5/8"	4.5	27ER4.5 UNJ	27EL4.5 UNJ	27	2.0	2.7	6.35
		4	27ER4 UNJ	27EL4 UNJ	27	2.2	3.0	6.35

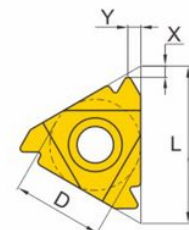
UNJ Aviation Thread Inserts

Internal
UNJC UNJF UNJEF UNJS



Defined by : MIL-S-8879C

Tolerance class : 3A/3B

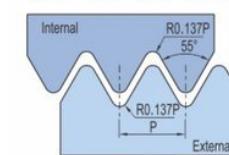


Standard

Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
Standard	1/4'	28	11NR28 UNJ	11NL28 UNJ	11	0.7	0.7	3.20
		24	11NR24 UNJ	11NL24 UNJ	11	0.7	0.8	3.20
		20	11NR20 UNJ	11NL20 UNJ	11	0.8	0.9	3.20
		18	11NR18 UNJ	11NL18 UNJ	11	0.8	1.0	3.20
		16	11NR16 UNJ	11NL16 UNJ	11	0.9	1.1	3.20
		14	11NR14 UNJ	11NL14 UNJ	11	1.0	1.2	3.20
	3/8"	28	16NR28 UNJ	16NL28 UNJ	16	0.7	0.7	3.65
		24	16NR24 UNJ	16NL24 UNJ	16	0.7	0.8	3.65
		20	16NR20 UNJ	16NL20 UNJ	16	0.8	0.9	3.65
		18	16NR18 UNJ	16NL18 UNJ	16	0.8	1.0	3.65
		16	16NR16 UNJ	16NL16 UNJ	16	0.9	1.1	3.65
		14	16NR14 UNJ	16NL14 UNJ	16	1.0	1.2	3.65
		13	16NR13 UNJ	16NL13 UNJ	16	1.0	1.3	3.65
		12	16NR12 UNJ	16NL12 UNJ	16	1.1	1.3	3.65
		11	16NR11 UNJ	16NL11 UNJ	16	1.2	1.5	3.65
		10	16NR10 UNJ	16NL10 UNJ	16	1.2	1.5	3.65
	1/2"	7	22NR7 UNJ	22NL7 UNJ	22	1.7	2.3	4.76
		6	22NR6 UNJ	22NL6 UNJ	22	1.6	2.3	4.76
		5	22NR5 UNJ	22NL5 UNJ	22	1.8	2.5	4.76
	5/8"	4.5	27NR4.5 UNJ	27NL4.5 UNJ	27	2.0	2.7	6.35
		4	27NR4 UNJ	27NL4 UNJ	27	2.2	3.0	6.35

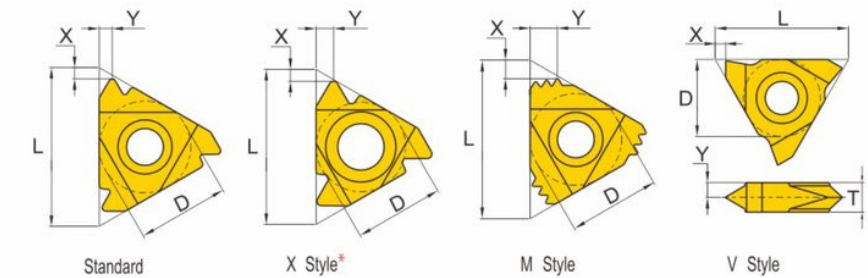
W-55° Whitworth Full Profile Inserts

External
BSW BSF BSP BSB



Defined by : B.S.84:1956 , DIN 259 , ISO 228/1:1982

Tolerance class : Medium class A

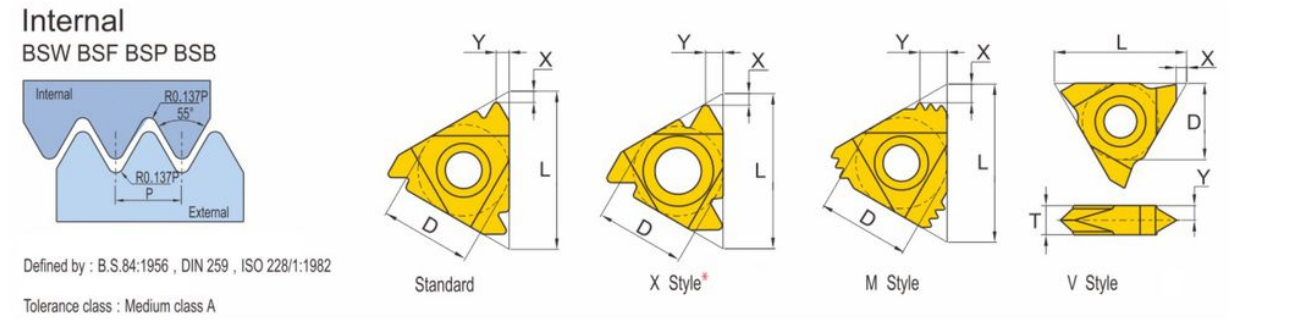


Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
Standard	1/4'	28	11ER28 W	11EL28 W	11	0.6	0.7	3.20
		26	11ER26 W	11EL26 W	11	0.7	0.8	3.20
		20	11ER20 W	11EL20 W	11	0.8	0.9	3.20
		19	11ER19 W	11EL19 W	11	0.8	1.0	3.20
		18	11ER18 W	11EL18 W	11	0.8	1.0	3.20
		16	11ER16 W	11EL16 W	11	0.9	1.1	3.20
		14	11ER14 W	11EL14 W	11	1.0	1.2	3.20
	3/8"	28	16ER28 W	16EL28 W	16	0.6	0.7	3.65
		26	16ER26 W	16EL26 W	16	0.7	0.8	3.65
		20	16ER20 W	16EL20 W	16	0.8	0.9	3.65
		19	16ER19 W	16EL19 W	16	0.8	1.0	3.65
		18	16ER18 W	16EL18 W	16	0.8	0.9	3.65
		16	16ER16 W	16EL16 W	16	0.9	1.1	3.65
		14	16ER14 W	16EL14 W	16	1.0	1.2	3.65
		12	16ER12 W	16EL12 W	16	1.1	1.4	3.65
		11	16ER11 W	16EL11 W	16	1.1	1.5	3.65
		10	16ER10 W	16EL10 W	16	1.1	1.5	3.65
		9	16ER9 W	16EL9 W	16	1.2	1.5	3.65
		8	16ER8 W	16EL8 W	16	1.2	1.7	3.65
	1/2"	7	22ER7 W	22EL7 W	22	1.6	2.3	4.76
		6	22ER6 W	22EL6 W	22	1.6	2.3	4.76
		5	22ER5 W	22EL5 W	22	1.7	2.4	4.76
	5/8"	4.5	27ER4.5 W	27EL4.5 W	27	1.8	2.6	6.35
		4	27ER4 W	27EL4 W	27	2.0	2.9	6.35

W-55° Whitworth Full Profile Inserts(Con't)

Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
X style  	3/8"	28	16XER28 W	16XEL28 W	16	0.6	0.7	4.30
		26	16XER26 W	16XEL26 W	16	0.7	0.8	4.30
		20	16XER20 W	16XEL20 W	16	0.8	0.9	4.30
		19	16XER19 W	16XEL19 W	16	0.8	1.0	4.30
		18	16XER18 W	16XEL18 W	16	0.8	0.9	4.30
		16	16XER16 W	16XEL16 W	16	0.9	1.1	4.30
		14	16XER14 W	16XEL14 W	16	1.0	1.2	4.30
		12	16XER12 W	16XEL12 W	16	1.1	1.4	4.30
		11	16XER11 W	16XEL11 W	16	1.1	1.5	4.30
		10	16XER10 W	16XEL10 W	16	1.1	1.5	4.30
		9	16XER9 W	16XEL9 W	16	1.2	1.5	4.30
		8	16XER8 W	16XEL8 W	16	1.2	1.7	4.30
V style  	3/8"	19	16VER19 W	16VEL19 W	16	1.1	2.7	3.65
		18	16VER18 W	16VEL18 W	16	1.1	2.6	3.65
		16	16VER16 W	16VEL16 W	16	1.1	2.6	3.65
		14	16VER14 W	16VEL14 W	16	1.1	2.4	3.65
		12	16VER12 W	16VEL12 W	16	1.1	2.4	3.65
		11	16VER11 W	16VEL11 W	16	1.1	2.1	3.65
	5/8"	4	27VER4 W	27VEL4 W	27	1.0	3.3	6.35
		3	27VER3 W	27VEL3 W	27	1.0	4.3	8.70
		2.5	27VER2.5 W	27VEL2.5 W	27	1.0	5.2	10.0
M style  	3/8"	14	16ER14W2M		16	1.9	2.8	3.65
	1/2"	14	22ER14W3M		22	2.9	4.6	4.76
		11	22ER11W2M		22	2.3	3.5	4.76

W-55° Whitworth Full Profile Inserts



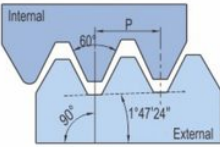
Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
Standard  	5/32"	26	06NR26 W	06NL26 W	6	0.7	0.6	1.90
		22	06NR22 W	06NL22 W	6	0.6	0.6	1.90
		20	06NR20 W	06NL20 W	6	0.6	0.7	1.90
		18	06NR18 W	06NL18 W	6	0.6	0.7	1.90
	3/16"	28	08NR28 W	08NL28 W	8	0.6	0.6	2.20
		24	08NR24 W	08NL24 W	8	0.6	0.6	2.20
		20	08NR20 W	08NL20 W	8	0.6	0.7	2.20
		19	08NR19 W	08NL19 W	8	0.6	0.7	2.20
		18	08NR18 W	08NL18 W	8	0.6	0.7	2.20
		16	08NR16 W	08NL16 W	8	0.6	0.7	2.20
	1/4"	28	11NR28 W	11NL28 W	11	0.6	0.6	3.20
		26	11NR26 W	11NL26 W	11	0.6	0.7	3.20
		20	11NR20 W	11NL20 W	11	0.7	0.9	3.20
		19	11NR19 W	11NL19 W	11	0.8	1	3.20
		18	11NR18 W	11NL18 W	11	0.8	1	3.20
		16	11NR16 W	11NL16 W	11	0.9	1.1	3.20
		14	11NR14 W	11NL14 W	11	1.0	1.2	3.20
		12	16NR12 W	16NL12 W	16	1.1	1.4	3.65
	3/8"	28	16NR28 W	16NL28 W	16	0.6	0.7	3.65
		26	16NR26 W	16NL26 W	16	0.7	0.8	3.65
		20	16NR20 W	16NL20 W	16	0.8	0.9	3.65
		19	16NR19 W	16NL19 W	16	0.8	1	3.65
		18	16NR18 W	16NL18 W	16	0.8	1	3.65
		16	16NR16 W	16NL16 W	16	0.9	1.1	3.65
		14	16NR14 W	16NL14 W	16	1.0	1.2	3.65
		12	16NR12 W	16NL12 W	16	1.1	1.4	3.65
		11	16NR11 W	16NL11 W	16	1.1	1.5	3.65
		10	16NR10 W	16NL10 W	16	1.1	1.5	3.65
		9	16NR9 W	16NL9 W	16	1.2	1.5	3.65
		8	16NR8 W	16NL8 W	16	1.2	1.7	3.65

W-55° Whitworth Full Profile Inserts(Con't)

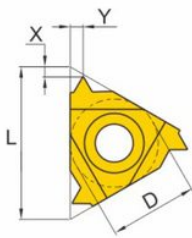
Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
 	1/2"	7	22NR7 W	22NL7 W	22	1.6	2.3	4.76
		6	22NR6 W	22NL6 W	22	1.6	2.3	4.76
		5	22NR5 W	22NL5 W	22	1.7	2.4	4.76
	5/8"	4.5	27NR4.5 W	27NL4.5 W	27	1.8	2.6	6.35
		4	27NR4 W	27NL4 W	27	2.0	2.9	6.35
	1/4"	28	11XNR28 W	11XNL28 W	11	0.6	0.6	3.39
		26	11XNR26 W	11XNL26 W	11	0.6	0.7	3.39
		20	11XNR20 W	11XNL20 W	11	0.7	0.9	3.39
		19	11XNR19 W	11XNL19 W	11	0.8	1.0	3.39
		18	11XNR18 W	11XNL18 W	11	0.8	1.0	3.39
16		11XNR16 W	11XNL16 W	11	0.9	1.1	3.39	
14		11XNR14 W	11XNL14 W	11	1.0	1.2	3.39	
3/8"		28	16XNR28 W	16XNL28 W	16	0.6	0.7	4.30
		26	16XNR26 W	16XNL26 W	16	0.7	0.8	4.30
		20	16XNR20 W	16XNL20 W	16	0.8	0.9	4.30
		19	16XNR19 W	16XNL19 W	16	0.8	1.0	4.30
		18	16XNR18 W	16XNL18 W	16	0.8	1.0	4.30
		16	16XNR16 W	16XNL16 W	16	0.9	1.1	4.30
		14	16XNR14 W	16XNL14 W	16	1.0	1.2	4.30
		12	16XNR12 W	16XNL12 W	16	1.1	1.4	4.30
		11	16XNR11 W	16XNL11 W	16	1.1	1.5	4.30
		10	16XNR10 W	16XNL10 W	16	1.1	1.5	4.30
9		16XNR9 W	16XNL9 W	16	1.2	1.5	4.30	
8	16XNR8 W	16XNL8 W	16	1.2	1.7	4.30		
 	5/8"	4	27VNR4 W	27VNL4 W	27	1.0	3.3	6.35
		3	27VNR3 W	27VNL3 W	27	1.0	4.3	8.70
		2.5	27VNR2.5 W	27VNL2.5 W	27	1.0	5.2	10.0
 	3/8"	14	16NR14W2M		16	1.9	2.8	3.65
	1/2"	14	22NR14W3M		22	2.9	4.6	4.76
		11	22NR11W2M		22	2.3	3.5	4.76

NPTF (Dry Seal) Inserts

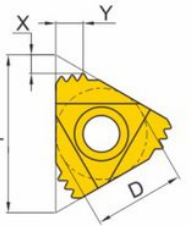
External



Defined by : ANSI B1.20.3-1976
Tolerance class : Standard NPTF



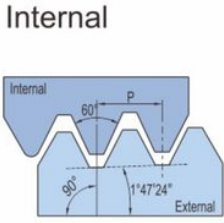
Standard



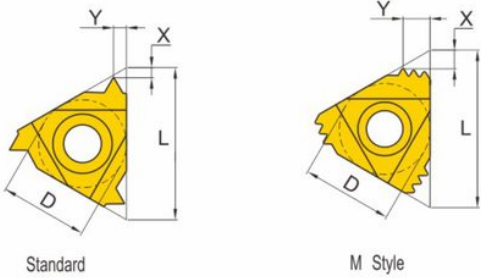
M Style

Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
Standard	1/4"	27	11ER27 NPTF	11EL27 NPTF	11	0.7	0.8	3.20
		18	11ER18 NPTF	11EL18 NPTF	11	0.8	1.0	3.20
		14	11ER14 NPTF	11EL14 NPTF	11	0.8	1.0	3.20
	3/8"	27	16ER27 NPTF	16EL27 NPTF	16	0.7	0.8	3.65
		18	16ER18 NPTF	16EL18 NPTF	16	0.8	1.0	3.65
		14	16ER14 NPTF	16EL14 NPTF	16	0.9	1.2	3.65
		11.5	16ER11.5 NPTF	16EL11.5 NPTF	16	1.1	1.5	3.65
		8	16ER8 NPTF	16EL8 NPTF	16	1.3	1.8	3.65
M style	1/2"	11.5	16ER11.5 NPTF2M		22	3.4	2.2	4.76

NPTF (Dry Seal) Inserts

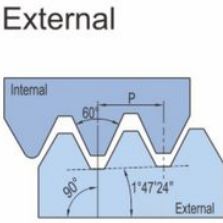


Defined by : ANSI B1.20.3-1976
Tolerance class : Standard NPTF

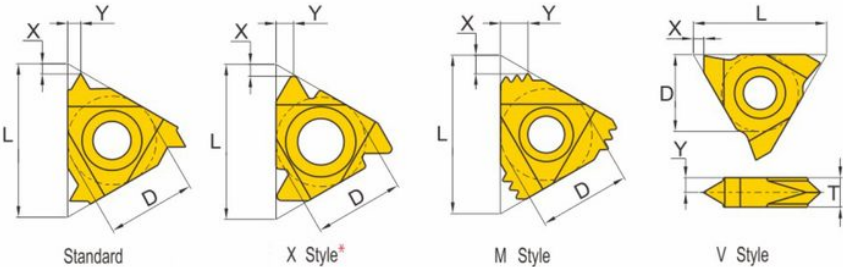


Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
  Standard	5/32"	27	06NR27 NPTF	06NL27 NPTF	6	0.7	0.6	1.90
	3/16"	27	08NR27 NPTF	08NL27 NPTF	8	0.6	0.6	2.20
		18	08NR18 NPTF	08NL18 NPTF	8	0.6	0.6	2.20
	1/4"	27	11NR27 NPTF	11NL27 NPTF	11	0.7	0.8	3.20
		18	11NR18 NPTF	11NL18 NPTF	11	0.8	1.0	3.20
		14	11NR14 NPTF	11NL14 NPTF	11	0.8	1.0	3.20
	3/8"	27	16NR27 NPTF	16NL27 NPTF	16	0.7	0.8	3.65
		18	16NR18 NPTF	16NL18 NPTF	16	0.8	1.0	3.65
		14	16NR14 NPTF	16NL14 NPTF	16	0.9	1.2	3.65
		11.5	16NR11.5 NPTF	16NL11.5 NPTF	16	1.1	1.5	3.65
  M Style	1/2"	11.5	22NR11.5 NPTF2M		22	3.4	2.2	4.76
	5/8"	11.5	27NR11.5 NPTF3M		27	3.5	2.2	6.35

NPT-60° National Pipe Threads Inserts

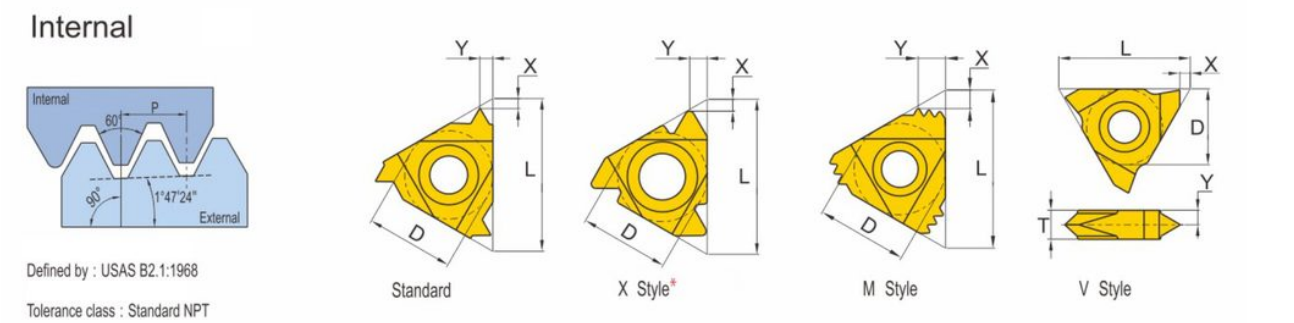


Defined by : USAS B2.1:1968
Tolerance class : Standard NPT



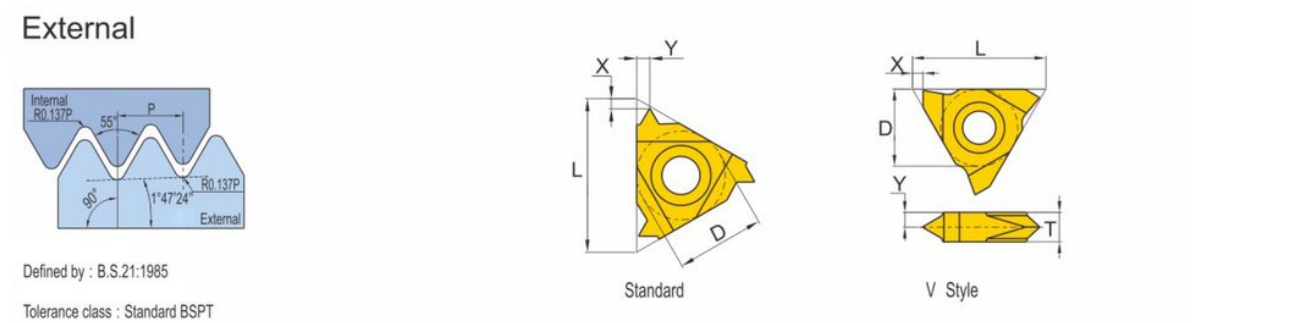
Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
  Standard	1/4"	27	11ER27 NPT	11EL27 NPT	11	0.7	0.8	3.20
		18	11ER18 NPT	11EL18 NPT	11	0.8	1.0	3.65
		14	11ER14 NPT	11EL14 NPT	11	0.8	1.0	3.65
	3/8"	27	16ER27 NPT	16EL27 NPT	16	0.7	0.8	3.65
		18	16ER18 NPT	16EL18 NPT	16	0.8	1.0	3.65
		14	16ER14 NPT	16EL14 NPT	16	0.8	1.0	3.65
		11.5	16ER11.5 NPT	16EL11.5 NPT	16	1.1	1.5	3.65
		8	16ER8 NPT	16EL8 NPT	16	1.2	1.8	3.65
  X style	3/8"	27	16XER27 NPT	16XEL27 NPT	16	0.7	0.8	4.30
		18	16XER18 NPT	16XEL18 NPT	16	0.8	1.0	4.30
		14	16XER14 NPT	16XEL14 NPT	16	0.8	1.0	4.30
		11.5	16XER11.5 NPT	16XEL11.5 NPT	16	1.1	1.5	4.30
		8	16XER8 NPT	16XEL8 NPT	16	1.2	1.8	4.30
  V style	3/8"	27	16VER27 NPT	16VEL27 NPT	16	1.1	2.9	3.65
		18	16VER18 NPT	16VEL18 NPT	16	1.1	2.6	3.65
		14	16VER14 NPT	16VEL14 NPT	16	1.1	2.3	3.65
		11.5	16VER11.5 NPT	16VEL11.5 NPT	16	1.1	2.1	3.65
  M style	1/2"	11.5	22ER11.5 NPT2M		22	3.4	2.2	4.76
	5/8"	11.5	27ER11.5 NPT3M		27	3.5	5.6	6.35
		8	27ER8 NPT2M		27	2.9	4.7	6.35

NPT-60° National Pipe Threads Inserts



Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
Standard  	5/32"	27	06NR27 NPT	06NL27 NPT	6	0.6	0.6	1.90
	3/16"	27	08NR27 NPT	08NL27 NPT	8	0.6	0.6	2.20
		18	08NR18 NPT	08NL18 NPT	8	0.6	0.6	2.20
		27	11NR27 NPT	11NL27 NPT	11	0.7	0.8	3.20
	1/4"	18	11NR18 NPT	11NL18 NPT	11	0.8	1.0	3.20
		14	11NR14 NPT	11NL14 NPT	11	0.8	1.0	3.20
		27	16NR27 NPT	16NL27 NPT	16	0.7	0.8	3.65
	3/8"	18	16NR18 NPT	16NL18 NPT	16	0.8	1.0	3.65
		14	16NR14 NPT	16NL14 NPT	16	0.8	1.0	3.65
		11.5	16NR11.5 NPT	16NL11.5 NPT	16	1.1	1.5	3.65
		8	16NR8 NPT	16NL8 NPT	16	1.2	1.8	3.65
X style  	1/4"	27	11XNR27 NPT	11XNL27 NPT	11	0.7	0.8	3.39
		18	11XNR18 NPT	11XNL18 NPT	11	0.8	1.0	3.39
		14	11XNR14 NPT	11XNL14 NPT	11	0.8	1.0	3.39
	3/8"	27	16XNR27 NPT	16XNL27 NPT	16	0.7	0.8	4.30
		18	16XNR18 NPT	16XNL18 NPT	16	0.8	1.0	4.30
		14	16XNR14 NPT	16XNL14 NPT	16	0.8	1.0	4.30
		11.5	16XNR11.5 NPT	16XNL11.5 NPT	16	1.1	1.5	4.30
		8	16XNR8 NPT	16XNL8 NPT	16	1.2	1.8	4.30
M style  	1/2"	11.5	22NR11.5 NPT2M		22	3.4	2.2	4.76
	5/8"	11.5	27NR11.5 NPT3M		27	3.5	5.6	6.35
		8	27NR8 NPT2M		27	2.9	4.7	6.35

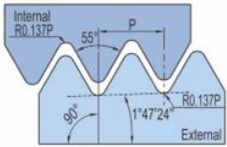
BSPT-55° British Standard Pipe Full Profile Inserts



Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
Standard  	1/4"	28	11ER28 BSPT	11EL28 BSPT	11	0.6	0.6	3.20
		19	11ER19 BSPT	11EL19 BSPT	11	0.8	0.9	3.20
		14	11ER14 BSPT	11EL14 BSPT	11	0.9	1.0	3.20
		29	16ER28 BSPT	16EL28 BSPT	16	0.6	0.6	3.65
	3/8"	19	16ER19 BSPT	16EL19 BSPT	16	0.8	0.9	3.65
		14	16ER14 BSPT	16EL14 BSPT	16	1.0	1.2	3.65
		11	16ER11 BSPT	16EL11 BSPT	16	1.1	1.5	3.65
V style  	3/8"	28	16VER28 BSPT	16VEL28 BSPT	16	1.1	3.0	3.65
		19	16VER19 BSPT	16VEL19 BSPT	16	1.1	2.7	3.65
		14	16VER14 BSPT	16VEL14 BSPT	16	1.1	2.4	3.65
		11	16VER11 BSPT	16VEL11 BSPT	16	1.1	2.1	3.65

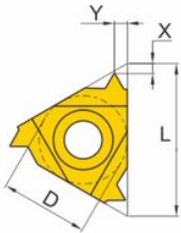
BSPT-55° British Standard Pipe Full Profile Inserts

Internal



Defined by : B.S.21:1985

Tolerance class : Standard BSPT

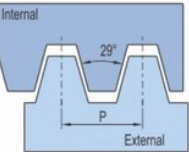


Standard

Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
Standard  	5/32"	28	06NR28 BSPT	06NL28 BSPT	6	0.7	0.6	1.90
	3/16"	28	08NR28 BSPT	08NL28 BSPT	8	0.6	0.6	2.20
		19	08NR19 BSPT	08NL19 BSPT	8	0.6	0.6	2.20
	1/4"	28	11NR28 BSPT	11NL28 BSPT	11	0.6	0.8	3.20
		19	11NR19 BSPT	11NL19 BSPT	11	0.8	0.9	3.20
		14	11NR14 BSPT	11NL14 BSPT	11	0.9	1.0	3.20
	3/8"	28	16NR28 BSPT	16NL28 BSPT	16	0.6	0.6	3.65
		19	16NR19 BSPT	16NL19 BSPT	16	0.8	0.9	3.65
		14	16NR14 BSPT	16NL14 BSPT	16	1.0	1.2	3.65
		11	16NR11 BSPT	16NL11 BSPT	16	1.1	1.5	3.65

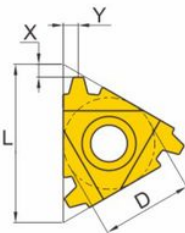
American ACME Inserts

Standard

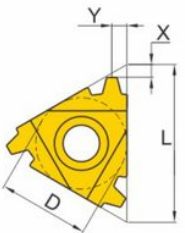


Defined by : ANSI B 1.5:1988

Tolerance class : 3G



Standard

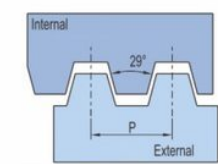


Standard

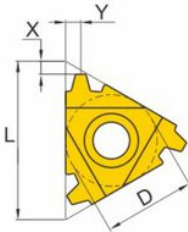
Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
External  	3/8"	16	16ER16 ACME	16EL16 ACME	16	1.0	1.1	3.65
		14	16ER14 ACME	16EL14 ACME	16	1.0	1.2	3.65
		12	16ER12 ACME	16EL12 ACME	16	1.1	1.2	3.65
		10	16ER10 ACME	16EL10 ACME	16	1.3	1.3	3.65
		8	16ER8 ACME	16EL8 ACME	16	1.4	1.5	3.65
	1/2"	6	22ER6 ACME	22EL6 ACME	22	1.8	2.1	4.76
		5	22ER5 ACME	22EL5 ACME	22	2.0	2.3	4.76
	5/8"	4	27ER4 ACME	27EL4 ACME	27	2.4	2.7	6.35
Internal  	3/8"	16	16NR16 ACME	16NL16 ACME	16	1.0	1.1	3.65
		14	16NR14 ACME	16NL14 ACME	16	1.0	1.2	3.65
		12	16NR12 ACME	16NL12 ACME	16	1.1	1.2	3.65
		10	16NR10 ACME	16NL10 ACME	16	1.3	1.3	3.65
		8	16NR8 ACME	16NL8 ACME	16	1.4	1.5	3.65
	1/2"	6	22NR6 ACME	22NL6 ACME	22	1.8	2.1	4.76
		5	22NR5 ACME	22NL5 ACME	22	2.0	2.3	4.76
	5/8"	4	27NR4 ACME	27NL4 ACME	27	2.4	2.7	6.35

Stub ACME Inserts

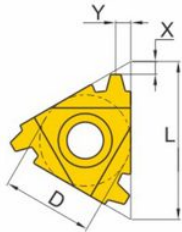
Standard



Defined by : ANSI B 1.8:1988
Tolerance class : 2G



Standard

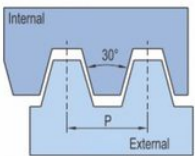


Standard

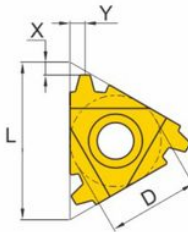
Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
External 	3/8"	16	16ER16 STACME	16EL16 STACME	16	1.0	1.1	3.65
		14	16ER14 STACME	16EL14 STACME	16	1.1	1.1	3.65
		12	16ER12 STACME	16EL12 STACME	16	1.2	1.2	3.65
		10	16ER10 STACME	16EL10 STACME	16	1.2	1.3	3.65
		8	16ER8 STACME	16EL8 STACME	16	1.4	1.5	3.65
		6	16ER6 STACME	16EL6 STACME	16	1.7	1.8	3.65
	1/2"	5	22ER5 STACME	22EL5 STACME	22	2.1	2.3	4.76
	5/8"	4	27ER4 STACME	27EL4 STACME	27	2.3	2.4	6.35
		3	27ER3 STACME	27EL3 STACME	27	2.9	2.9	6.35
Internal 	3/8"	16	16NR16 STACME	16NL16 STACME	16	1.0	1.1	3.65
		14	16NR14 STACME	16NL14 STACME	16	1.1	1.1	3.65
		12	16NR12 STACME	16NL12 STACME	16	1.2	1.2	3.65
		10	16NR10 STACME	16NL10 STACME	16	1.2	1.3	3.65
		8	16NR8 STACME	16NL8 STACME	16	1.4	1.5	3.65
		6	16NR6 STACME	16NL6 STACME	16	1.7	1.8	3.65
	1/2"	5	22NR5 STACME	22NL5 STACME	22	2.1	2.3	4.76
	5/8"	4	27NR4 STACME	27NL4 STACME	27	2.3	2.4	6.35
		3	27NR3 STACME	27NL3 STACME	27	2.9	2.9	6.35

Trapeze Inserts

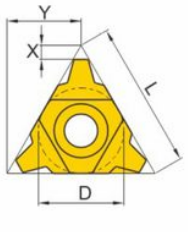
External



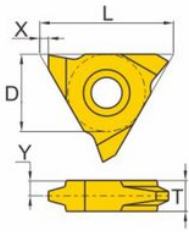
Defined by : DIN 103
Tolerance class : 7e/7H



Standard



U Style

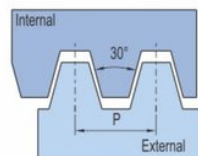


V Style

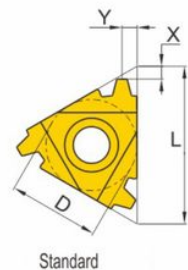
Inserts shape	D	Pitch	Ordering code		Dimension			
		mm	Right hand	Left hand	L	X	Y	T
Standard 	3/8"	1.5	16ER1.5 TR	16EL1.5 TR	16	1.0	1.1	3.65
		2.0	16ER2.0 TR	16EL2.0 TR	16	1.1	1.3	3.65
		3.0	16ER3.0 TR	16EL3.0 TR	16	1.3	1.5	3.65
	1/2"	4.0	22ER4.0 TR	22EL4.0 TR	22	1.7	1.9	4.76
		5.0	22ER5.0 TR	22EL5.0 TR	22	2.1	2.5	4.76
		6.0	27ER6.0 TR	27EL6.0 TR	27	2.2	2.6	6.35
		7.0	27ER7.0 TR	27EL7.0 TR	27	2.3	2.7	6.35
	5/8"							
V style 	5/8"	6.0	27VER6.0 TR	27VEL6.0 TR	27	1.0	3.3	6.35
		7.0	27VER7.0 TR	27VEL7.0 TR	27	1.0	3.3	6.35
		8.0	27VER8.0 TR	27VEL8.0 TR	27	1.0	3.3	6.35
		9.0	27VER9.0 TR	27VEL9.0 TR	27	1.0	4.3	8.70
		10.0	27VER10.0 TR	27VEL10.0 TR	27	1.0	4.3	8.70
		12.0	27VER12.0 TR	27VEL12.0 TR	27	1.0	5.2	10.0
	5/8"							
U style 	5/8"	8.0	27UE8.0 TR		27	2.6	13.7	6.35
		9.0	27UE9.0 TR		27	3.0	13.7	6.35

Trapeze Inserts

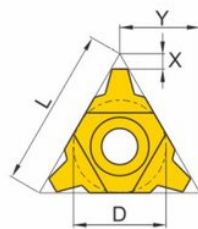
Internal



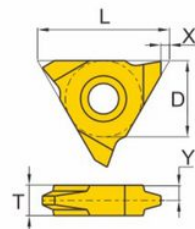
Defined by : DIN 103
Tolerance class : 7e/7H



Standard



U Style

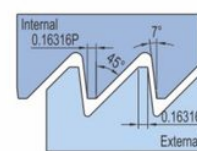


V Style

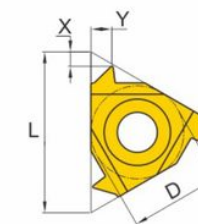
Inserts shape	D	Pitch	Ordering code		Dimension			
		mm	Right hand	Left hand	L	X	Y	T
  Standard	3/8"	1.5	16NR1.5 TR	16NL1.5 TR	16	1.0	1.1	3.65
		2.0	16NR2.0 TR	16NL2.0 TR	16	1.1	1.3	3.65
		3.0	16NR3.0 TR	16NL3.0 TR	16	1.3	1.5	3.65
	1/2"	4.0	22NR4.0 TR	22NL4.0 TR	22	1.7	1.9	4.76
		5.0	22NR5.0 TR	22NL5.0 TR	22	2.1	2.5	4.76
	5/8"	6.0	27NR6.0 TR	27NL6.0 TR	27	2.2	2.6	6.35
		7.0	27NR7.0 TR	27NL7.0 TR	27	2.3	2.7	6.35
  V style	5/8"	6.0	27VNR6.0 TR	27VNL6.0 TR	27	1.0	3.3	6.35
		7.0	27VNR7.0 TR	27VNL7.0 TR	27	1.0	3.3	6.35
		8.0	27VNR8.0 TR	27VNL8.0 TR	27	1.0	3.3	6.35
		9.0	27VNR9.0 TR	27VNL9.0 TR	27	1.0	4.3	8.70
		10.0	27VNR10.0 TR	27VNL10.0 TR	27	1.0	4.3	8.70
		12.0	27VNR12.0 TR	27VNL12.0 TR	27	1.0	5.2	10.0
  U style	5/8"	8.0	27UN8.0 TR		27	2.6	13.7	6.35
		9.0	27UN9.0 TR		27	3.0	13.7	6.35

American Buttress Inserts

External

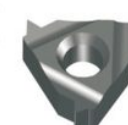


Defined by : ANSI B 1.9.1973
Tolerance class : Class 2

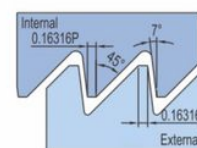


Standard



Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
  Standard	1/4"	20	11ER20 ABUT	11EL20 ABUT	11	1.0	1.4	3.20
		16	11ER16 ABUT	11EL16 ABUT	11	1.3	1.9	3.20
	3/8"	20	16ER20 ABUT	16EL20 ABUT	16	1.0	1.4	3.65
		16	16ER16 ABUT	16EL16 ABUT	16	1.3	1.9	3.65
		12	16ER12 ABUT	16EL12 ABUT	16	1.4	2.0	3.65
		10	16ER10 ABUT	16EL10 ABUT	16	1.5	2.3	3.65
	1/2"	8	22ER8 ABUT	22EL8 ABUT	22	2.0	3.2	4.76
		6	22ER6 ABUT	22EL6 ABUT	22	2.2	3.5	4.76

Internal



Defined by : ANSI B 1.9.1973
Tolerance class : Class 2



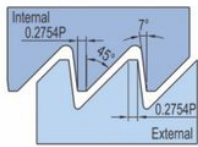
Standard



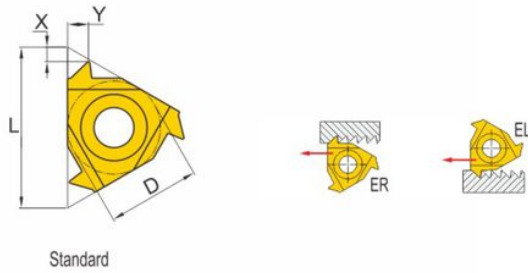
Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
  Standard	1/4"	20	11NR20 ABUT	11NL20 ABUT	11	1.0	1.4	3.20
		16	11NR16 ABUT	11NL16 ABUT	11	1.3	1.9	3.20
	3/8"	20	16NR20 ABUT	16NL20 ABUT	16	1.0	1.4	3.65
		16	16NR16 ABUT	16NL16 ABUT	16	1.3	1.9	3.65
		12	16NR12 ABUT	16NL12 ABUT	16	1.4	2.0	3.65
		10	16NR10 ABUT	16NL10 ABUT	16	1.5	2.3	3.65
	1/2"	8	22NR8 ABUT	22NL8 ABUT	22	2.0	3.2	4.76
		6	22NR6 ABUT	22NL6 ABUT	22	2.2	3.5	4.76

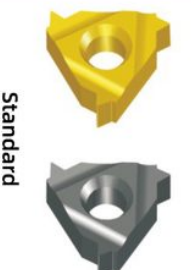
British Buttress Inserts

External

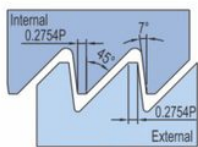


Defined by : B.S.1657:1950
Tolerance class : Medium Class

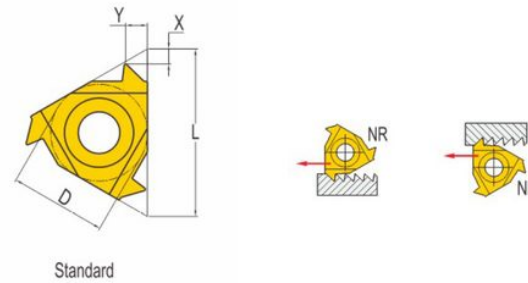


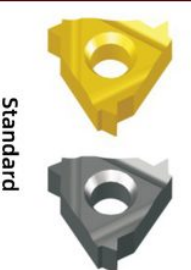
Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
 Standard	3/8"	16	16ER16 BBUT	16EL16 BBUT	16	1.1	1.6	3.65
		12	16ER12 BBUT	16EL12 BBUT	16	1.4	2.1	3.65
		10	16ER10 BBUT	16EL10 BBUT	16	1.4	2.2	3.65
		8	16ER8 BBUT	16EL8 BBUT	16	1.6	2.5	3.65
	1/2"	8	22ER8 BBUT	22EL8 BBUT	22	1.6	2.5	4.76

Internal



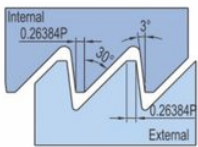
Defined by : B.S.1657:1950
Tolerance class : Medium Class



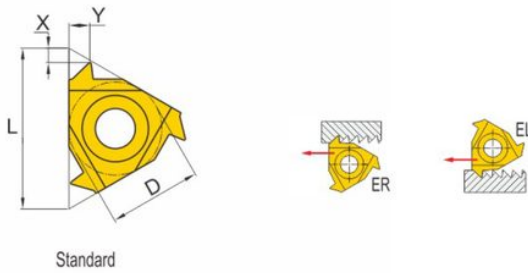
Inserts shape	D	Pitch	Ordering code		Dimension			
		TPI	Right hand	Left hand	L	X	Y	T
 Standard	3/8"	16	16NR16 BBUT	16NL16 BBUT	16	1.1	1.6	3.65
		12	16NR12 BBUT	16NL12 BBUT	16	1.4	2.1	3.65
		10	16NR10 BBUT	16NL10 BBUT	16	1.4	2.2	3.65
		8	16NR8 BBUT	16NL8 BBUT	16	1.6	2.5	3.65
	1/2"	8	22NR8 BBUT	22NL8 BBUT	22	1.6	2.5	4.76

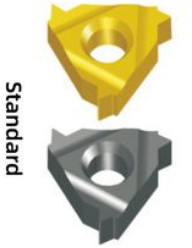
Sagengewinde Inserts

External

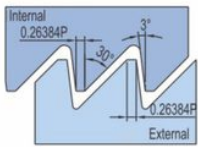


Defined by : DIN 513
Tolerance class : Medium Class

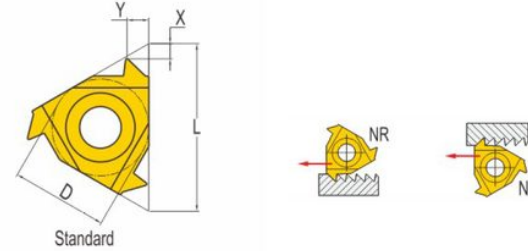


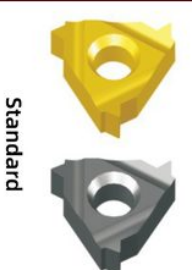
Inserts shape	D	Pitch	Ordering code		Dimension			
		mm	Right hand	Left hand	L	X	Y	T
 Standard	3/8"	2.0	16ER2.0 SAGE	16EL2.0 SAGE	16	1.47	2.08	3.65
	1/2"	2.0	22ER2.0 SAGE	22EL2.0 SAGE	22	1.47	2.08	4.76
		3.0	22ER3.0 SAGE	22EL3.0 SAGE	22	1.79	2.60	4.76
		4.0	27ER4.0 SAGE	27EL4.0 SAGE	27	1.93	3.20	6.35

Internal



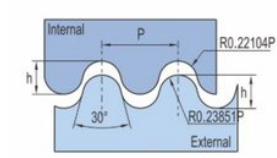
Defined by : DIN 513
Tolerance class : Medium Class



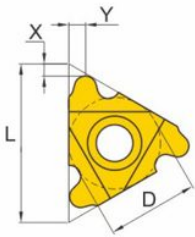
Inserts shape	D	Pitch	Ordering code		Dimension			
		mm	Right hand	Left hand	L	X	Y	T
 Standard	3/8"	2.0	16NR2.0 SAGE	16NL2.0 SAGE	16	1.52	2.20	3.65
	1/2"	3.0	22NR3.0 SAGE	22NL3.0 SAGE	22	1.66	2.90	4.76
	5/8"	4.0	27NR4.0 SAGE	27NL4.0 SAGE	27	2.12	3.20	6.35

Round DIN 405 Inserts

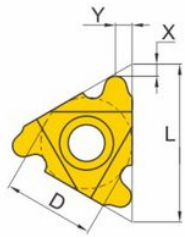
Standard



Defined by : DIN 405
Tolerance class : 7h/7H



Standard

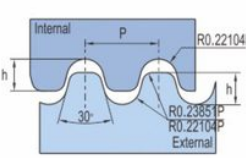


Standard

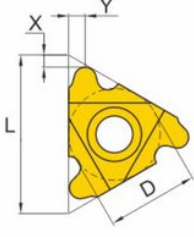
Inserts shape	D	Pitch	Ordering code		Dimension				
		TPI	Right hand	Left hand	L	X	Y	hmin	T
External  	3/8"	10	16ER10 RD	16EL10 RD	16	1.1	1.2	1.27	3.65
		8	16ER8 RD	16EL8 RD	16	1.3	1.4	1.59	3.65
		6	16ER6 RD	16EL6 RD	16	1.5	1.7	2.12	3.65
	1/2"	6	22ER6 RD	22EL6 RD	22	1.5	1.7	2.12	4.76
		4	22ER4 RD	22EL4 RD	22	1.7	2.3	3.18	4.76
	5/8"	4	27ER4 RD	27EL4 RD	27	1.7	2.3	3.18	6.35
Internal  	3/8"	10	16NR10 RD	16NL10 RD	16	1.1	1.2	1.27	3.65
		8	16NR8 RD	16NL8 RD	16	1.3	1.4	1.59	3.65
		6	16NR6 RD	16NL6 RD	16	1.5	1.7	2.12	3.65
	1/2"	6	22NR6 RD	22NL6 RD	22	1.5	1.7	2.12	4.76
		4	22NR4 RD	22NL4 RD	22	1.7	2.3	3.18	4.76
	5/8"	4	27NR4 RD	27NL4 RD	27	1.7	2.3	3.18	6.35

Round 20400 Inserts

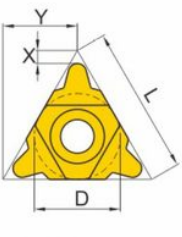
External



Defined by : DIN 20400
Tolerance class : Standard



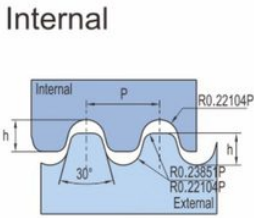
Standard



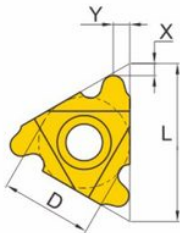
U Style

Inserts shape	D	Pitch	Ordering code		Dimension				
		mm	Right hand	Left hand	L	X	Y	hmin	T
Standard  	1/2"	3.0	22ER3.00 RD	22EL3.00 RD	22	1.28	1.70	1.65	4.76
		4.0	22ER4.00 RD	22EL4.00 RD	22	1.60	2.20	2.20	4.76
		5.0	22ER5.00 RD	22EL5.00 RD	22	1.36	1.75	2.75	4.76
		6.0	22ER6.00 RD	22EL6.00 RD	22	1.70	2.10	3.30	4.76
U Style  	5/8"	8.0	27UE8.00 RD		27	2.95	13.5	4.40	6.35

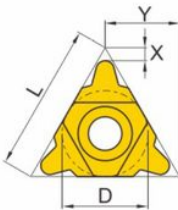
Round 20400 Inserts



Defined by : DIN 20400
Tolerance class : Standard



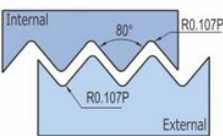
Standard



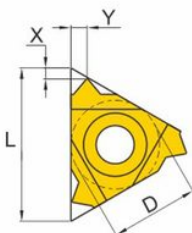
U Style

Inserts shape	D	Pitch	Ordering code		Dimension				
		mm	Right hand	Left hand	L	X	Y	hmin	T
	1/2"	3.0	22NR3.00 RD	22NL3.00 RD	22	1.32	1.70	1.65	4.76
		4.0	22NR4.00 RD	22NL4.00 RD	22	1.64	2.20	2.20	4.76
		5.0	22NR5.00 RD	22NL5.00 RD	22	1.41	1.75	2.75	4.76
		6.0	22NR6.00 RD	22NL6.00 RD	22	1.75	2.10	3.30	4.76
	5/8"	8.0	27UN8.00 RD		27	2.95	13.5	4.40	6.35

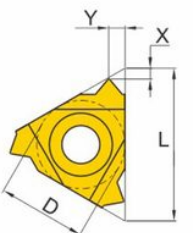
Pg Inserts



Defined by : DIN 40430
Tolerance class : Standard



External



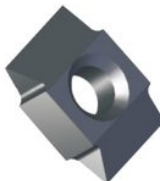
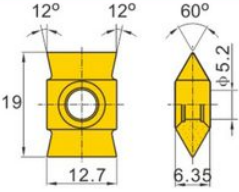
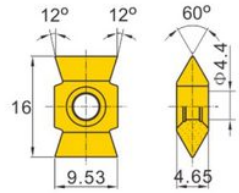
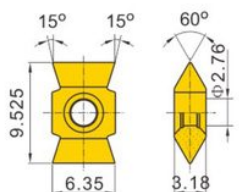
Internal

Inserts shape	D	Pitch		Ordering code		Dimension			
		TPI	Thread	Right hand	Left hand	L	X	Y	T
	1/4"	20	Pg7	11ER20 Pg	11EL20 Pg	11	0.8	0.9	3.20
		18	Pg7/11/13.5/16	11ER18 Pg	11EL18 Pg	11	0.8	1.0	3.20
		16	Pg21/19/36/42/48	11ER16 Pg	11EL16 Pg	11	0.9	1.1	3.20
	3/8"	20	Pg7	16ER20 Pg	16EL20 Pg	16	0.8	0.9	3.65
		18	Pg7/11/13.5/16	16ER18 Pg	16EL18 Pg	16	0.8	1.0	3.65
		16	Pg21/19/36/42/48	16ER16 Pg	16EL16 Pg	16	0.9	1.1	3.65
	1/4"	20	Pg7	11NR20 Pg	11NL20 Pg	11	0.8	0.9	3.20
		18	Pg7/11/13.5/16	11NR18 Pg	11NL18 Pg	11	0.8	1.0	3.20
		16	Pg21/19/36/42/48	11NR16 Pg	11NL16 Pg	11	0.9	1.1	3.20
	3/8"	20	Pg7	16NR20 Pg	16NL20 Pg	16	0.8	0.9	3.65
		18	Pg7/11/13.5/16	16NR18 Pg	16NL18 Pg	16	0.8	1.0	3.65
		16	Pg21/19/36/42/48	16NR16 Pg	16NL16 Pg	16	0.8	1.1	3.65

Partial Profile V Style Inserts

Inserts shape	Thread	Pitch	Radius
		mm	Re
 Partial Profile 60°	MTTR/L 436001	1.0~1.75	R0.1
	MTTR/L 436002	2.0~2.5	R0.2
	MTTR/L 436003	3.0~3.5	R0.3
	MTTR/L 436004	4.0~4.5	R0.4
 Partial Profile 55°	MTTR/L 435501	1.0~1.75	R0.1
	MTTR/L 435502	2.0~2.5	R0.2
	MTTR/L 435503	3.0~3.5	R0.3
	MTTR/L 435504	4.0~4.5	R0.4

Partial Profile Thread Whirling Milling Inserts

Inserts shape	Dimension	Designation	Ordering Code
 		Partial Profile 60°	SV1906
		Partial Profile 60°	SV1604
		Partial Profile 60°	SV0903

Threading Milling Tools

ISO Metric Full Profile Inserts



Pitch mm	Internal EXternal	Insert size				
		A=12mm	A=14mm	A=21mm	A=30mm	A=40mm
0.5	External					
	Internal	*12N0.5 ISO	14N0.5 ISO			
0.75	External		14E0.75 ISO			
	Internal	*12N0.75 ISO	14N0.75 ISO			
1	External		14E1.0 ISO	21E1.0 ISO		
	Internal	*12N1.0 ISO	14N1.0 ISO	21N1.0 ISO		
1.25	External		14E1.25 ISO			
	Internal	*12N1.25 ISO	14N1.25 ISO			
1.5	External		14E1.5 ISO	21E1.5 ISO	30E1.5 ISO	40E1.5 ISO
	Internal	*12N1.5 ISO	14N1.5 ISO	21N1.5 ISO	30N1.5 ISO	40N1.5 ISO
1.75	External		14E1.75 ISO			
	Internal		14N1.75 ISO	21N1.75 ISO		
2	External		14E2.0 ISO	21E2.0 ISO	30E2.0 ISO	40E2.0 ISO
	Internal		14N2.0 ISO	21N2.0 ISO	30N2.0 ISO	40N2.0 ISO
2.5	External		14E2.5 ISO	21E2.5 ISO		
	Internal		14N2.5 ISO	21N2.5 ISO		
3	External			21E3.0 ISO	30E3.0 ISO	40E3.0 ISO
	Internal			21N3.0 ISO	30N3.0 ISO	40N3.0 ISO
3.5	External				30E3.5 ISO	
	Internal			21N3.5 ISO	30N3.5 ISO	40N3.5 ISO
4	External				30E4.0 ISO	40E4.0 ISO
	Internal				30N4.0 ISO	40N4.0 ISO
4.5	External					
	Internal				30N4.5 ISO	40N4.5 ISO
5	External					40E5.0 ISO
	Internal					40N5.0 ISO
5.5	External					
	Internal					40N5.5 ISO
6.0	External					40E6.0 ISO
	Internal					40N6.0 ISO
H		6.3	7.5	12	16	20
T		2.9	3.1	4.7	5.5	6.3

* Insert with one cutting edge

UN-60° American UN Full Profile Inserts



Pitch TPI	Internal External	Insert size				
		A=12mm	A=14mm	A=21mm	A=30mm	A=40mm
32	External		14E32 UN			
	Internal	*12N32 UN	14N32 UN			
28	External		14E28 UN			
	Internal	*12N28 UN	14N28 UN			
27	External					
	Internal		14N27 UN			
24	External		14E24 UN	21E24 UN		
	Internal	*12N24 UN	14N24 UN	21N24 UN		
20	External		14E20 UN	21E20 UN	30E20 UN	
	Internal	*12N20 UN	14N20 UN	21N20 UN	30N20 UN	
18	External		14E18 UN	21E18 UN	30E18 UN	
	Internal	*12N18 UN	14N18 UN	21N18 UN	30N18 UN	
16	External		14E16 UN	21E16 UN	30E16 UN	40E16 UN
	Internal	*12N16 UN	14N16 UN	21N16 UN	30N16 UN	40N16 UN
14	External		14E14 UN	21E14 UN	30E14 UN	40E14 UN
	Internal		14N14 UN	21N14 UN	30N14 UN	40N14 UN
12	External		14E12 UN	21E12 UN	30E12 UN	40E12 UN
	Internal		14N12 UN	21N12 UN	30N12 UN	40N12 UN
10	External			21E10 UN	30E10 UN	40E10 UN
	Internal			21N10 UN	30N10 UN	40N10 UN
8	External				30E8 UN	40E8 UN
	Internal			21N8 UN	30N8 UN	40N8 UN
6	External				30E6 UN	40E6 UN
	Internal				30N6 UN	40N6 UN
4.5	External					
	Internal					40N4.5 UN
4	External					
	Internal					40N4 UN
H		6.3	7.5	12	16	20
T		2.9	3.1	4.7	5.5	6.3

* Insert with one cutting edge

W-55° Whitworth Full Profile Inserts



Pitch TPI	Insert size				
	A=12mm	A=14mm	A=21mm	A=30mm	A=40mm
24		14-24W			
20		14-20W	21EN20W		
19	*12E19W, *12N19W	14-19W	21EN19W		
16		14-16W	21EN16W	30EN16W	
14		14-14W	21EN14W	30EN14W	
11			21EN11W	30EN11W	40EN11W
8					40EN8W

* Insert with one cutting edge

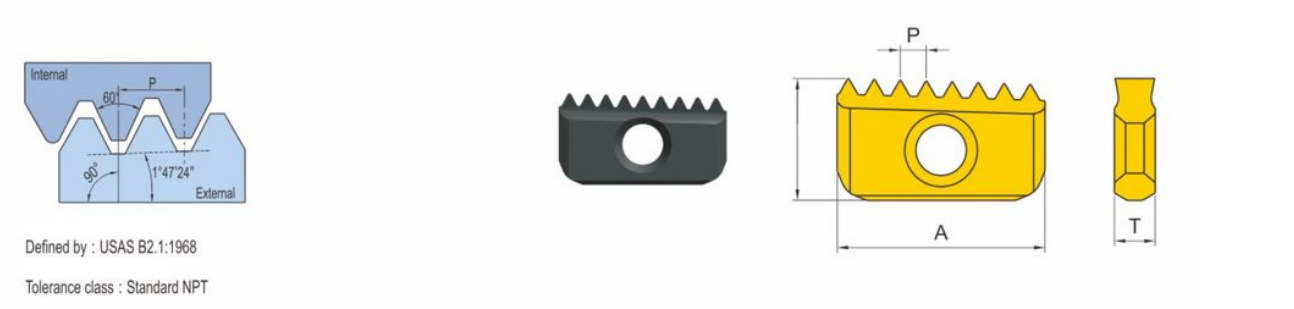
NPTF (Dry seal) Inserts



Pitch	Insert size				
TPI	A=12mm	A=14mm	A=21mm	A=30mm	A=40mm
18	*12E18NPTF,*12N18NPTF	14-18NPTF			
14		14-14NPTF	21-14NPTF		
11.5			21-11.5NPTF	30-11.5NPTF	40-11.5NPTF
8				30-8NPTF	40-8NPTF

* Insert with one cutting edge

NPT-60° National Pipe Threads Inserts



Pitch	Insert size				
TPI	A=12mm	A=14mm	A=21mm	A=30mm	A=40mm
18	*12E18NPT,*12N18NPT	14-18NPT			
14		14-14NPT	21-14NPT		
11.5			21-11.5NPT	30-11.5NPT	40-11.5NPT
8				30-8NPT	40-8NPT

* Insert with one cutting edge

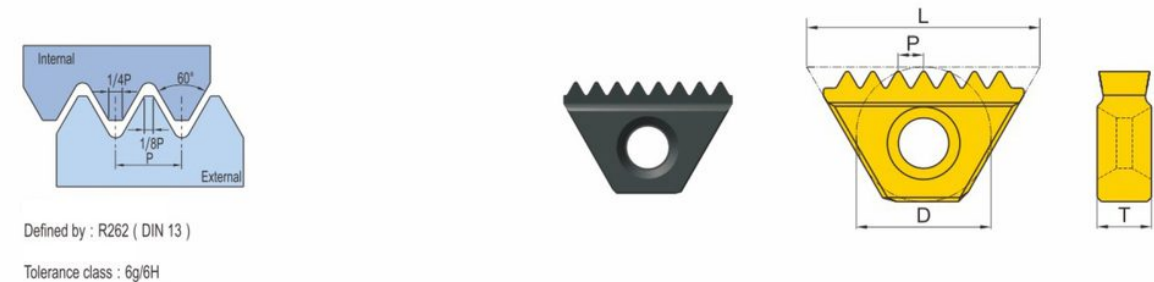
BSPT-55° British Standard Pipe Full Profile Inserts



Pitch	Insert size				
TPI	A=12mm	A=14mm	A=21mm	A=30mm	A=40mm
19	*12E19BSPT,*12N19BSPT	14-19BSPT			
14		14-14BSPT	21-14BSPT		
11			21-11BSPT	30-11BSPT	40-11BSPT

* Insert with one cutting edge

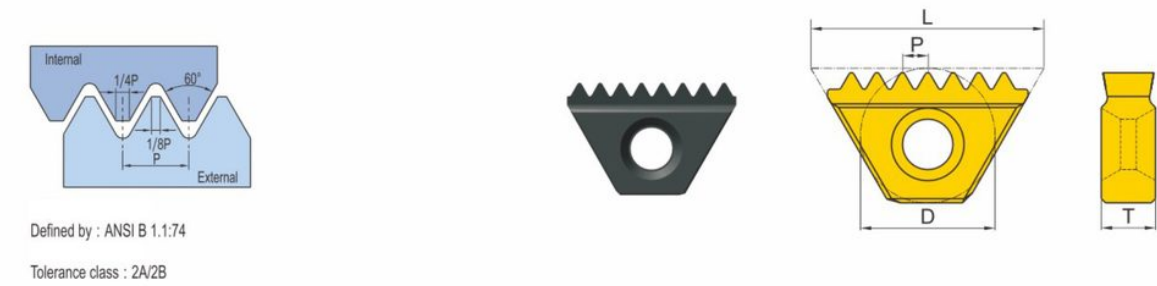
ISO Metric Full Profile Inserts



Pitch	Internal EXternal	Insert size					
mm		L=10.4mm D=6.0mm	L=11mm D=1/4"	L=16mm D=3/8"	L=22mm D=3/8"B	L=27mm D=5/8"	L=38.5mm D=3/4"B
0.5	External						
	Internal	*6.0N0.5 ISO	2N0.5 ISO	3N0.5 ISO			
0.75	External		2E0.75 ISO	3E0.75 ISO			
	Internal	*6.0N0.75 ISO	2N0.75 ISO	3N0.75 ISO			
1	External		2E1.0 ISO	3E1.0 ISO	3BE1.0 ISO	5E1.0 ISO	
	Internal	*6.0N1.0 ISO	2N1.0 ISO	3N1.0 ISO	3BN1.0 ISO	5N1.0 ISO	
1.25	External		2E1.25 ISO	3E1.25 ISO	3BE1.25 ISO	5E1.25 ISO	
	Internal	*6.0N1.25 ISO	2N1.25 ISO	3N1.25 ISO	3BN1.25 ISO	5N1.25 ISO	
1.5	External		2E1.5 ISO	3E1.5 ISO	3BE1.5 ISO	5E1.5 ISO	6BE1.5 ISO
	Internal	*6.0N1.5 ISO	2N1.5 ISO	3N1.5 ISO	3BN1.5 ISO	5N1.5 ISO	6BN1.5 ISO
1.75	External			3E1.75 ISO	3BE1.75 ISO	5E1.75 ISO	
	Internal			3N1.75 ISO	3BN1.75 ISO	5N1.75 ISO	
2	External			3E2.0 ISO	3BE2.0 ISO	5E2.0 ISO	6BE2.0 ISO
	Internal			3N2.0 ISO	3BN2.0 ISO	5N2.0 ISO	6BN2.0 ISO
2.5	External					5E2.5 ISO	6BE2.5 ISO
	Internal					5N2.5 ISO	6BN2.5 ISO
3	External					5E3.0 ISO	6BE3.0 ISO
	Internal					5N3.0 ISO	6BN3.0 ISO
3.5	External					5E3.5 ISO	
	Internal					5N3.5 ISO	
4	External					5E4.0 ISO	6BE4.0 ISO
	Internal					5N4.0 ISO	6BN4.0 ISO
4.5	External					5E4.5 ISO	6BE4.5 ISO
	Internal					5N4.5 ISO	6BN4.5 ISO
5	External						6BE5.0 ISO
	Internal						6BN5.0 ISO
5.5	External						6BN5.5 ISO
	Internal						6BN5.5 ISO
6	External						6BE6.0 ISO
	Internal						6BN6.0 ISO

* Insert with one cutting edge

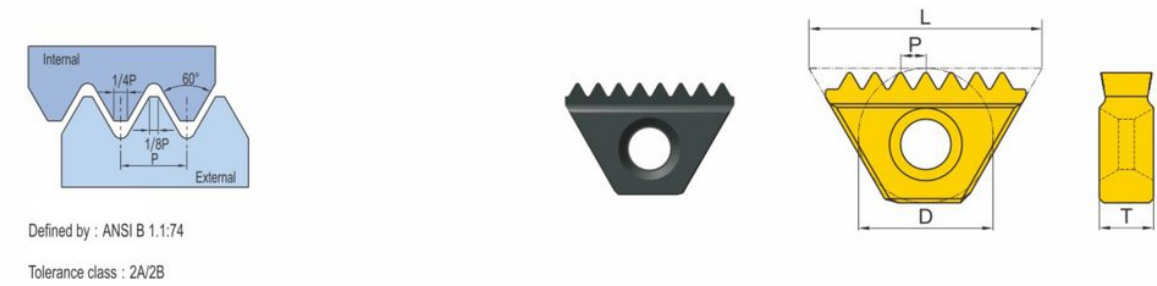
UN-60° American UN Full Profile Inserts



Pitch mm	Internal External	Insert size					
		L=10.4mm D=6.0mm	L=11mm D=1/4"	L=16mm D=3/8"	L=22mm D=3/8"B	L=27mm D=5/8"	L=38.5mm D=3/4"B
48	External						
	Internal		2N48 UN				
40	External						
	Internal		2N40 UN	3N40 UN			
32	External						
	Internal	*6.0N32 UN	2N32 UN	3N32 UN			
28	External		2E28 UN	3E28 UN			
	Internal	*6.0N28 UN	2N28 UN	3N28 UN			
27	External		2E27 UN	3E27 UN			
	Internal		2N27 UN	3N27 UN			
26	External			3E26 UN			
	Internal			3N26 UN			
24	External		2E24 UN	3E24 UN	3BE24 UN	5E24 UN	
	Internal	*6.0N24 UN	2N24 UN	3N24 UN	3BN24 UN	5N24 UN	
20	External		2E20 UN	3E20 UN	3BE20 UN	5E20 UN	
	Internal	*6.0N20 UN	2N20 UN	3N20 UN	3BN20 UN	5N20 UN	
18	External		2E18 UN	3E18 UN	3BE18 UN	5E18 UN	
	Internal	*6.0N18 UN	2N18 UN	3N18 UN	3BN18 UN	5N18 UN	
16	External		2E16 UN	3E16 UN	3BE16 UN	5E16 UN	
	Internal	*6.0N16 UN	2N16 UN	3N16 UN	3BN16 UN	5N16 UN	
14	External		2E14 UN	3E14 UN	3BE14 UN	5E14 UN	
	Internal		2N14 UN	3N14 UN	3BN14 UN	5N14 UN	
13	External			3E13 UN	3BE13 UN	5E13 UN	
	Internal			3N13 UN	3BN13 UN	5N13 UN	
12	External			3E12 UN	3BE12 UN	5E12 UN	
	Internal			3N12 UN	3BN12 UN	5N12 UN	
11.5	External			3E11.5 UN		5E11.5 UN	
	Internal			3N11.5 UN		5N11.5 UN	

* Insert with one cutting edge

UN-60° American UN Full Profile Inserts



Pitch mm	Internal External	Insert size					
		L=10.4mm D=6.0mm	L=11mm D=1/4"	L=16mm D=3/8"	L=22mm D=3/8"B	L=27mm D=5/8"	L=38.5mm D=3/4"B
11	External					5E11 UN	
	Internal					5N11 UN	
10	External					5E10 UN	
	Internal					5N10 UN	
9	External					5E9 UN	
	Internal					5N9 UN	
8	External					5E8 UN	
	Internal					5N8 UN	
7	External					5E7 UN	
	Internal					5N7 UN	
6	External					5E6 UN	6BE6 UN
	Internal					5N6 UN	6BN6 UN
5	External						6BE5 UN
	Internal						6BN5 UN
4.5	External						6BE4.5 UN
	Internal						6BN4.5 UN
4	External						6BE4 UN
	Internal						6BN4 UN

* Insert with one cutting edge

UNJ Aviation Thread Inserts



Pitch mm	Internal External	Insert size			
		L=10.4mm D=6.0mm	L=11mm D=1/4"	L=16mm D=3/8"	L=27mm D=5/8"mm
24	External		2E24 UNJ	3E24 UNJ	
	Internal	*6.0N24 UNJ	2N24 UNJ	3N24 UNJ	
20	External		2E20 UNJ	3E20 UNJ	
	Internal	*6.0N20 UNJ	2N20 UNJ	3N20 UNJ	
18	External			3E18 UNJ	
	Internal	*6.0N18 UNJ	2N18 UNJ	3N18 UNJ	
16	External		2E16 UNJ	3E16 UNJ	5E16 UNJ
	Internal	*6.0N16 UNJ	2N16 UNJ	3N16 UNJ	5N16 UNJ
14	External		2E14 UNJ	3E14 UNJ	
	Internal		2N14 UNJ	3N14 UNJ	
13	External			3E13 UNJ	
	Internal				
12	External			3E12 UNJ	5E12 UNJ
	Internal			3N12 UNJ	5N12 UNJ
11	External				5E11 UNJ
	Internal				5N11 UNJ

* Insert with one cutting edge

W-55° Whitworth Full Profile Inserts



Pitch mm	Insert size					
	L=10.4mm D=6.0mm	L=11mm D=1/4"	L=16mm D=3/8"	L=22mm D=3/8"B	L=27mm D=5/8"	L=38.5mm D=3/4"B
28	*6.0EN28 W	2EN28 W				
26	*6.0EN26 W	2EN26 W	3-26 W			
24	*6.0EN24 W	2EN24 W	3-24 W	3BEN24 W		
20	*6.0EN20 W	2EN20 W	3-20 W	3BEN20 W		
19	*6.0EN19 W	2EN19 W	3-19 W	3BEN19 W		
18			3-18 W	3BEN18 W		
16			3-16 W	3BEN16 W	5EN16 W	
14		2EN14 W	3-14 W	3BEN14 W	5EN14 W	
12			3-12 W	3BEN12 W	5EN12 W	
11			3-11 W	3BEN11 W	5EN11 W	6BEN11 W
10					5EN10 W	
9					5EN9 W	
8					5EN8 W	
7					5EN7 W	
6					5EN6 W	6BEN6 W
5						6BEN5 W
4.5						6BEN4.5 W

* Insert with one cutting edge

NPTF(Dry Seal) Inserts



Pitch	Insert size			
TPI	L=16mm D=3/8"	L=22mm D=3/8"B	L=27mm D=5/8"	L=38.5mm D=3/4"B
14	3-14 NPTF	3B-14 NPTF		
11.5	3-11.5 NPTF	3B-11.5 NPTF	5-11.5 NPTF	6B-11.5 NPTF
8			5-8 NPTF	6B-8 NPTF

* Insert with one cutting edge

NPT-60° National Pipe Threads Inserts



Pitch	Insert size			
TPI	L=16mm D=3/8"	L=22mm D=3/8"B	L=27mm D=5/8"	L=38.5mm D=3/4"B
18	*3E18 NPT			
14	3-14 NPT	3B-14 NPT		
11.5	3-11.5 NPT	**3B-11.5 NPT	5-11.5 NPT	6B-11.5 NPT
8			5-8 NPT	6B-8 NPT

* Insert with one cutting edge

BSPT-55° British Standard Pipe Full Profile Inserts



Pitch	Insert size		
TPI	L=11mm D=1/4"	L=16mm D=3/8"	L=27mm D=5/8"
19	2-19 BSPT		
14		3-14 BSPT	
11		3-11 BSPT	5-11 BSPT

* Insert with one cutting edge

Threading Tools For Oil Pipes

Threading Tools For Oil Pipes

External API Line Type Inserts



Order No	TPI	Thread Taper	Conodont position	
			X	Y
B17ER11.5G2-4	11.5	1:16	0.32	17.3

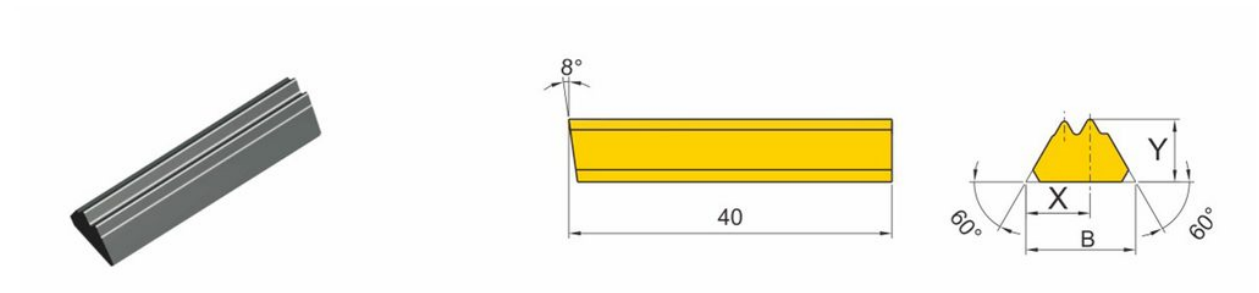
Internal API Line Type Inserts



Order No	TPI	Thread Taper	Conodont position	
			X	Y
B17NR11.5G2-4	11.5	1:16	0.32	17.3

Threading Tools For Oil Pipes

External API Round Inserts



Order No	TPI	Thread Taper	Conodont position		
			B	X	Y
L40VER10RD1-2	10	1:16	12.8	9.82	7.76
L40VER8RD1-2	8	1:16	13.6	10.78	7.76

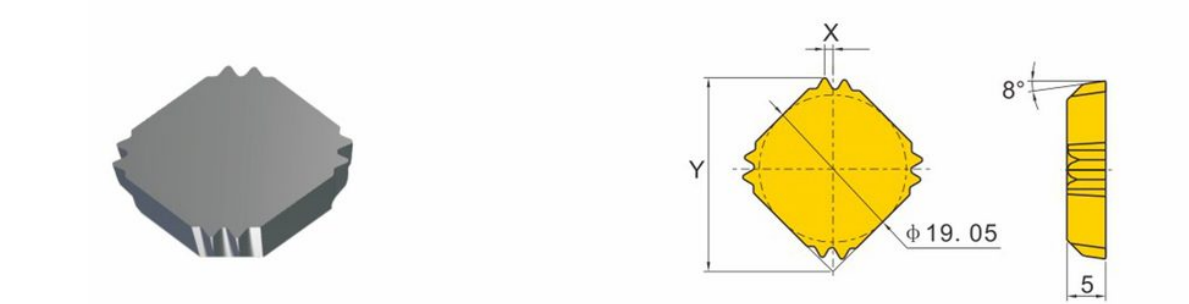
Threading Tools For Oil Pipes

External API Round Inserts



Order No	TPI	Thread Taper	Conodont position	
			X	Y
T22ER10RD1-4	10	1:16	7.0	18.9

Internal API Round Inserts



Order No	TPI	Thread Taper	Conodont position	
			X	Y
S19NR10RD4-2	10	1:16	1.06	25.20
S19NR8RD4-2	8	1:16	1.30	25.00

External API Round Inserts



Order No	TPI	Thread Taper	Conodont position	
			X	Y
T22ER8RD1-4	8	1:16	5.2	18.9

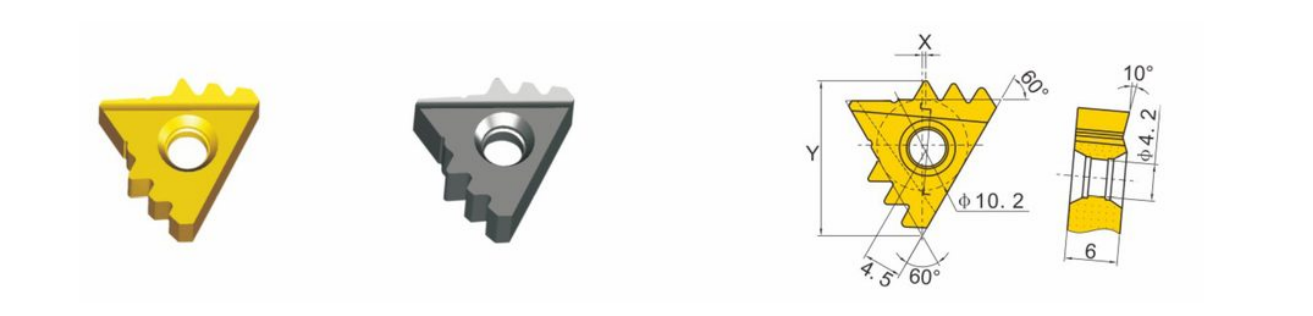
Threading Tools For Oil Pipes

External API Round Inserts



Order No	TPI	Thread Taper	Conodont position	
			X	Y
B17ER10RD2-4	10	1:16	0.18	17.10
B17ER8RD2-3	8	1:16	0.32	17.10

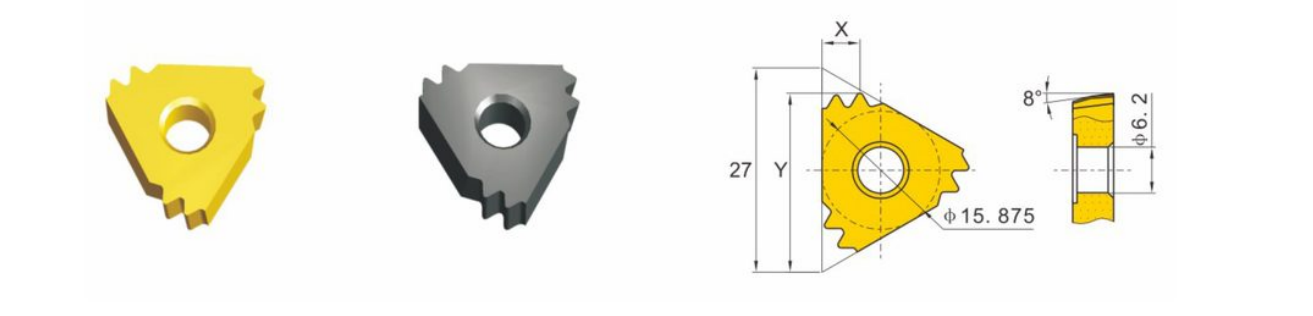
Internal API Round Inserts



Order No	TPI	Thread Taper	Conodont position	
			X	Y
B17NR10RD2-4	10	1:16	0.18	17.10
B17NR8RD2-3	8	1:16	0.32	17.10
B23NR8RD2-5	8	1:16	3.50	21.90

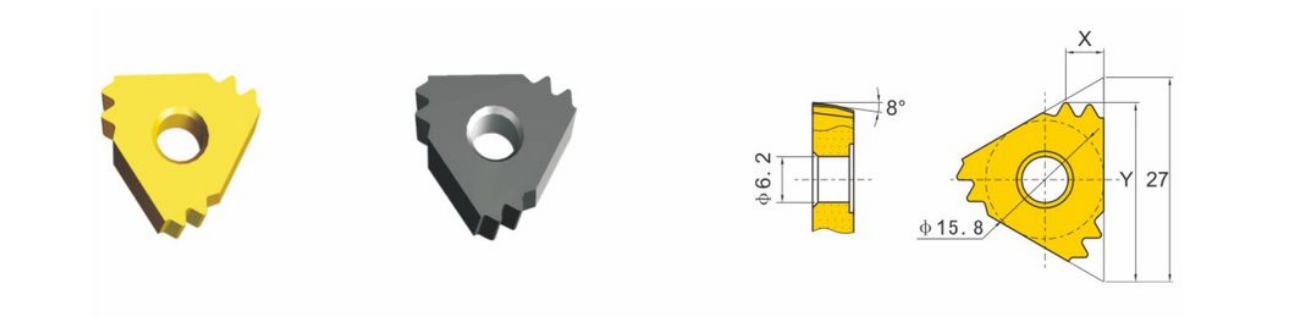
Threading Tools For Oil Pipes

External API Round Inserts



Order No	TPI	Thread Taper	Conodont position	
			X	Y
T27ER8RD3-2	8	1:16	5.00	24.30
T27ER10RD3-2	10	1:16	4.70	24.50

Internal API Round Inserts



Order No	TPI	Thread Taper	Conodont position	
			X	Y
T27NR8RD3-2	8	1:16	5.00	24.30
T27NR10RD3-2	10	1:16	4.70	24.50

Threading Tools For Oil Pipes

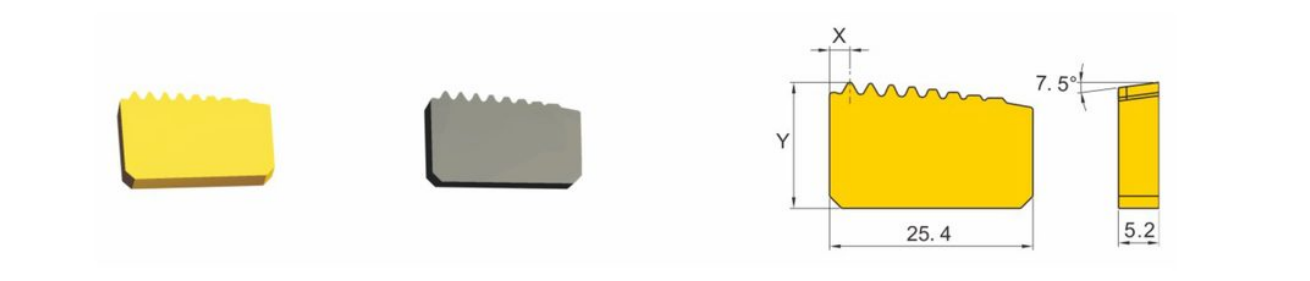
External API Round Inserts For PMC Machine Tools(USA)



Order No	TPI	Thread Taper	Conodont position	
			X	Y
P16ER8RD1-31	8	1:16	7.73	14.70
P16ER8RD1-32	8	1:16	6.67	14.96
P16ER8RD1-33	8	1:16	5.61	15.04
P16ER10RD1-31	10	1:16	7.30	14.27
P16ER10RD1-32	10	1:16	6.46	14.55
P16ER10RD1-33	10	1:16	5.61	14.65

Threading Tools For Oil Pipes

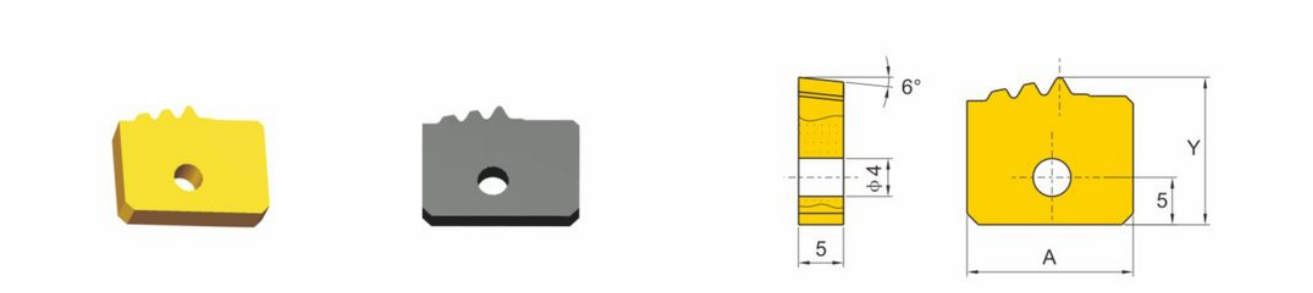
Internal API Round Inserts For PMC Machine Tools(USA)



Order No	TPI	Thread Taper	Conodont position	
			X	Y
P25NR8RD1-7	8	1:16	3.70	15.70
P25NR10RD1-8	10	1:16	3.70	15.40

Threading Tools For Oil Pipes

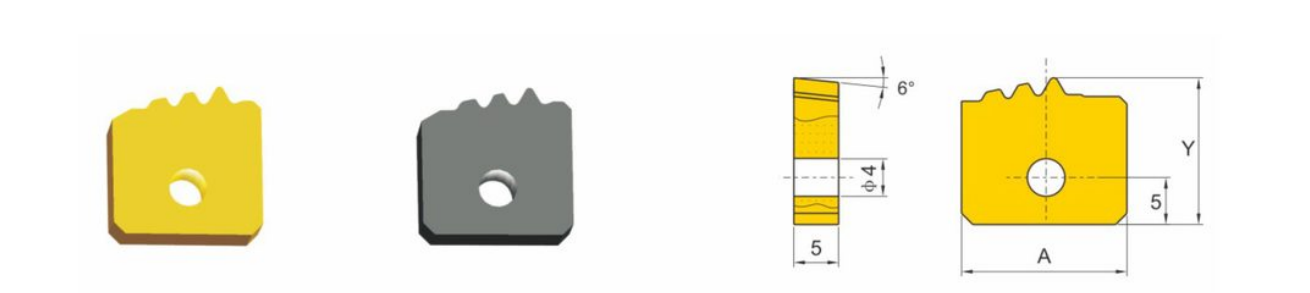
External API Round Inserts For Colinet Machine Tools



Order No	TPI	Thread Taper	Conodont position		
			A	X	Y
C20ER8RD1-31(12°)	8	1:16	20	10.20	15.63
C20ER8RD1-32(12°)	8	1:16	20	8.61	15.92
C20ER8RD1-31(15°)	8	1:16	16	6.00	15.40
C20ER8RD1-32(15°)	8	1:16	16	4.41	15.86
C20ER10RD1-31	10	1:16	16	5.67	15.16
C20ER10RD1-32	10	1:16	16	4.40	15.45

Threading Tools For Oil Pipes

External API Round Inserts For Colinet Machine Tools



Order No	TPI	Thread Taper	Conodont position		
			A	X	Y
C16ER8RD1-3	8	1:16	16	4.40	15.86

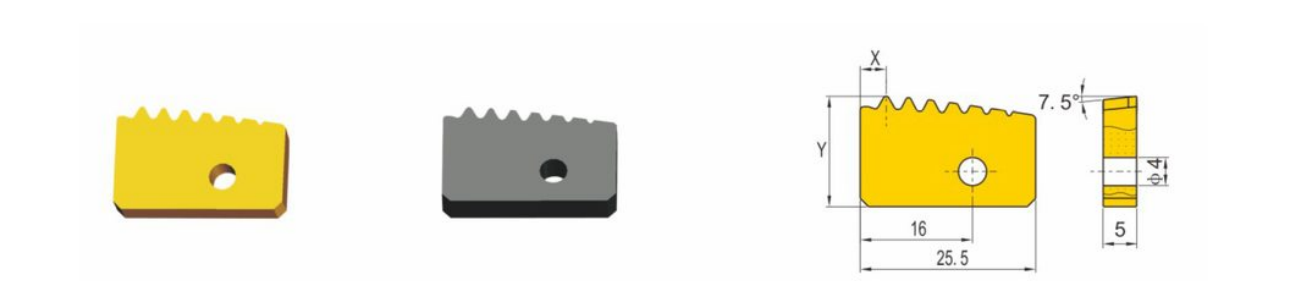
Threading Tools For Oil Pipes

External API Round Inserts For Colinet Machine Tools



Order No	TPI	Thread Taper	Conodont position	
			X	Y
C16ER8RD2-3	8	1:16	4.40	15.74
C16ER10RD2-3	10	1:16	4.40	15.74

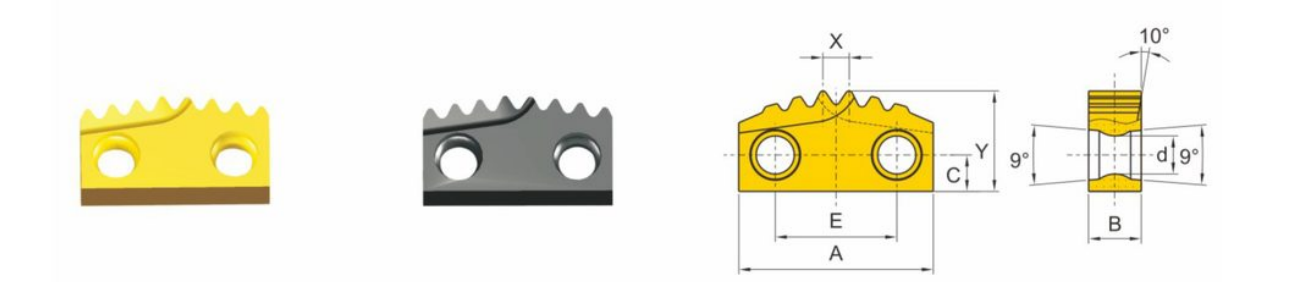
Internal API Round Inserts For Colinet Machine Tools



Order No	TPI	Thread Taper	Conodont position	
			X	Y
C25NR8RD1-7	8	1:16	3.70	17.10
C25NR10RD1-8	10	1:16	3.70	16.80

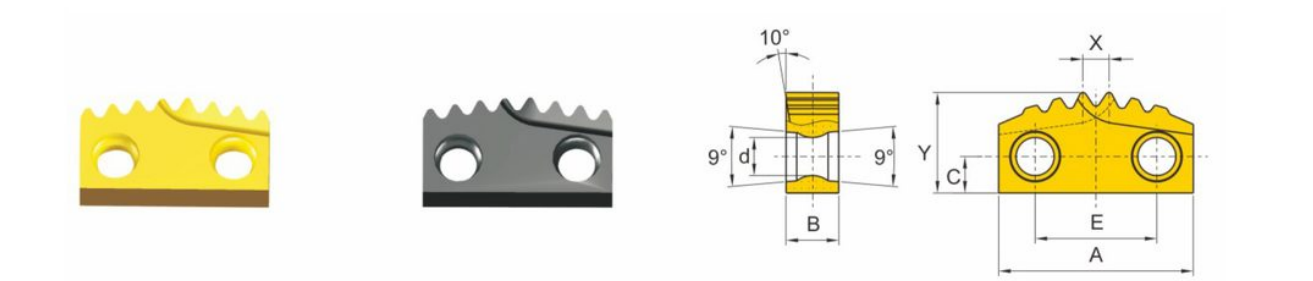
Threading Tools For Oil Pipes

External API Round Inserts



Order No	TPI	Thread Taper	Conodont position						
			A	B	C	D	E	X	Y
S24ER10RD2-3	10	1:16	24	6.5	4.5	4.7	15	3.6	12.4
S24ER8RD2-3	8	1:16	24	6.5	4.5	4.7	15	3.3	12.4

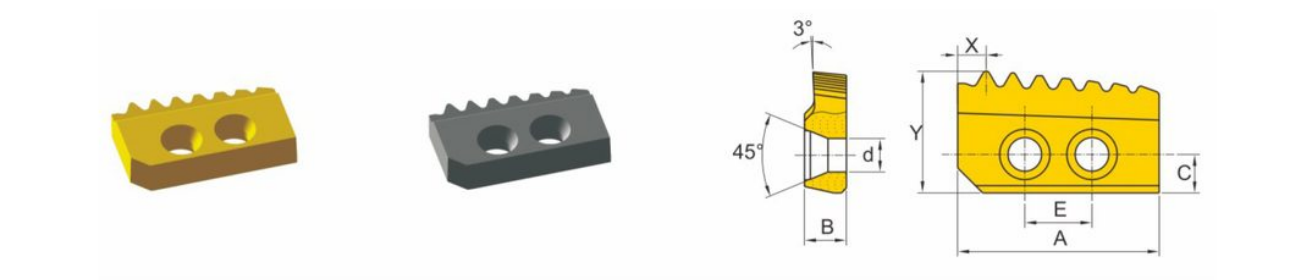
Internal API Round Inserts



Order No	TPI	Thread Taper	Conodont position						
			A	B	C	D	E	X	Y
S24NR10RD2-4	10	1:16	24	6.5	4.5	4.7	15	3.6	12.4
S24NR8RD2-4	8	1:16	24	6.5	4.5	4.7	15	3.3	12.4

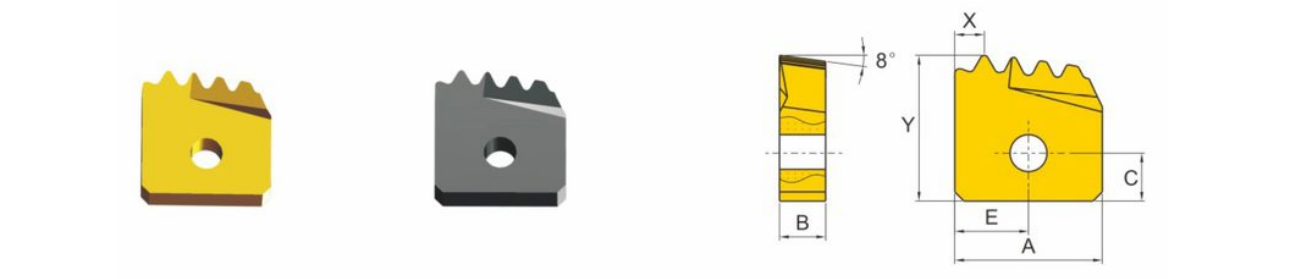
Threading Tools For Oil Pipes

Internal API Round Inserts



Order No	TPI	Thread Taper	Conodont position						
			A	B	C	D	E	X	Y
S24NR10RD1-7	10	1:16	24	5	4.6	4	8	7.4	14.48
S24NR8RD1-7	8	1:16	24	5	4.6	4	8	3.4	14.53

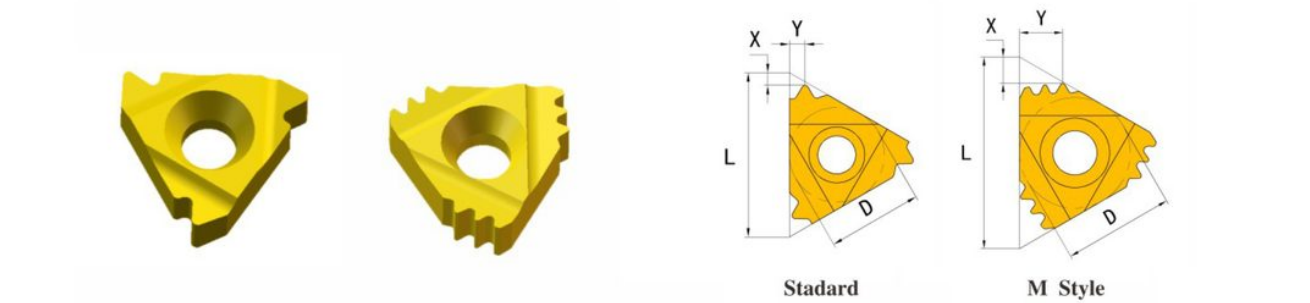
Internal API Round Inserts



Order No	TPI	Thread Taper	Conodont position						
			A	B	C	D	E	X	Y
S16NR10RD1-4	10	1:16	16	5	5.2	4	8	3.2	15.8
S16NR8RD1-4	8	1:16	16	5	5.2	4	8	3.2	15.8

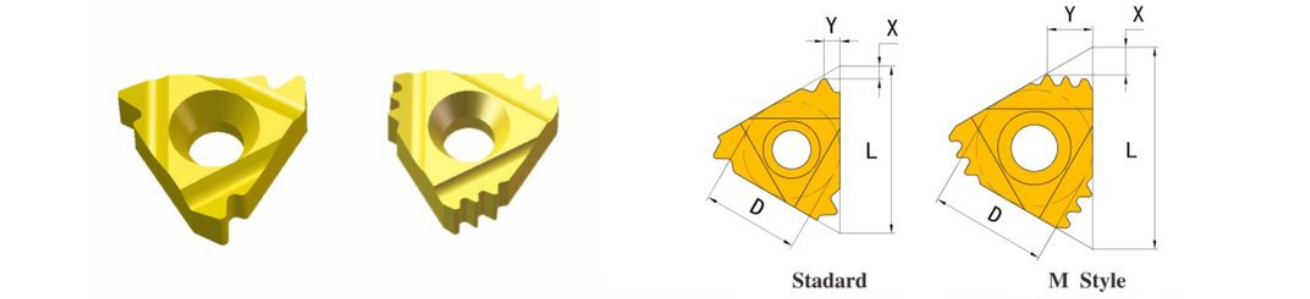
Threading Tools For Oil Pipes

External API Round Inserts



Order No	TPI	Thread Taper	Conodont position				
			D	X	Y	L	B
16ER8 APIRD	8	1:16	9.52	1.3	1.5	16	3.65
16ER10 APIRD	10	1:16	9.52	1.2	1.4	16	3.65
22ER8 APIRD	8	1:16	12.70	1.7	2.1	22	4.86
22ER10 APIRD	10	1:16	12.70	1.4	1.7	22	4.86
27ER8 APIRD-2M	8	1:16	15.87	2.4	4.5	27	6.35
27ER10 APIRD-3M	10	1:16	15.87	3.3	6.2	27	6.35

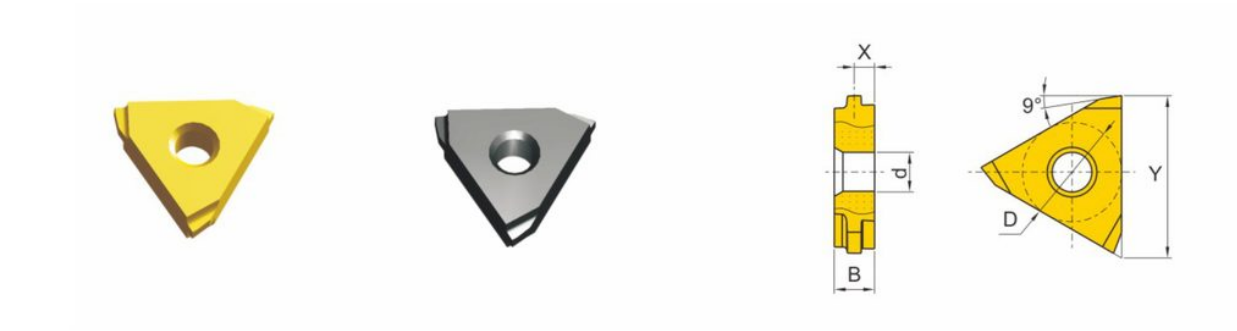
Internal API Round Inserts



Order No	TPI	Thread Taper	Conodont position				
			D	X	Y	L	B
16NR8 APIRD	8	1:16	9.52	1.3	1.5	16	3.65
16NR10 APIRD	10	1:16	9.52	1.2	1.4	16	3.65
22NR8 APIRD	8	1:16	12.70	1.7	2.1	22	4.86
22NR10 APIRD	10	1:16	12.70	1.4	1.7	22	4.86
27NR8 APIRD-2M	8	1:16	15.87	2.4	4.5	27	6.35
27NR10 APIRD-3M	10	1:16	15.87	3.3	6.2	27	6.35

Threading Tools For Oil Pipes

External API Buttress Inserts(V Style)



Order No	TPI	Thread Taper	Conodont position				
			D	d	B	X	Y
T28VER5BU3-1	5	1:16	16	6.2	6.5	3.60	26.20

Internal API Buttress Inserts(V Style)



Order No	TPI	Thread Taper	Conodont position				
			D	d	B	x	Y
T28VNR5BU3-1	5	1:16	16	6.2	6.5	3.60	26.20

Threading Tools For Oil Pipes

External API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position					
			D	d	C	B	X	Y
B17ER5BU2-2	5	1:16	10.2	4.2	4.5	6	2.05	16.80
B17ER5BU2-2(OTTM)	5	1:16	10.2	4.2	4.5	6	2.05	16.80

Internal API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position					
			D	d	C	B	X	Y
B17NR5BU2-2	5	1:16	10.2	4.2	4.5	6	1.14	16.65
B17NR5BU2-2(OTTM)	5	1:16	10.2	4.2	4.5	6	1.14	16.65

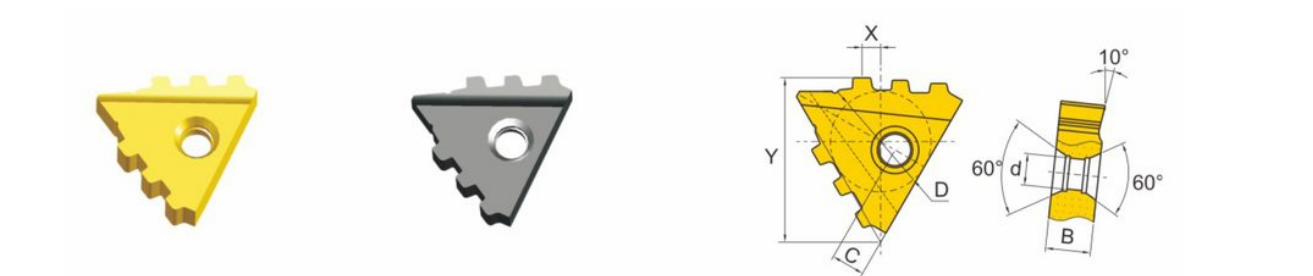
Threading Tools For Oil Pipes

External API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position					
			D	d	C	B	X	Y
B23ER5BU2-3	5	1:16	13.4	4.2	4.5	6	2.46	21.90
B23ER5BU2-3(1:12)	5	1:12	13.4	4.2	4.5	6	2.46	21.90
B23ER5BU2-3(OTTM)	5	1:16	13.4	4.2	4.5	6	2.46	21.90

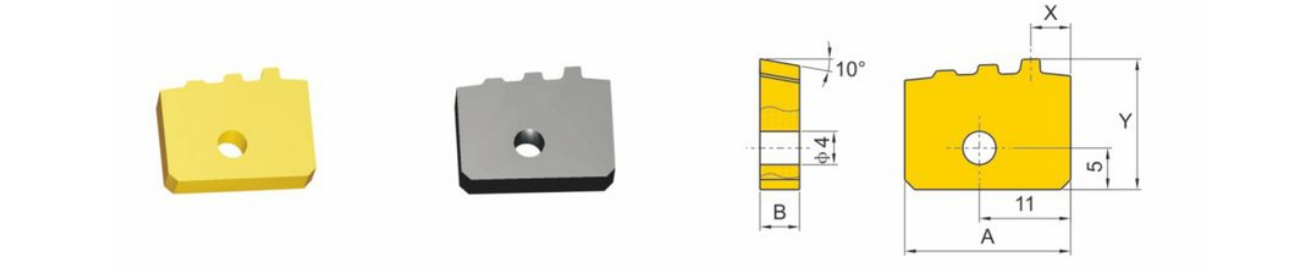
Internal API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position					
			D	d	C	B	X	Y
B23NR5BU2-3	5	1:16	13.4	4.2	4.5	6	2.46	21.90
B23NR5BU2-3(1:12)	5	1:12	13.4	4.2	4.5	6	2.46	21.90
B23NR5BU2-3(OTTM)	5	1:16	13.4	4.2	4.5	6	2.46	21.90

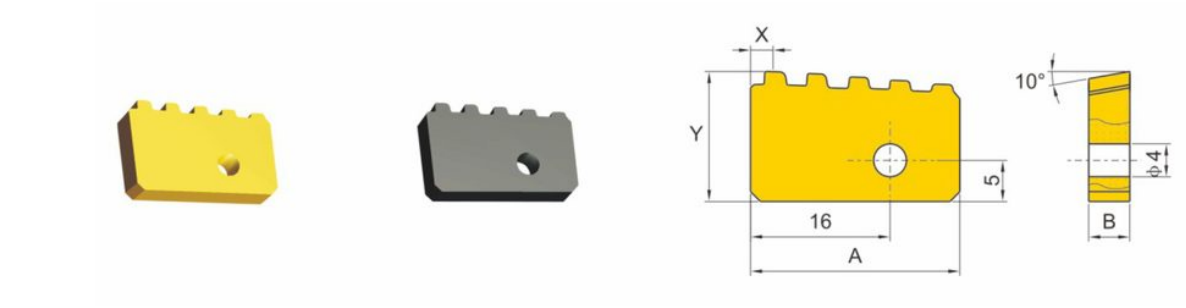
Threading Tools For Oil Pipes

External Inserts API Buttress For Colinet Machine Tools



Order No	TPI	Thread Taper	Conodont position			
			A	B	X	Y
C20ER5BU1-31	5	1:16	20	5	4.84	15.67
C20ER5BU1-32	5	1:16	20	5	2.30	15.89
4.795-1	5	1:16	20	5	4.79	15.70
4.795-2	5	1:16	20	5	2.25	15.91

Internal Buttress Inserts For Colinet Machine Tools



Order No	TPI	Thread Taper	Conodont position			
			A	B	X	Y
C25NR5BU1-5	5	1:16	25.5	5	2.50	15.60
C25NR5BU1-5(1:12)	5	1:12	25.5	5	2.50	15.87
C25NR5BU1-5(OTTM)	5	1:16	25.5	5	2.50	15.75

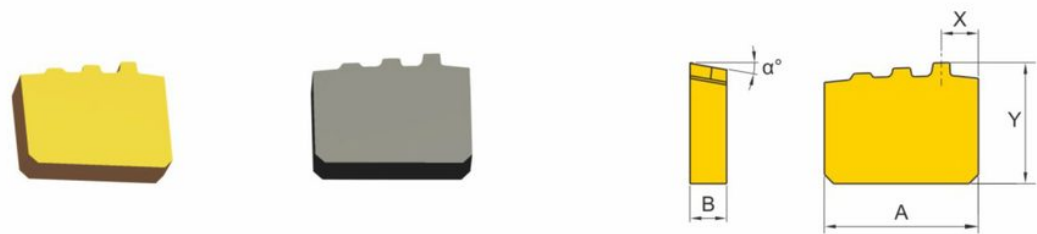
Internal Inserts Of Inverse Thread Cutting For Colinet Machine Tools



Order No	TPI	Thread Taper	Conodont position			
			A	B	X	Y
C25NR5BU1-5(B)	5	1:16	25.5	5	2.5	15.80
C25NR5BU1-5(1:12)(B)	5	1:12	25.5	5	2.5	15.87
C25NR5BU1-5(OTTM)(B)	5	1:16	25.5	5	2.5	15.75

Threading Tools For Oil Pipes

External API Buttress Inserts For PMC Machine Tools



Order No	TPI	Thread Taper	Conodont position			
			A	B	X	Y
P16ER5BU1-31	5	1:16	16.9	5.2	4.29	14.60
P16ER5BU1-32	5	1:16	16.9	5.2	2.60	14.86
P16ER5BU1-33	5	1:16	16.9	5.2	0.91	15.00

Threading Tools For Oil Pipes

Internal API Buttress Inserts For PMC Machine Tools



Order No	TPI	Thread Taper	Conodont position			
			A	B	X	Y
P25NR5BU1-5	5	1:16	25.4	5.2	4.29	14.60

External API Buttress Inserts For PMC Machine Tools



Order No	TPI	Thread Taper	Conodont position				Note
			A	B	X	Y	
4.201	5	1:16	17	5	5.56	14.56	API
4.202	5	1:16	17	5	3.87	14.80	API
4.203	5	1:16	17	5	2.16	14.98	API
4.416-1	5	1:16	17	5	5.51	14.60	OTTM
4.416-2	5	1:16	17	5	3.82	14.86	OTTM
4.416-3	5	1:16	17	5	2.13	15.02	OTTM

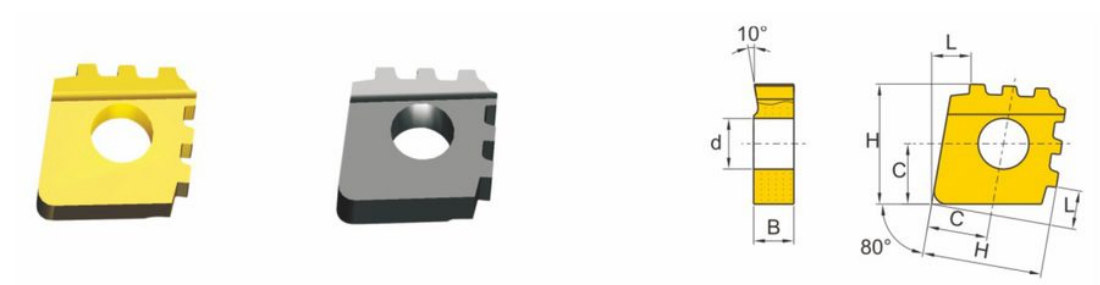
Threading Tools For Oil Pipes

External API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position				
			B	C	d	H	L
R19ER5BU2-3	5	1:16	6.35	9.5	8	18.4	6.00

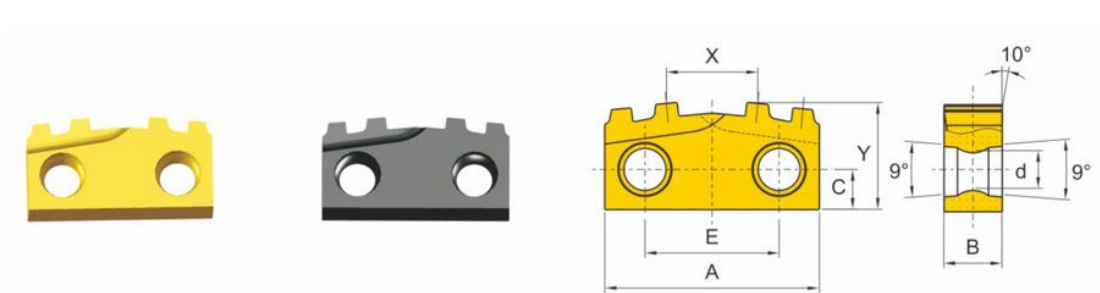
Internal API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position				
			B	C	d	H	L
R19NR5BU2-3	5	1:16	6.35	9.5	8	18.4	6.00

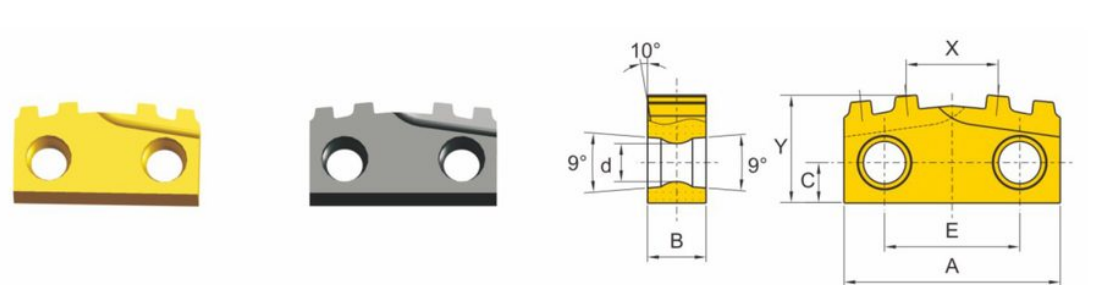
Threading Tools For Oil Pipes

External API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position						
			A	B	C	d	E	X	Y
S24ER5BU2-2	5	1:16	24	6.5	4.5	4.7	15	10.3	12

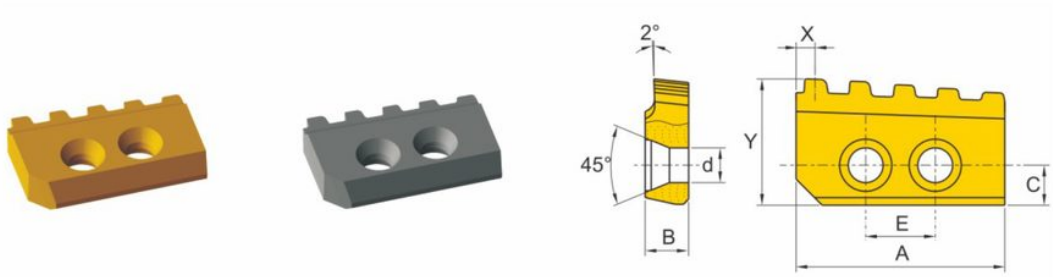
Internal API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position						
			A	B	C	d	E	X	Y
S24NR5BU2-2	5	1:16	24	6.5	4.5	4.7	15	10.3	12

Threading Tools For Oil Pipes

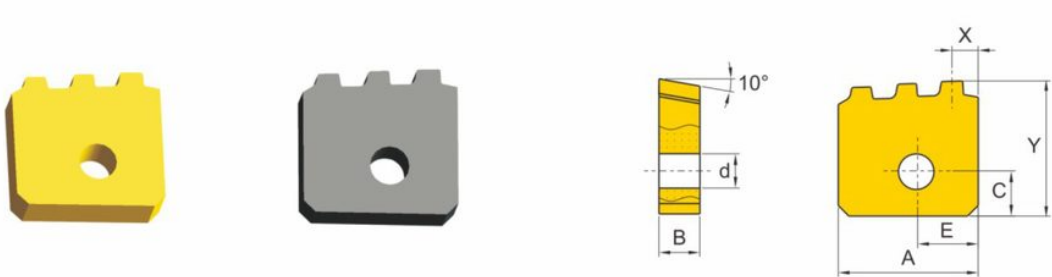
Internal API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position						
			A	B	C	d	E	X	Y
S24NR5BU1-5	5	1:16	24	5	4.6	4	8	2.26	14.54

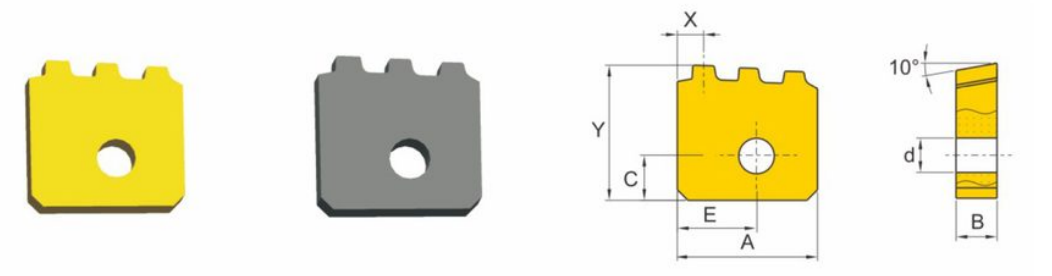
Threading Tools For Oil Pipes

External API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position						
			A	B	C	d	E	X	Y
S16ER5BU1-3	5	1:16	15.8	4.76	5	4	7	3	15.2

Internal API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position						
			A	B	C	d	E	X	Y
S16NR5BU1-3	5	1:16	15.8	4.76	5	4	7	2.5	15.8

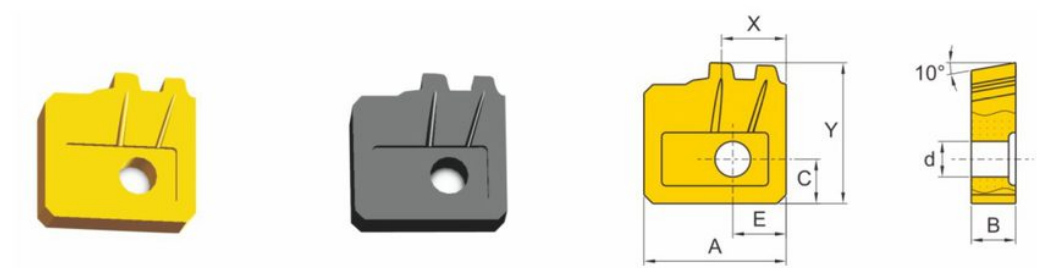
Threading Tools For Oil Pipes

External API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position						
			A	B	C	d	E	X	Y
C19ER5BU1-3(1:12)	5	1:12	19	6.35	9.5	7.93	9.5	5.70	18.92

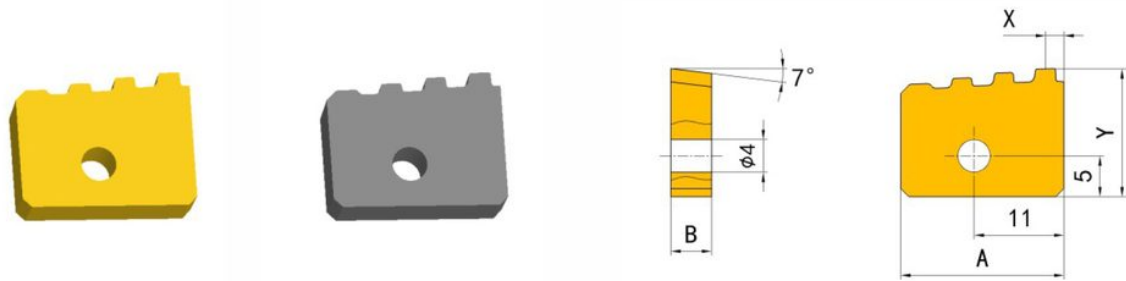
Internal API Buttress Inserts



Order No	TPI	Thread Taper	Conodont position						
			A	B	C	d	E	X	Y
S16ER5BU1-2	5	1:16	15.8	5	5	4	7	3.00	15.20

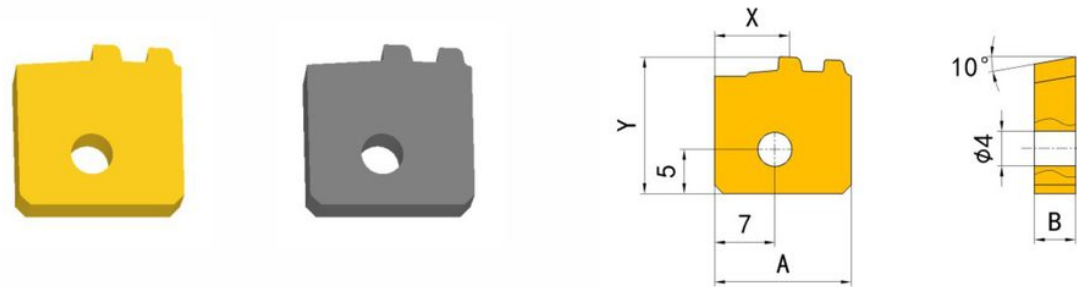
Threading Tools For Oil Pipes

External Buttress Inserts



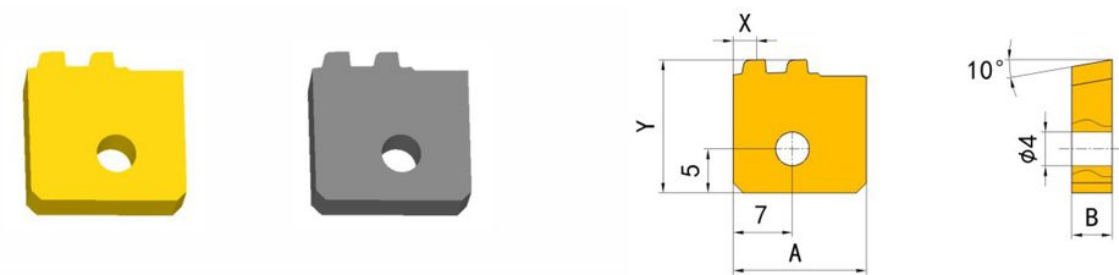
Order No	TPI	Thread Taper	Conodont position			
			A	B	X	Y
X1-89634	5	1:16	20	5	2.29	15.70
X1-89633	5	1:16	20	5	3.98	15.50
X1-89632	5	1:16	20	5	5.68	15.38
OTTM PIN 5TPI-3	5	1:16	20	5	2.32	15.70
OTTM PIN 5TPI-2	5	1:16	20	5	4.01	15.54
OTTM PIN 5TPI-1	5	1:16	20	5	5.70	15.38

Internal Buttress Inserts



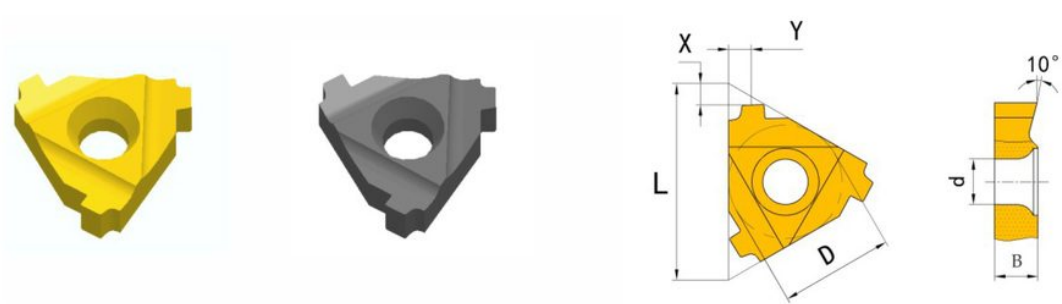
Order No	TPI	Thread Taper	Conodont position			
			A	B	X	Y
C16NR5BU1-2(OTTM)	5	1:16	15.76	4.76	8.67	15.75
C16NR5BU1-2(4.240)	5	1:16	15.76	4.76	8.67	15.75

Internal Buttress Inserts



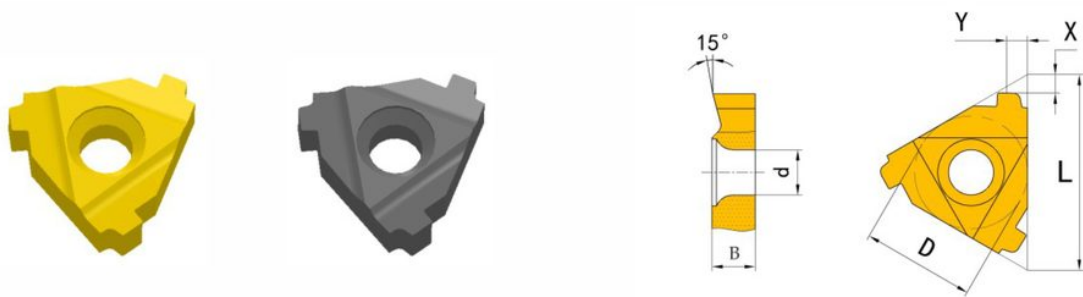
Order No	TPI	Thread Taper	Conodont position			
			A	B	X	Y
C16NR5BU1-2(OTTM)B	5	1:16	15.75	4.76	2.5	15.75
C16NR5BU1-2(4.865)	5	1:16	15.75	4.76	2.5	15.80

External Buttress Inserts



Order No	TPI	Thread Taper	Conodont position				
			D	X	Y	L	B
22ER5 BUT	5	1:16	12.7	2.4	2.6	22	4.86
22ER5BUT(1:12)	5	1:16	12.7	2.7	2.2	22	4.86
22ER5BUT(BC-OTTM)	5	1:16	12.7	2.4	2.7	22	4.86

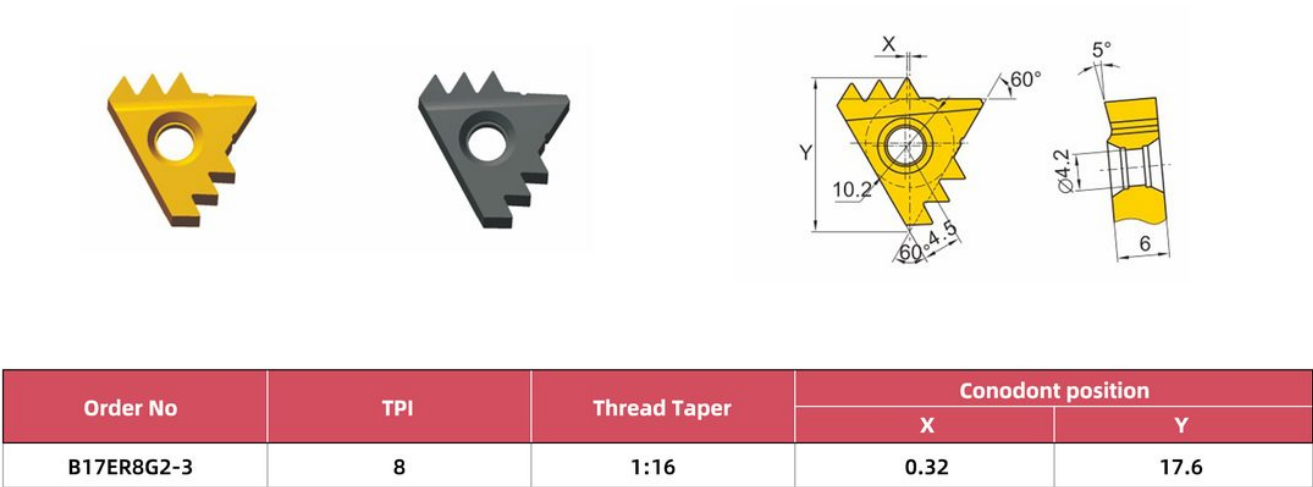
Internal Buttress Inserts



Order No	TPI	Thread Taper	Conodont position				
			D	X	Y	L	B
22NR5 BUT	5	1:16	12.7	2.8	1.9	22	4.86
22NR5BUT(1:12)	5	1:16	12.7	2.7	2.2	22	4.86
22NR5BUT(BC-OTTM)	5	1:16	12.7	2.2	2.1	22	4.86

Threading Tools For Oil Pipes

External API Line Type Inserts



Order No	TPI	Thread Taper	Conodont position	
			X	Y
B17ER8G2-3	8	1:16	0.32	17.6

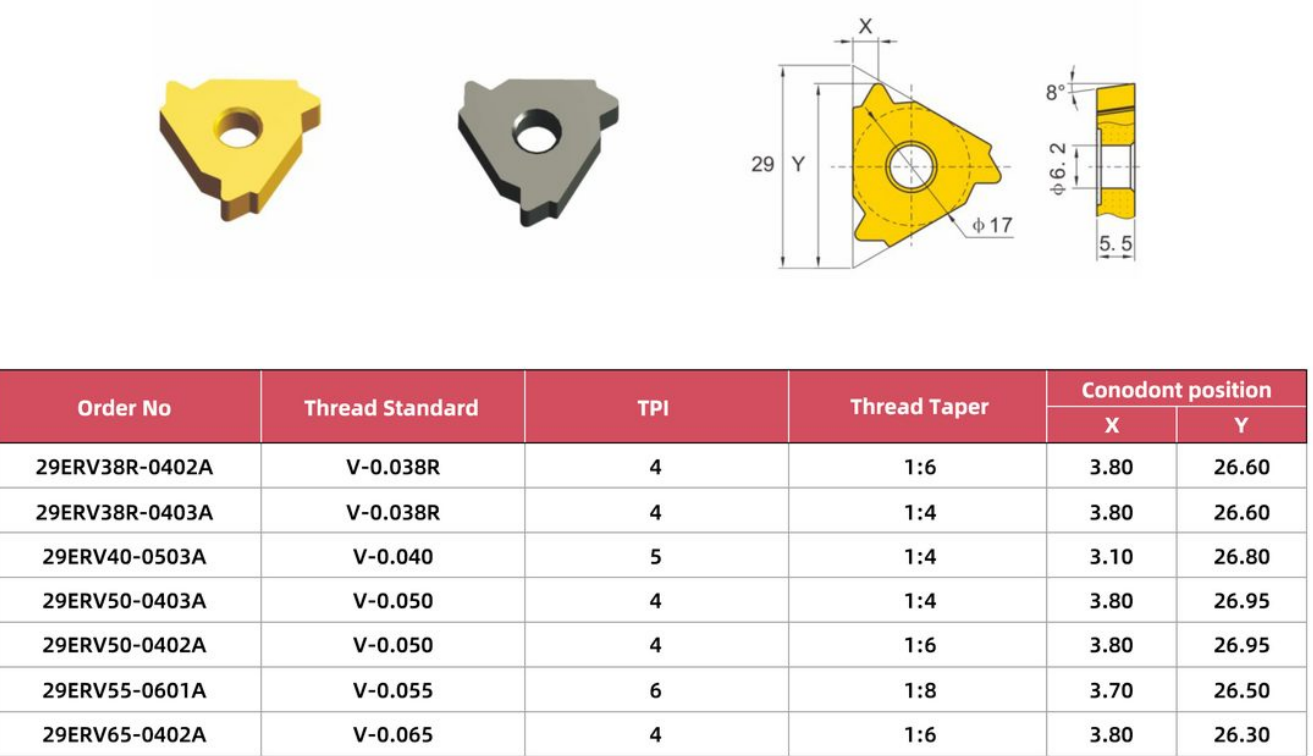
Internal API Line Type Inserts



Order No	TPI	Thread Taper	Conodont position	
			X	Y
B17NR8G2-3	8	1:16	0.32	17.6

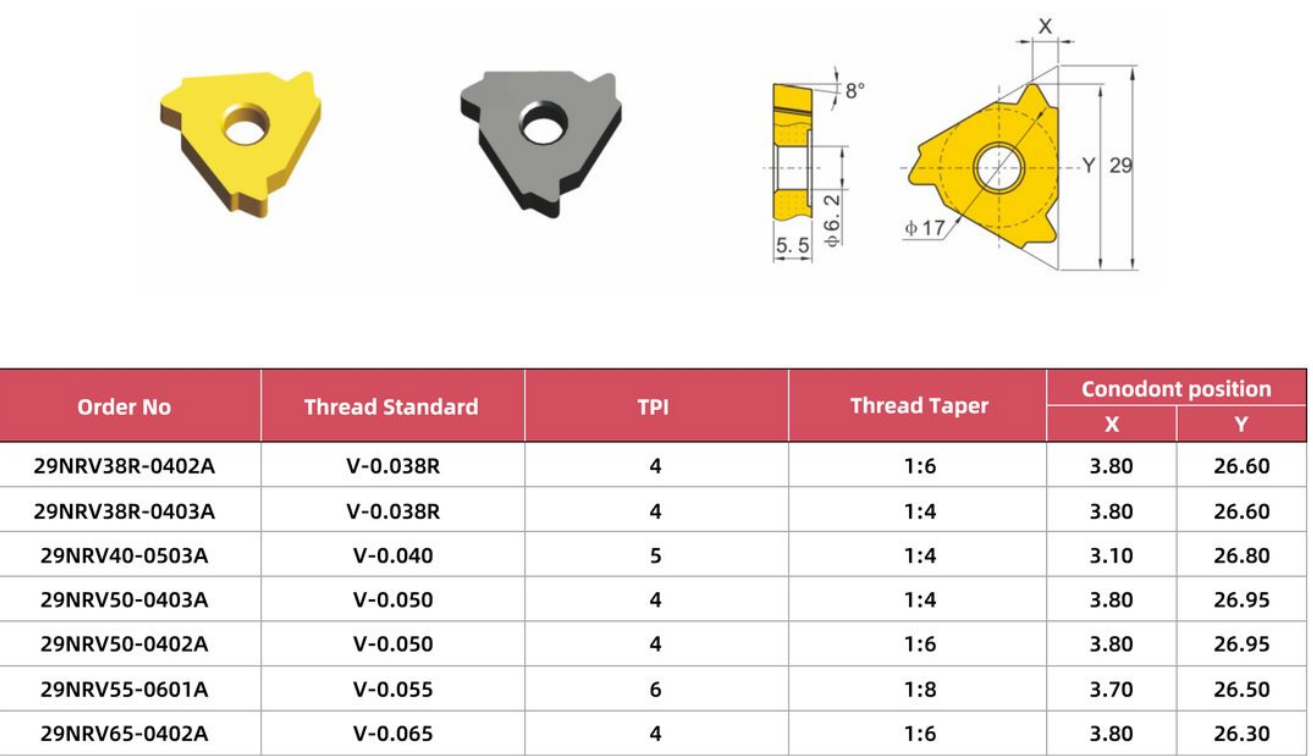
Threading Tools For Oil Pipes

A Style External Inserts



Order No	Thread Standard	TPI	Thread Taper	Conodont position	
				X	Y
29ERV38R-0402A	V-0.038R	4	1:6	3.80	26.60
29ERV38R-0403A	V-0.038R	4	1:4	3.80	26.60
29ERV40-0503A	V-0.040	5	1:4	3.10	26.80
29ERV50-0403A	V-0.050	4	1:4	3.80	26.95
29ERV50-0402A	V-0.050	4	1:6	3.80	26.95
29ERV55-0601A	V-0.055	6	1:8	3.70	26.50
29ERV65-0402A	V-0.065	4	1:6	3.80	26.30

A Style Internal Inserts



Order No	Thread Standard	TPI	Thread Taper	Conodont position	
				X	Y
29NRV38R-0402A	V-0.038R	4	1:6	3.80	26.60
29NRV38R-0403A	V-0.038R	4	1:4	3.80	26.60
29NRV40-0503A	V-0.040	5	1:4	3.10	26.80
29NRV50-0403A	V-0.050	4	1:4	3.80	26.95
29NRV50-0402A	V-0.050	4	1:6	3.80	26.95
29NRV55-0601A	V-0.055	6	1:8	3.70	26.50
29NRV65-0402A	V-0.065	4	1:6	3.80	26.30

Threading Tools For Oil Pipes

A Style External Inserts



Order No	Thread Standard	TPI	Thread Taper	Conodont position	
				X	Y
29ERV38R-0402A	V-0.038R	4	1:6	3.80	26.60
29ERV38R-0403A	V-0.038R	4	1:4	3.80	26.60
29ERV40-0503A	V-0.040	5	1:4	3.10	26.80
29ERV50-0403A	V-0.050	4	1:4	3.80	26.95
29ERV50-0402A	V-0.050	4	1:6	3.80	26.95
29ERV55-0601A	V-0.055	6	1:8	3.70	26.50
29ERV65-0402A	V-0.065	4	1:6	3.80	26.30

A Style Internal Inserts



Order No	Thread Standard	TPI	Thread Taper	Conodont position	
				X	Y
29NRV38R-0402A	V-0.038R	4	1:6	3.80	26.60
29NRV38R-0403A	V-0.038R	4	1:4	3.80	26.60
29NRV40-0503A	V-0.040	5	1:4	3.10	26.80
29NRV50-0403A	V-0.050	4	1:4	3.80	26.95
29NRV50-0402A	V-0.050	4	1:6	3.80	26.95
29NRV55-0601A	V-0.055	6	1:8	3.70	26.50
29NRV65-0402A	V-0.065	4	1:6	3.80	26.30

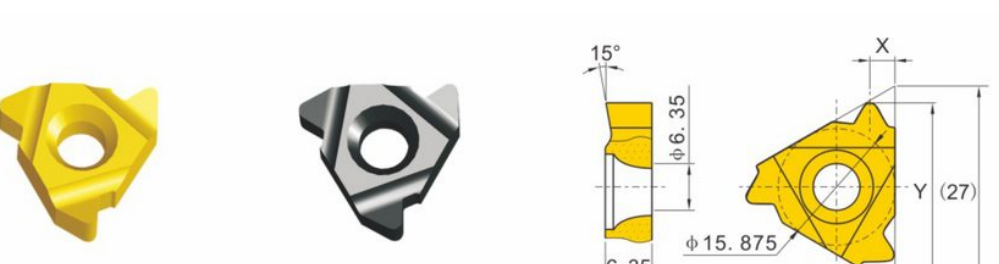
Threading Tools For Oil Pipes

B Style External Inserts



Order No	Thread Standard	TPI	Thread Taper	Conodont position	
				X	Y
27ERV38R-0402B	V-0.038R	4	1:6	2.80	25.15
27ERV38R-0403B	V-0.038R	4	1:4	2.80	25.15
27ERV40-0503B	V-0.040	5	1:4	2.80	25.35
27ERV50-0403B	V-0.050	4	1:4	3.00	25.50
27ERV50-0402B	V-0.050	4	1:6	3.00	25.50
27ERV55-0601B	V-0.055	6	1:8	2.80	25.00
27ERV65-0402B	V-0.065	4	1:6	3.00	24.80

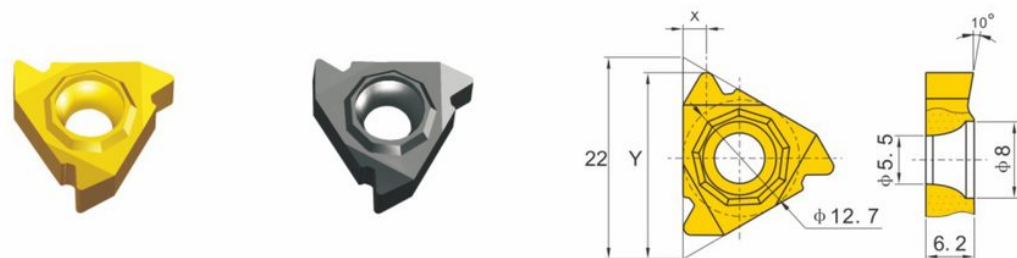
B Style Internal Inserts



Order No	Thread Standard	TPI	Thread Taper	Conodont position	
				X	Y
27NRV38R-0402B	V-0.038R	4	1:6	2.80	25.15
27NRV38R-0403B	V-0.038R	4	1:4	2.80	25.15
27NRV40-0503B	V-0.040	5	1:4	2.80	25.35
27NRV50-0403B	V-0.050	4	1:4	3.00	25.50
27NRV50-0402B	V-0.050	4	1:6	3.00	25.50
27NRV55-0601B	V-0.055	6	1:8	2.80	25.00
27NRV65-0402B	V-0.065	4	1:6	3.00	24.80

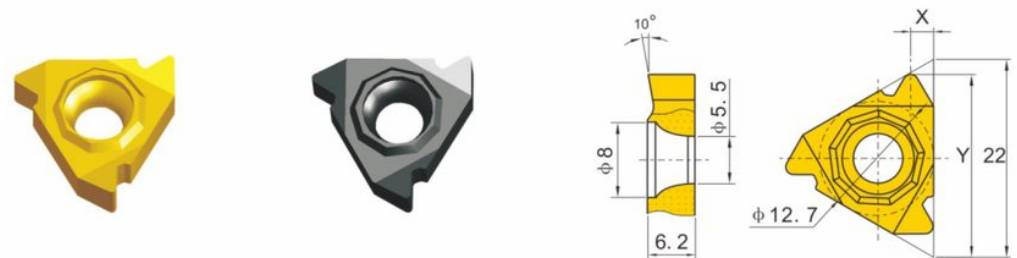
Threading Tools For Oil Pipes

C Style External Inserts



Order No	Thread Standard	TPI	Thread Taper	Conodont position	
				X	Y
22ERV38R-0402C	V-0.038R	4	1:6	2.60	20.30
22ERV38R-0403C	V-0.038R	4	1:4	2.70	20.30
22ERV40-0503C	V-0.040	5	1:4	2.60	20.60
22ERV50-0403C	V-0.050	4	1:4	2.80	20.80
22ERV50-0402C	V-0.050	4	1:6	2.80	20.80
22ERV55-0601C	V-0.055	6	1:8	2.00	19.30
22ERV65-0402C	V-0.065	4	1:6	2.65	19.80

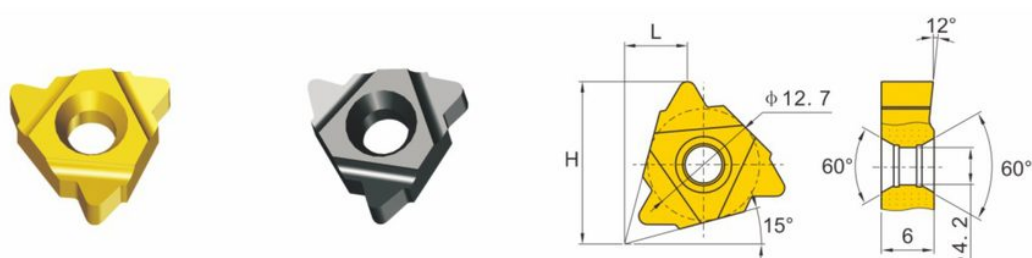
C Style Internal Inserts



Order No	Thread Standard	TPI	Thread Taper	Conodont position	
				X	Y
22NRV38R-0402C	V-0.038R	4	1:6	2.60	20.30
22NRV38R-0403C	V-0.038R	4	1:4	2.70	20.30
22NRV40-0503C	V-0.040	5	1:4	2.60	20.60
22NRV50-0403C	V-0.050	4	1:4	2.80	20.80
22NRV50-0402C	V-0.050	4	1:6	2.80	20.80
22NRV55-0601C	V-0.055	6	1:8	2.00	19.30
22NRV65-0402C	V-0.065	4	1:6	2.65	19.80

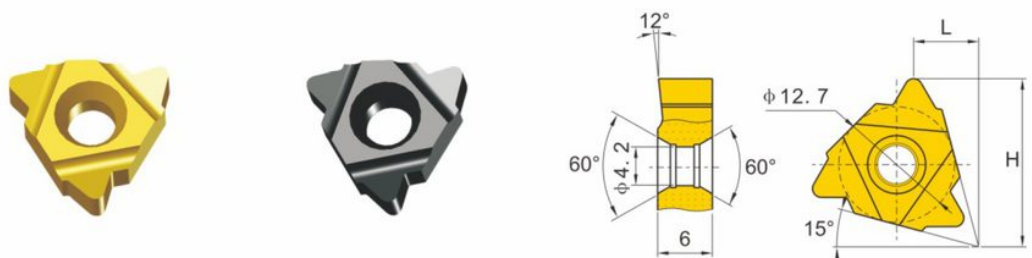
Threading Tools For Oil Pipes

D Style External Inserts



Order No	Thread Standard	TPI	Thread Taper	Conodont position	
				X	Y
22ERV38R-0402D	V-0.038R	4	1:6	18.43	7.13
22ERV38R-0403D	V-0.038R	4	1:4	18.43	7.13
22ERV40-0503D	V-0.040	5	1:4	18.43	7.13
22ERV50-0403D	V-0.050	4	1:4	18.75	7.28
22ERV50-0402D	V-0.050	4	1:6	18.75	7.28
22ERV55-0601D	V-0.055	6	1:8	17.75	6.85
22ERV65-0402D	V-0.065	4	1:6	18.00	6.85

D Style Internal Inserts



Order No	Thread Standard	TPI	Thread Taper	Conodont position	
				X	Y
22NRV38R-0402D	V-0.038R	4	1:6	18.43	7.13
22NRV38R-0403D	V-0.038R	4	1:4	18.43	7.13
22NRV40-0503D	V-0.040	5	1:4	18.43	7.13
22NRV50-0403D	V-0.050	4	1:4	18.75	7.28
22NRV50-0402D	V-0.050	4	1:6	18.75	7.28
22NRV55-0601D	V-0.055	6	1:8	17.75	6.85
22NRV65-0402D	V-0.065	4	1:6	18.00	6.85