

Unified Coarse Thread: UNC

Nominal Thread	TPI	Internal Thread			Bore Dia.
		Toolholder	Insert		
			Partial Profile	Full Profile	
2-56 UNC	56	No Tools Available	—	—	1.69
•	•				
•	•				
10-24 UNC	24				3.68
1/4-20 UNC	20	—	HPTR04504-60 / VNTR045-11		4.98
5/16-18 UNC	18	—	HPTR06005-60 / VNTR060-11		6.41
3/8-16 UNC	16	—	HPTR07507-60-005		7.81
7/16-14 UNC	14	No Tools Available			9.15
1/2-13 UNC	13				10.58
9/16-12 UNC	12				12.00
5/8-11 UNC	11				13.38
3/4-10 UNC	10				16.30
7/8-9 UNC	9				19.17
•		* 3/8-16 UNC and over cannot be machined, because no inserts are available for the TPI.			
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Unified Fine Thread: UNF

Nominal Thread	TPI	Internal Thread			Bore Dia.
		Toolholder	Insert		
			Partial Profile	Full Profile	
0-80 UNF	80	No Tools Available	—	—	1.18
•	•				
•	•				
10-32 UNF	32				3.97
1/4-28 UNF	28	—	HPTR04504-60 / VNTR045-11		5.37
5/16-24 UNF	24	—	HPTR06005-60 / VNTR060-11		6.79
		SINR0612S-06E	06IR60005	—	
3/8-24 UNF	24	—	HPTR06005-60 / VNTR060-11		8.38
		SINR0612S-06E	06IR60005	—	
7/16-20 UNF	20	SINR0816S-08E	08IR60007	—	9.74
1/2-20 UNF	20				11.33
9/16-18 UNF	18	SINR1216S-11E	11IRA60	—	12.76
5/8-18 UNF	18		11IR60005	—	14.35
3/4-16 UNF	16	SINR1516S-11	11IRA60	—	17.33
			11IR60005	—	
7/8-14 UNF	14	SINR2016S-16		16IR14UN(-TF)	20.26
1 -12 UNF	12	SINR2016S-16			23.10
1 1/8-12 UNF	12	SINR2420S-16	16IRAG60		26.28
1 1/4-12 UNF	12		16IRG60	16IR12UN(-TF)	29.46
1 3/8-12 UNF	12		16IR6001(-TS)		32.63
1 1/2-12 UNF	12	CINR3025S-16			36.81

Whitworth Coarse Thread: W

Nominal Thread	TPI	Internal Thread			Bore Dia.
		Toolholder	Insert		
			Partial Profile	Full Profile	
W 1/4	20	No Tools Available	—	—	4.91
W 5/16	18				6.34
W 3/8	16				7.73
W 7/16	14				9.06
W 1/2	12				10.30
W 9/16	12				11.89
W 5/8	11				13.26
W 3/4	10				16.17
W 7/8	9				19.03
W 1	8	SINR2016S-16	16IRAG55	—	21.80
			16IRG55	—	
W 1 1/8	7	SINR2420S-22	22IRN55	—	24.47
W 1 1/4	7				27.64
W 1 3/8	6	CINR3025S-22	22IRN55	—	30.13
W 1 1/2	6				33.30
W 1 5/8	5				35.52
W 1 3/4	5	CINR3732S-22	22IRN55	—	38.69
W 1 7/8	4 1/2	* Because the toolholder does not fit to the pre-drilled hole or the insert does not match to the TPI, machining is not possible.			41.23
W 2					44.41
W 2 1/4					49.96

Whitworth Fine Thread: W

Nominal Thread	TPI	Internal Thread			Bore Dia.						
		Toolholder	Insert								
			Partial Profile	Full Profile							
W9.5 TPI 24	24	SINR0816S-08E	08IR5501	—	8.30						
W10 TPI 24		—	HPTR06005-55		8.80						
W10.5 TPI 24					9.30						
W9.5 TPI 20	20	SINR0816S-08E	08IR5501	—	8.06						
W10 TPI 20		—	HPTR06005-55		8.56						
W10.5 TPI 20					9.06						
W11 TPI 20					9.56						
W11.5 TPI 20					10.06						
W12 TPI 20					10.56						
W12.5 TPI 20					11.06						
W13 TPI 20	20	SINR1216S-11E	11IR55005	—	11.56						
W13.5 TPI 20					12.06						
W11 TPI 18	18	—	HPTR08007-55-010		9.40						
W11.5 TPI 18					9.90						
W12 TPI 18					10.40						
W12.5 TPI 18					10.90						
W14 TPI 18	18	SINR1216S-11E	11IRA55	—	12.40						
W14.5 TPI 18		11IR55005	12.90								
W15 TPI 18			13.40								
W16 TPI 18			14.40								
W13 TPI 16	16	No Tools Available			11.20						
W13.5 TPI 16		SINR1216S-11E	11IRA55	11IR55005	11.70						
W14 TPI 16					12.20						
W14.5 TPI 16					12.70						
W15 TPI 16					13.20						
W17 TPI 16					15.20						
W18 TPI 16					16.20						
W19 TPI 16	17.20										
W20 TPI 16	18.20										
W16 TPI 14	14	SINR1216S-11E	11IR55005	—	13.94						
W17 TPI 14		14.94									
W18 TPI 14	14	SINR1516S-11	11IR55005	—	15.94						
W21 TPI 14		SINR2016S-16	16IRAG55		16IRG55	18.94					
W22 TPI 14						16IR5501	16IR5502	19.94			
W23 TPI 14								(16IR14W-TF)	(16IR14W-TS)	20.94	
W24 TPI 14										(16IR14W)	21.94
W25 TPI 14											22.94
W26 TPI 14				23.94							
W19 TPI 12	12	No Tools Available			16.60						
W20 TPI 12		SINR2016S-16	16IRAG55	16IRG55	17.60						
W21 TPI 12					18.60						
W22 TPI 12					19.60						
W28 TPI 12					—	16IR5501	16IR5502	25.60			
W30 TPI 12								27.60			
W32 TPI 12								29.60			
W34 TPI 12								31.60			
W35 TPI 12					12	CINR3025S-16	16IRAG55	16IRG55	32.60		
W36 TPI 12									—	33.60	
W38 TPI 12										35.60	
W40 TPI 12										CINR3732S-16	—
W42 TPI 12	39.60										
W44 TPI 12	41.60										
W45 TPI 12	42.60										
W46 TPI 12	43.60										
W48 TPI 12	45.60										
W50 TPI 12	47.60										
•	* Hereafter, 12 TPI Whitworth Fine Thread can be machined by the same tool as above.				•						
•					•						
•					•						
W23 TPI 10	10	SINR2016S-16	16IRAG55	16IRG55	20.12						
W24 TPI 10					—	21.12					
W25 TPI 10						22.12					
W26 TPI 10						23.12					
W28 TPI 9	9	SINR2420S-16	16IRAG55	16IRG55	24.80						
W30 TPI 9					16IR5501	16IR5502	26.80				
W32 TPI 9							28.80				
W34 TPI 8	8	CINR3025S-16	16IRAG55	16IRG55	30.40						
W35 TPI 8					—	31.40					
W36 TPI 8						32.40					
W38 TPI 8						34.40					
W40 TPI 8						36.40					
W42 TPI 8						38.40					
W44 TPI 7	7	CINR3732S-22	22IRN55	—	39.89						
W45 TPI 7					40.89						
W46 TPI 7					41.89						
W48 TPI 7					43.89						
W50 TPI 7					45.89						
W52 TPI 7					47.89						
W55 TPI 6	6	CINR3732S-22	22IRN55	—	50.20						
W58 TPI 6					—	53.20					
W60 TPI 6						55.20					
W62 TPI 6						57.20					
•						W72 TPI 6	67.20				
•							69.24				
W75 TPI 5	5	CINR3732S-22	22IRN55	—	•						
•					•						
•					•						
W105 TPI 5	4	•	•	•	99.24						
•					•						
W110 TPI 4	4	* For 4 and more TPI Whitworth Fine Thread cannot be machined because the insert does not match to the TPI.			102.8						
•					•						
•					•						

• Above shows the usage example of applicable Toolholder / Insert.

