

# HSSE-V3 SPIRAL POINT TAPS-SPECIAL LIMITS 1/2" INCH YELLOW RING



Designed for high-speed tapping applications. Developed to withstand the high stress and high heat associated with high-speed CNC production tapping. Features a unique free-cutting design with a special tempering and geometry which contributes to extra tool life.

## HSSE-V3% VANADIUM

- Superior performance in hardened tool steels such as 4140, 4340, H13, D2.
- Up to 35 HRC

## SPECIAL LIMITS H5, H6, H7

- 4.5 PITCH LEAD (INTERMEDIATE)

■ HSSE-V3 SPIRAL POINT TAPS INCH										
Tap	Threads Per Inch	No. Flutes	O/A L (in)	Thread L (in)	H5 Limit Code No.	Price \$	H6 Limit Code No.	Price \$	H7 Limit Code No.	Price \$
<b>NC</b>										
6	32	3	2	.512	122-556	8.60			122-650	8.60
8	32	3	2-1/8	.512	122-558	9.10			122-652	9.10
10	24	3	2-3/8	.512	122-560	9.30			122-654	9.30
1/4	20	3	2-1/2	.630	122-564	10.60			122-658	10.60
5/16	18	3	2-23/32	.748	122-568	12.80			122-662	12.80
3/8	16	3	2-15/16	.748	122-572	15.60			122-666	15.60
7/16	14	3	3-5/32	.866	122-576	20.30				
1/2	13	3	3-3/8	.945	122-580	22.60			122-670	22.60
5/8	11	3	3-13/16	1.102	122-584	35.60				
3/4	10	3	4-1/4	1.220	122-586	59.60				
1	8	4	5-1/8	1.496			122-588	111.70		
1-1/4	7	4	5-3/4	1.732			122-590	184.10		
1-3/8	6	4	6-1/16	2.000			122-592	242.00		
1-1/2	6	4	6-3/8	2.000			122-594	310.50		
<b>NF</b>										
10	32	3	2-3/8	.512	122-562	9.30			122-656	9.30
1/4	28	3	2-1/2	.630	122-566	10.60			122-660	10.60
5/16	24	3	2-23/32	.748	122-570	12.80			122-664	12.80
3/8	24	3	2-15/16	.748	122-574	15.60			122-668	15.60
7/16	20	3	3-5/32	.866	122-578	20.30				
1/2	20	3	3-3/8	.945	122-582	22.60				

cutting conditions					
Materials				Hardness (HRC)	Cutting Speed (FPM)
Main Group	Sub-Group	Condition			
Tool steels	01, A-2,D-2 H-13,P-20	Annealed	<35		15-25
Medium Carbon	1030, 1035 1038,1040 1045, 1050	Normalized	<28		20-40
Alloyed high carbon	1065, 1070, 1080, 1090 1095, 1561, 1572	Normalized	<32		20-30
High strength	4140, 4340	Normalized	<32		20-30
Titanium	Commercially pure	Annealed	<32		15-30
Aluminum	Cast, wrought	-	-		30-90

cutting speed (fpm)										
	10	20	30	40	50	60	70	80	90	100
Tool Steels										
Medium Carbon										
Alloyed High Carbon										
High Strength										
Titanium										
Aluminum										
hardness (hrc)										
	0	5	10	15	20	25	30	35	35	40
Tool Steels										
Medium Carbon										
Alloyed High Carbon										
High Strength										
Titanium										
Aluminum										