powercoil®

Insert Part Number		3528-1/4X2.0D
Insert Thread Form		British Standard Whitworth - BSW
Nominal Thread Size		1/4 X 20
Insert Length Q (installed)	D	2.0D
Insert Length Q (installed)	inch	0.500
Insert Material		304 Stainless Steel
Insert Coating/Plating		-
Military Standard	#	
National Aerospace Standard	#	
Federal Stock	#	
National Stock / NATO	#	

Optimum thread performance with Wire Thread Inserts is achieved when the inserts are installed 1/2 to 1 pitch below the surface of the tapped hole. This means that the actual length of an installed insert is equal to dimension Q less 1/2 to 1 pitch. Dimensions S and T allow for tap end clearance of intermediate taps. When using Bottoming and Spiral Flute Taps these dimensions maybe reduced by an amount equal to 2 thread pitches. Any countersink depths must be added to these dimensions.

COMPATIBLE POWERCOIL INSTALLATION AND REMOVAL TOOLS	
TOOL TYPE	Part #
Hand Installation Tool	3500-HIT9
Tang Break Tool	3500-TB9
Removal Tool	3500-RT2
Machine Installation Tool	-
Mandrel Installation Tool	-
Captive Prewinder Tool	-
Non-Captive Prewinder Tool	-
Spring Loaded tang Break Tool	-
Pneumatic Front end assembly (FEA)	-
FEA Mandrel	-
FEA Nozzle	-
Pneumatic Tool	-

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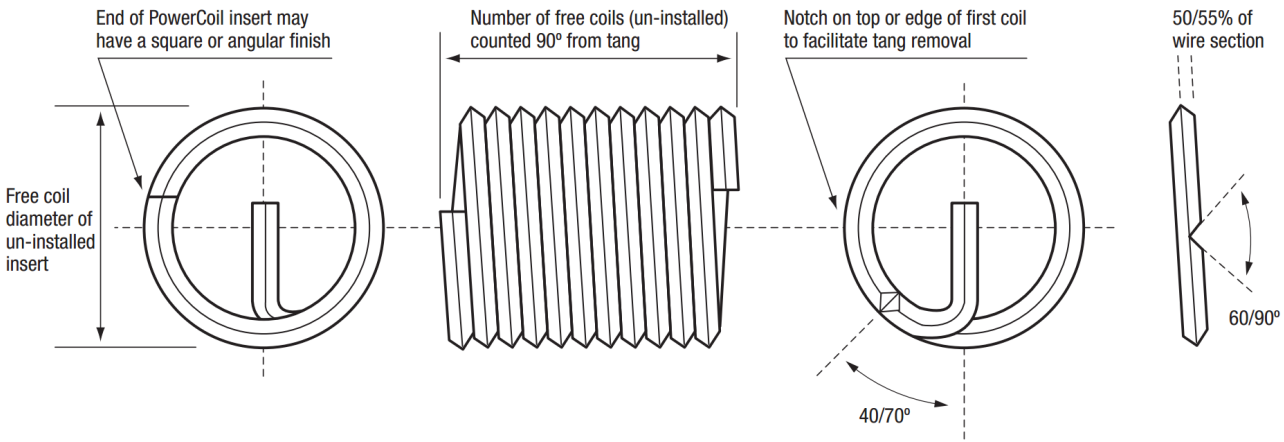
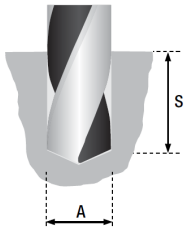
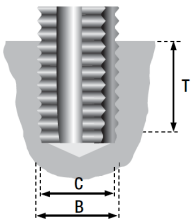


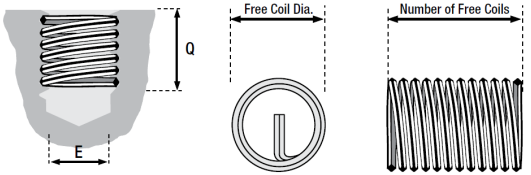
DRILLED HOLE DIMENSIONS INTERMEDIATE/PLUG TAP		
Drill Size	mm	6.70
Drill Part Number		2007-6.70
Drill Size inch	inch	17/64
Drill Part Number inch		2006-17/64
A Minor Diameter minimum	inch	0.261
A Minor Diameter maximum	inch	0.267
S Drilling Depth minimum	inch	0.725



TAPPED HOLE DIMENSIONS			
Tap Size	STI		BSW 1/4 X 20
Tap Size	-		-
B Major Diameter		inch	0.309
C Pitch Diameter MIN		inch	0.2820
C Pitch Diameter MAX	Close	inch	0.2836
C Pitch Diameter MAX	Medium	inch	0.2849
T Tapping Depth MIN		inch	0.675
Power Coil Tap Part Number	STI	Taper	3528-1/4T
Power Coil Tap Part Number	STI	Intermediate	3528-1/4I
Power Coil Tap Part Number	STI	Bottoming	3528-1/4B
Power Coil Tap Part Number	STI	SpiralPoint	-
Power Coil Tap Part Number	STI	SpiralFlute	-



INSERT SPECIFICATIONS		
E Fitted Minor Diameter	inch	0.1860
Q Nominal Length Installed	inch	0.500
Free Coil Diameter minimum	inch	0.31
Free Coil Diameter maximum	inch	0.33
Free Coils minimum	#	7.70
Free Coils maximum	#	8.50



IMPORTANT The success of any drilling and tapping operation is dependant upon many factors -type of material being cut, cutting speed, coolant, equipment being used - and it is not possible to give specific drill sizes for each material. Drill sizes shown are recommendations only and PowerCoil would strongly suggest that independent testing be performed for specific and critical applications.
When using wire thread inserts it is important that the drilling and tapping diameters and lengths shown are adhered to.
The figures outlined in these tables encompass effective free coil tolerances for most globally recognized standards and manufacturers, including those of reduced diameter wire thread inserts.

Number of Free Coils – the number of coils on an un-installed insert counted along the insert length 90° from the tang.