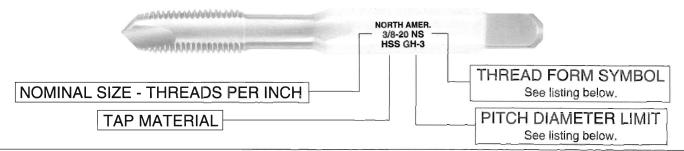
## ENGINEERING DATA

Taps, dies and other types of threading tools are marked according to the Standard System of Marking Ground Thread Taps. Tools are marked with the nominal size, number of threads per inch (pitch), and the appropriate thread form symbol and pitch diameter symbol. Symbols typically used are listed.

## STANDARD SYSTEM OF TAP MARKING



## PITCH DIAMETER LIMIT SYMBOLS

All standard ground thread taps are marked with the letter "G" to designate Ground Thread. The letter G will be followed by the letter "H" to designate above basic; or the letter "L" to designate below basic. The number following H or L signifies the number of .0005" steps above or below the basic pitch diameter. For instance, the tap pictured above is a 3/8" dia. tap with 20 threads per inch (pitch), and has a NS (American National Special Thread) thread form. The tap is made from High Speed Steel, and the GH-3 pitch diameter limit symbol indicates a Ground Thread tap with pitch diameter limits .0010 to .0015 over basic.

Pitch Diameter Limits for taps to 1" diameter inclusive:

L1 = Basic to Basic minus .0005

H1 = Basic to Basic plus .0005

H2 = Basic plus .0005 to Basic plus .0010

H3 = Basic plus .0010 to Basic plus .0015

H4 = Basic plus .0015 to Basic plus .0020

H5 = Basic plus .0020 to Basic plus .0025

H6 = Basic plus .0025 to Basic plus .0030

Taps larger than 1" dia. are ground to a .0010" tolerance on the pitch diameter and are marked with:

H4 = Basic plus .0010" to Basic .0020"

## THREAD FORM SYMBOLS

	111112/12/10		
ACME-C	Acme Thread-Centralizing	NPTF	Dryseal American National Standard Taper
ACME-G	Acme Thread-General Purpose		Pipe Thread
AMO	American Standard Microscope Objective Thread	NPTR	American National Standard Taper Pipe Thread
ANPT	Aeronautical National Form Taper Pipe Thread		for Railing Joints (Tap marked NPT)
	(Ground thread tap marked NPT)	NS	American National Thread-Special
BA	British Association Standard Thread	PTF	Dryseal SAE Short Taper Pipe Thread
BSF	British Standard Fine Thread Series	SGT	Special Gas Taper Thread
BSPP	British Standard Pipe (Parallel) Thread	SPL-PTF	Dryseal Special Taper Pipe Thread
BSPT	British Standard Taper Pipe Thread	STI	Special Thread for Helical Coil Wire Screw
BSW	British Standard Whitworth Coarse Thread Series		Thread Inserts
М	Metric ScrewThread Series	Stub Acme	Stub Acme Thread
N	American National 8, 12 and 16 Thread Series	*UN	Unified Constant Pitch Thread Series
	(8N, 12N, 16N)	*UNC	Unified Coarse Thread Series
N BUTT	American Buttress Screw Thread	*UNEF	Unified Extra Fine Thread Series
NC	American National Coarse Thread Series	*UNF	Unified Fine Thread Series
NEF	American National Extra Fine Thread Series	UNJ	Unified Thread Series with a 0.15011P to 0.18042P
NF	American National Fine Thread Series		Controlled Root Radius on External Thread only.
NGO	National Gas Outlet Thread	UNJC	Unified Coarse Thread Series with a 0.15011P to
NGT	National Gas Taper Thread (see "SGT")		0.18042P Controlled Root Radius on External
NH	American National Hose Coupling and Fire Hose		Thread only.
	Coupling Threads	UNJF	Unified Fine Thread Series with a 0.15011P to
NPS	For tap marking only (See NPSC, NPSM)		0.18042P Controlled Root Radius on External
NPSC	American National Standard Straight Pipe Thread		Thread only.
	in Pipe Couplings (Tap marked NPS)	UNM	Unified Miniature Thread Series
NPSF	Dryseal American National Standard Fuel Internal	UNR	Unified Constant Pitch Thread Series with a 0.108P
	Straight Pipe Thread		to 0.144P Controlled Root Radius; Ext. thread only.
NPSH	American National Standard Straight Pipe Thread	UNRC	Unified Coarse Thread Series with a 0.108P
	for Hose Couplings		to 0.144P Controlled Root Radius; Ext. thread only.
NPSI	Dryseal American National Standard Intermediate	UNRF	Unified Fine Thread Series with a 0.108P to 0.144P
	Internal Straight Pipe Thread		Controlled Root Radius; External thread only.
NPSL	American National Standard Straight Pipe Thread for	*UNS	Unified Thread-Special
	Loose Fitting Mechanical Joints with Locknuts	V	A 60° "V" thread with Truncated Crest and Root.
NPSM	American National Standard Straight Pipe Threads		The theoretical "V" Form is usually flatted to the
	for Free-Fitting Mechanical Joints for Fixtures		user's specifications.
	(Tap marked NPS)	WHIT	British Standard Whitworth Special Thread
NPT	American National Standard Taper Pipe Thread		
	(See ANPT, NPTR)	*Taps are not marked with "U" but with the symbol for the corresponding	
	, ,	American Sta	American Standard thread form with which it is compatible.