



High Performance, Application-Specific H.S.S.E. Spiral Flute Pipe Taps

*Specifically Designed and Engineered To Handle The Most Demanding
Pipe Tapping Applications for NPT and NPTF Thread Forms.
Your high performance tapping choice...when excuses won't cut it.*

- Allen Benjamin Application Specific HSSE Pipe Taps increase efficiencies, productivity and throughput across a range of materials.
- Most sizes and styles shipped from stock for rapid delivery.
- Each of the four color ring taps - yellow, green, blue, red - are manufactured with application-specific design criteria based on the characteristics and hardness range of various materials.
- Manufactured using HSSE material (premium high speed steel), which has a higher cobalt and vanadium content as compared to high speed steel (HSS) taps. This allows greater wear resistance and longer tap life.
- These HSSE pipe taps can handle a multitude of materials. Follow the guidelines in the color ring chart shown inside this brochure. Contact customer service for recommendations on part materials not listed.
- ***Specials are available upon request, made to customer specifications.***



- *Use an "Allen Benjamin Taps Test Application Data Sheet" to get a quote on taps that fit your most demanding application. Contact your sales representative or visit allenbenjamin.com and download form from 'Product Literature' tab.*

MATERIAL TYPE / COLOR CODE TABLE

Material application ranges organized by Allen Benjamin color code.

Work Material*	Color Ring	Brinell Hardness Range**
Steel - Low Carbon	○ Yellow	125-275
Steel - Med. Carbon	○ Yellow	180-425
Steel - High Carbon	○ Yellow	180-425
Alloy Steel	○ Green	225-400
Stainless - 300 Series	○ Blue	135-185 annealed 225-275 cold drawn
Stainless - 400 Series	○ Red	135-425
Stainless - PH Series	○ Red	150-440
High Nickel Alloy	○ Blue	150-360 Monel 200-400 Inconel
Titanium Alloy	○ Blue	310-440
Die Steel	○ Red	250-350
Hardened Steel - <325 BHN	○ Red	300-350
Hardened Steel - 325-426 BHN	○ Red	300-440

* **NOTE:** For material or material group not shown (such as No Lead Brass), please consult Customer Service.

** **BHN hardness range may vary depending on steel/workpiece condition. See the Allen Benjamin Catalog for Rockwell-Brinell Hardness Data chart.**

AVAILABLE SURFACE TREATMENTS

See Allen Benjamin catalog for surface treatment recommendations.

AlCrN:	Aluminum Chromium Nitride	TiAlN+WC/C:	'Hardlube' - Titanium Aluminum Nitride
CrC:	Chromium Carbide		Aluminum Nitride
CrN:	Chromium Nitride		+Tungsten Carbide/Carbon
DLC:	Diamond-like Carbon	TiCN:	Titanium Carbonitride
N:	Nitride	TiN:	Titanium Nitride
N + Ox:	Nitride + Oxide*	WC/C:	Tungsten Carbide/Carbon
Ox:	Steam Oxide*	WS2:	Tungsten Disulfide
	*Oxide (Ox) may also be shown as 'O'	ZrN:	Zirconium Nitride
TiAlN:	Titanium Aluminum Nitride		

In many applications, a tap that is properly designed and used under recommended conditions will produce acceptable results without the use of surface treatments. However, under some conditions, such as tapping excessively hard, abrasive or challenging materials, the use of performance enhancing surface treatments will be beneficial to the overall results of your tapping operation in terms of improved tool life and internal thread quality. Coolant-through taps may also be a consideration. Contact Allen Benjamin for tapping and treatment recommendations.

High Performance, Application-Specific H.S.S.E. Spiral Flute Pipe Taps



Size/Pitch/Type	# Flutes	Recommended Hole Size	EDP Yellow	EDP Green	EDP Blue	EDP Red
1/16-27 NPT	4	.2460"	83851	83852	83853	83854
1/16-27 NPTF	4	.2460"	83891	83892	83893	83894
1/8-27 NPT	4	.3320"	83856	83857	83858	83859
1/8-27 NPTF	4	.3320"	83896	83897	83898	83899
1/8-27 NPT (SS)	4	.3320"	83861	83862	83863	83864
1/8-27 NPTF (SS)	4	.3320"	83901	83902	83903	83904
1/4-18 NPT	4	.4375"	83866	83867	83868	83869
1/4-18 NPTF	4	.4375"	83906	83907	83908	83909
3/8-18 NPT	4	.5781"	83871	83872	83873	83874
3/8-18 NPTF	4	.5781"	83911	83912	83913	83914
1/2-14 NPT	4	.7030"	83876	83877	83878	83879
1/2-14 NPTF	4	.7030"	83916	83917	83918	83919
3/4-14 NPT	5	.9063"	83881	83882	83883	83884
3/4-14 NPTF	5	.9219"	83921	83922	83923	83924
1"-11 1/2 NPT	5	1.1406"	83886	83887	83888	83889
1"-11 1/2 NPTF	5	1.1563"	83926	83927	83928	83929

*SS denotes small shank

- *Made from HSSE premium high speed steel.*
- *Suited for application-specific tapping of NPT/NPTF pipe threads in a range of materials.*
- *Manufactured to Table 311 standard pipe tap dimensions for straight and taper styles.*
- *Designed with standard projection length.*
- *Steam Oxide coating is standard (unless otherwise specified).*
- *See previous page for color coding/material guidelines and available surface treatment options.*

**SPECIALS ARE AVAILABLE
FOR CUSTOM APPLICATIONS!**



Contact Allen Benjamin today for:

- *Solid carbide and carbide insert taps*
- *High performance, application-specific HSSE color ring taps*
 - *Tap extensions*
- *Tapping & cutting fluids*