

## High-Performance HSS-E Taps • **WIDIA-GTD™**

Our family of Exotic Material (EM) taps are specially designed to thread a broad assortment of materials for unrivaled high-performance tapping.

*EM-SS available until stock is depleted.*

*See EM-SS cross reference list to VariTap™ on pages A52–A62.*



# EM Series

- Enhanced tool geometry.
- Less tapping torque.
- Better chip removal.



### Unmatched Performance

The WIDIA-GTD™ EM Series taps are designed and manufactured to successfully thread high- and low-volume applications in aluminum, stainless steel, nickel alloys, titanium alloys, mold steels, irons, brass, bronze, and plastics. The formulation of premium steel tap base material is unique for every application. The combination of a special geometry, tap surface treatment, and premium steep gives these taps the highest level of performance.

### Premium Steels

EM Series taps use special HSS-E compositions containing high-vanadium and/or cobalt content depending on the application. The right combination improves tap-life as measured by product finish and/or pitch diameter size.

### Broad Offering of Diameter Limits

Pitch diameters from H2–H7 and metric pitch diameters from D3–D7 are stocked as standards in many styles, at no premium in price. With rigid setups, higher pitch diameter limits can be used for longer tool life. The EM Series offers many size options to produce the class of thread desired.

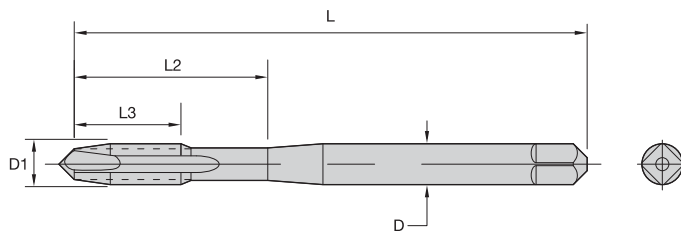


# High-Performance Taps

EM-SS GUN™ Taps • Through Holes

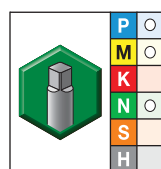
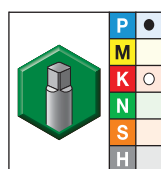
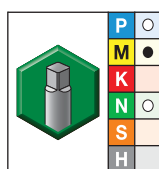
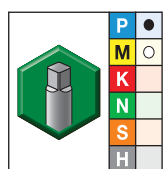


Available until stock is depleted.  
See VariTap™ cross reference chart  
on pages A52–A62.



- first choice
- alternate choice

## Series 8301 • Machine Screw and Fractional • Plug Chamfer



				inch dimensions				number of flutes	pitch diameter limit	
TiCN	TiN	oxide	uncoated	D1 TPI	L	L3	L2			D
—	—	82623	—	2 - 56	1.75	.26	.44	.141	2	H2
—	—	82624	—	2 - 56	1.75	.26	.44	.141	2	H3
—	—	82636	—	2 - 56	1.75	.26	.44	.141	2	H4
—	—	82600	—	3 - 48	1.81	.30	.50	.141	2	H2
<b>82301</b>	<b>82901</b>	<b>82601</b>	<b>82601B</b>	4 - 40	1.88	.34	.56	.141	2	H2
—	—	82602	—	4 - 40	1.88	.34	.56	.141	2	H3
—	—	82612	—	4 - 40	1.88	.34	.56	.141	2	H4
—	—	82634	<b>82634B</b>	4 - 40	1.88	.34	.56	.141	2	H5
—	—	82638	—	4 - 40	1.88	.34	.56	.141	2	H6
—	—	82683	—	4 - 48	1.88	.34	.56	.141	2	H2
—	—	82641	—	4 - 48	1.88	.34	.56	.141	2	H4
—	—	82603	—	5 - 40	1.94	.37	.63	.141	3	H2
—	—	82604	—	6 - 32	2.00	.41	.69	.141	3	H2
<b>82305</b>	<b>82905</b>	<b>82605</b>	<b>82605B</b>	6 - 32	2.00	.41	.69	.141	3	H3
—	—	82608	—	6 - 32	2.00	.41	.69	.141	3	H4
—	—	82635	<b>82635B</b>	6 - 32	2.00	.41	.69	.141	3	H5
—	—	82659	—	6 - 32	2.00	.41	.69	.141	3	H6
—	—	82665	<b>82665B</b>	6 - 32	2.00	.41	.69	.141	3	H7
—	—	82684	—	6 - 40	2.00	.41	.69	.141	3	H2
—	—	82642	—	6 - 40	2.00	.41	.69	.141	3	H3
—	—	82606	—	8 - 32	2.13	.45	.75	.168	3	H2
<b>82307</b>	<b>82907</b>	<b>82607</b>	<b>82607B</b>	8 - 32	2.13	.45	.75	.168	3	H3
—	—	82629	—	8 - 32	2.13	.45	.75	.168	3	H4
—	—	82637	<b>82637B</b>	8 - 32	2.13	.45	.75	.168	3	H5
—	—	82660	—	8 - 32	2.13	.45	.75	.168	3	H6
—	—	82667	—	8 - 32	2.13	.45	.75	.168	3	H7
—	—	82686	—	8 - 36	2.13	.45	.75	.168	3	H2
<b>82309</b>	<b>82909</b>	<b>82609</b>	<b>82609B</b>	10 - 24	2.38	.53	.88	.194	3	H3
—	—	82657	—	10 - 24	2.38	.53	.88	.194	3	H4
—	—	82639	<b>82639B</b>	10 - 24	2.38	.53	.88	.194	3	H5
—	—	82690	—	10 - 24	2.38	.53	.88	.194	3	H6
—	—	82669	—	10 - 24	2.38	.53	.88	.194	3	H7

(continued)