DORMER PRAMET

NEW HSS PRODUCTS

2023.2

DORMER

A321 HSS DRILL WITH THREE-FLATS SHANK

INTRODUCTION

Introducing a new intermediate length HSS drill with three-flat shanks designed for hand-held power tools, but also a well performing option for machine drilling. Three flats on the shank prevents the drill from slipping in the chuck, while a self-centering 135° split point and bronze oxide finish makes the drilling action smooth. The intermediate length variant falls in between ANSI jobber and stub length, providing balanced ratio of flexibility and toughness. Metric range covers most usual sizes starting from 3 mm up to 13 mm.

A321

- Versatile HSS drill
- Three-flats shank
- DC Range:
  3 – 13 mm

FEATURES & BENEFITS

Three-flats design on shank prevents slipping in power tools keyless chuck.

RELIABLE AND SAFE
solution for any hand-held operation.

Precisely ground with 135° point and a sharp split point geometry.

EASY DRILLING, SELF-CENTERING
capability and reduced thrust force.

Steam and bronze tempered surface finish for better lubrication.

IMPROVED DURABILITY
throughout the whole life span.

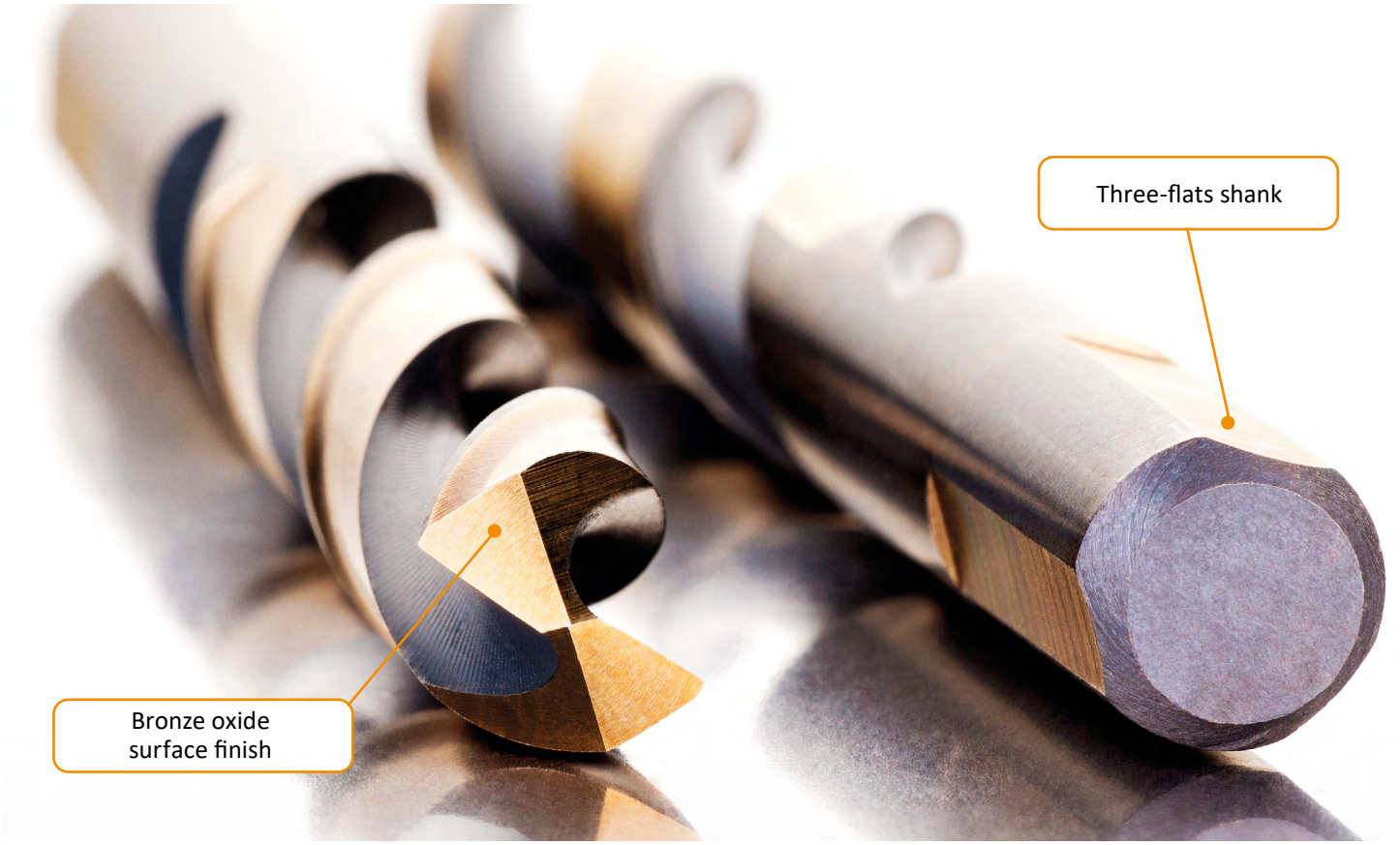
Shorter intermediate length with strong web design.

SUPERIOR RIGIDITY
even in unfavorable conditions.

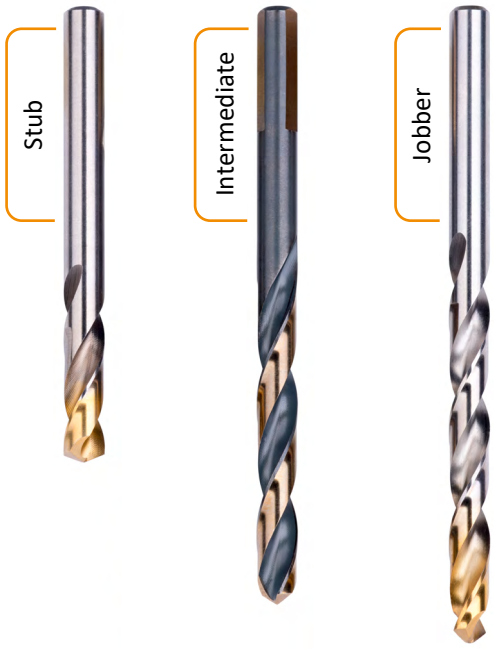
APPLICATION EXAMPLE

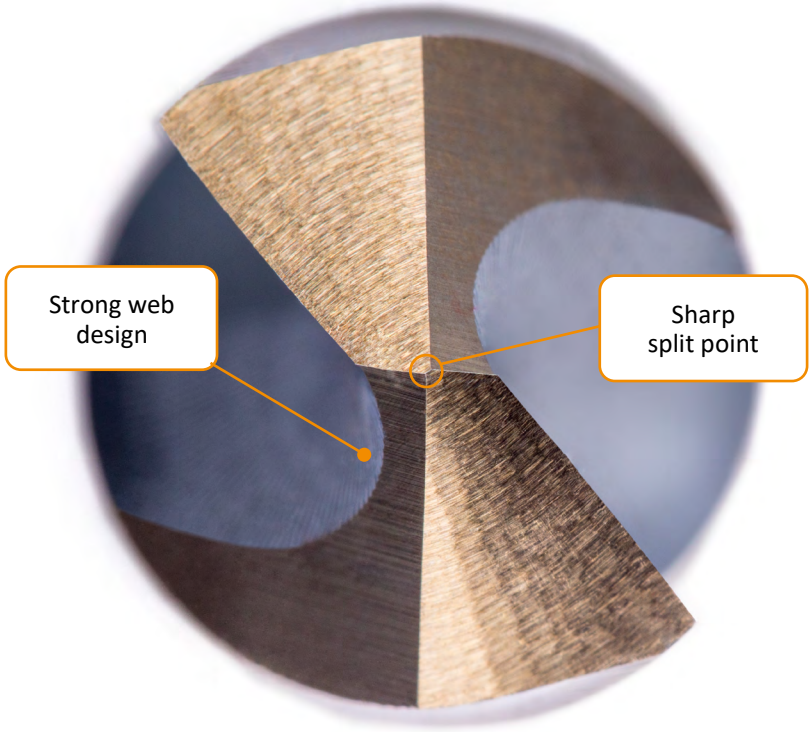
A321 HSS DRILL WITH THREE-FLATS SHANK

TECHNICAL DETAILS



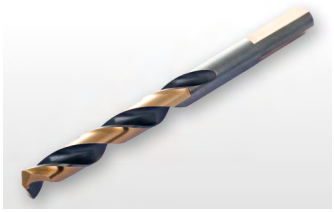
LENGTHS OVERVIEW





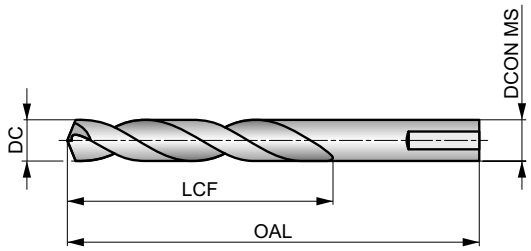
A321

DORMER



HSS Intermediate Length Drill, Steam and Bronze Tempered Surface Finish

Heavy duty design drill with three-flat shanks for medium depth holes. Primarily suited for hand-held operations and pillar drill machines. Three flats on the shank allow for non-slip chucking. The self-centering 135° split point reduces thrust force and the steam and bronze tempered surface finish improves lubricity.



HSS	DORMER	3.5×D
135°	ST Bronze	
R	DC h8	

Workpiece material group suitability, starting values for cutting speed (m/min) and feed Alpha Code. Tables with feed per revolution can be found starting from page XY.

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	P4.3	M1.1	M1.2
■33 H	■37 H	■38 H	■28 H	■25 F	◪22 E	■19 F	■15 F	◪13 E	■11 F	◪10 E	◪8 D	■21 E	■17 E
M2.1	M2.2	M3.1	M3.2	M3.3	M4.1	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2
◪18 E	◪15 E	◪9 G	◪8 G	◪7 G	◪9 C	■30 H	■22 F	■17 F	◪25 E	◪20 E	◪16 E	◪22 E	◪17 E
K3.3	K4.1	K4.2	K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	N1.1	N1.2	N1.3	N2.1	N2.2
◪13 E	◪20 E	◪15 E	◪11 E	◪10 E	◪8 E	◪23 E	◪17 E	◪13 E	◪33 J	◪25 J	◪17 I	◪42 H	◪37 H
N2.3	N3.1	N3.2	N3.3	N4.1	N4.2	N4.3	S1.1	S1.2	S1.3	S2.1	S2.2	S3.1	S3.2
◪27 H	◪59 H	◪35 I	◪18 G	◪30 J	◪28 H	◪14 F	◪23 E	◪12 D	◪6 B	◪8 E	◪4 A	◪6 E	◪3 A
S4.1	S4.2												
◪5 E	◪2 A												

Product	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	DCON MS (mm)	MID
A3213.0	3.00	0.1180	37.0	64.0	3.00	8349599
A3213.3	3.30	0.1300	40.0	67.0	3.30	8349650
A3213.4	3.40	0.1340	40.0	67.0	3.40	8349651
A3213.5	3.50	0.1380	40.0	67.0	3.50	8349652
A3214.0	4.00	0.1580	47.0	74.0	4.00	8349653
A3214.1	4.10	0.1610	47.0	74.0	4.10	8349654
A3214.2	4.20	0.1650	47.0	74.0	4.20	8349655
A3214.3	4.30	0.1690	47.0	74.0	4.30	8349656
A3214.5	4.50	0.1770	49.0	77.0	4.50	8349657
A3214.9	4.90	0.1930	50.0	80.0	4.90	8349658
A3215.0	5.00	0.1970	50.0	80.0	5.00	8349659
A3215.1	5.10	0.2010	50.0	80.0	5.10	8349660
A3215.3	5.30	0.2090	52.0	84.0	5.30	8349661
A3215.5	5.50	0.2170	52.0	84.0	5.50	8349662
A3216.0	6.00	0.2360	52.0	90.0	6.00	8349663
A3216.3	6.30	0.2480	52.0	90.0	6.30	8349664
A3216.5	6.50	0.2560	55.0	93.0	6.50	8349665

Product	DC (mm)	DC (inch)	LCF (mm)	OAL (mm)	DCON MS (mm)	MID
A3216.8	6.80	0.2680	59.0	97.0	6.80	8349666
A3217.0	7.00	0.2760	59.0	97.0	7.00	8349667
A3217.3	7.30	0.2870	62.0	100.0	7.30	8349668
A3217.5	7.50	0.2950	62.0	100.0	7.50	8349669
A3218.0	8.00	0.3150	67.0	105.0	8.00	8349670
A3218.5	8.50	0.3350	68.0	107.0	8.50	8349671
A3219.0	9.00	0.3540	70.0	108.0	9.00	8349672
A3219.5	9.50	0.3740	70.0	110.0	9.50	8349673
A32110.0	10.00	0.3940	74.0	113.0	10.00	8349674
A32110.3	10.30	0.4060	74.0	113.0	10.30	8349675
A32110.5	10.50	0.4130	75.0	115.0	10.50	8349676
A32111.0	11.00	0.4330	77.0	117.0	11.00	8349677
A32111.5	11.50	0.4530	79.0	120.0	11.50	8349678
A32112.0	12.00	0.4720	85.0	126.0	12.00	8349679
A32112.5	12.50	0.4920	88.0	130.0	12.50	8349680
A32113.0	13.00	0.5120	88.0	130.0	13.00	8349681

E55.(M) POWER TOOL TAPS

INTRODUCTION

A new assortment of general purpose, economical taps with a specific focus for operations using handheld power tools has been introduced. The Dormer E556 and E557 metric range features strong design suitable for maintenance mechanics, field service engineers, crafts people, contract engineers and educational institutes.

DORMER

E556(M)

- For through holes only
- For soft steels and carbon steels
- Range: M3 – M12

E557(M)

- For blind holes
- For soft steels and carbon steels
- Range: M3 – M12

FEATURES & BENEFITS

Simple, strong design
in high-quality HSS.

COST-EFFECTIVE
solution for general usage.

Bright surface finish easing chip flow.

APPLICATION VERSATILITY
for handheld power tools operations.

Short and thick tap style increases rigidity.

STABLE AND RELIABLE
performance up to 2xD holes depth.

APPLICATION EXAMPLES

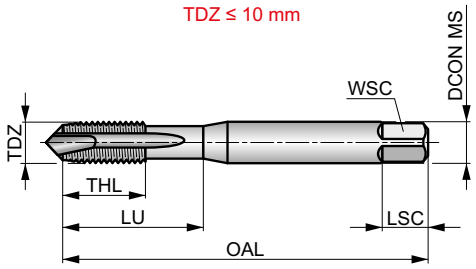
E556(M)

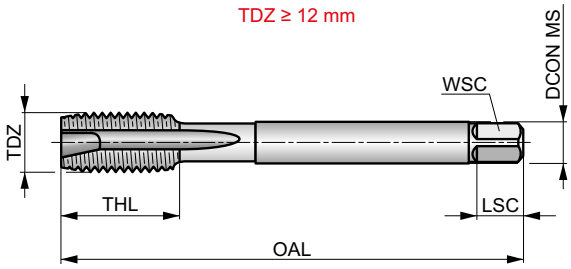
DORMER

HSS Spiral Point Power Tool Tap, Metric, ISO Standard

Ideal for hand held tapping with the use of Power Tools. Suited for through holes only the spiral point propel the chips ahead of the cutting zone, thus reducing loading and clogging in the flutes. The bright finish improve the chip flow in soft and non-ferrous materials.

M	ISO 529	6H
	2×D	HSS
B 3.5-5		R
Bright		





Workpiece material group suitability and starting values for cutting speed (m/min).

P1.1	P1.2	P1.3	P2.1	P2.2	P3.1	P3.2
■ 14	■ 15	■ 16	■ 11	■ 9	◪ 8	◪ 5

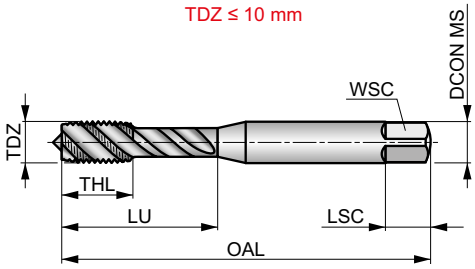
Product	TDZ	TP (mm)	OAL (mm)	THL (mm)	DCON MS (mm)	WSC (mm)	LSC (mm)	NOF	PHD (mm)	LU (mm)	MID
E556M3	3	0.50	48.0	11	3.15	2.50	5	3	2.50	18.00	8180400
E556M4	4	0.70	53.0	13	4.00	3.15	6	3	3.30	21.00	8180401
E556M5	5	0.80	58.0	16	5.00	4.00	7	3	4.20	25.00	8180402
E556M6	6	1.00	66.0	19	6.30	5.00	8	3	5.00	30.00	8180403
E556M8	8	1.25	72.0	22	8.00	6.30	9	3	6.80	35.00	8180404
E556M10	10	1.50	80.0	24	10.00	8.00	11	3	8.50	39.00	8180405
E556M12	12	1.75	89.0	29	9.00	7.10	10	3	10.30	–	8180406

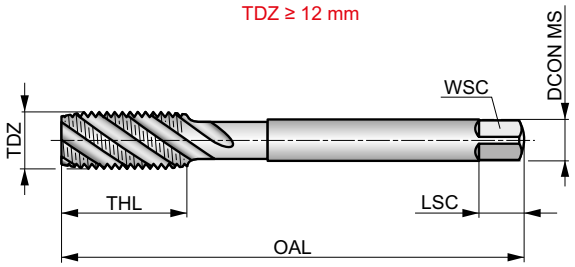
E557(M)

DORMER

HSS Spiral Flute Power Tool Tap, Metric, ISO Standard

Ideal for hand held tapping with the use of Power Tools. Tapping typically produce long stringy chips which, when not evacuated properly, can cause serious problems especially when threading blind holes. The spiral flute design counters this problem as it draws chips from the hole being tapped.





M	ISO 529	6H
	2×D	HSS
C 2-3		λ 35°
R	Bright	

Workpiece material group suitability and starting values for cutting speed (m/min).

P1.1	P1.2	P1.3	P2.1	P2.2	P3.1	P3.2
■ 14	■ 15	■ 16	■ 11	■ 9	◪ 8	◪ 5

Product	TDZ (mm)	TP (mm)	OAL (mm)	THL (mm)	DCON MS (mm)	WSC (mm)	LSC (mm)	NOF	PHD (mm)	LU (mm)	MID
E557M3	3	0.50	48.0	6	3.15	2.50	5	3	2.50	18.00	8180407
E557M4	4	0.70	53.0	8	4.00	3.15	6	3	3.30	21.00	8180408
E557M5	5	0.80	58.0	10	5.00	4.00	7	3	4.20	25.00	8180409
E557M6	6	1.00	66.0	12	6.30	5.00	8	3	5.00	30.00	8180410
E557M8	8	1.25	72.0	15	8.00	6.30	9	3	6.80	35.00	8180411
E557M10	10	1.50	80.0	18	10.00	8.00	11	3	8.50	39.00	8180412
E557M12	12	1.75	89.0	21	9.00	7.10	10	3	10.30	–	8180413

E894 SHARK FORMING TAPS

INTRODUCTION

Introducing a new addition into high-end Dormer threading assortment – Shark E894. A high performance HSS-E thread forming tap suitable for both through and blind holes, applicable in a wide range of workpiece materials, coming in DIN/ANSI standard and UNC, UNF and Metric thread forms. With a new forming lobe geometry, optimized post-treatment, TiN coating, and oil grooves providing lubrication up to 3.5xD depth, these taps are the first choice for highly demanding mass production threading applications.

DORMER

E894(UNC)

- UNC thread range: No. 4 × 40 – 7/8
- Thread tolerance: 2BX
- DIN/ANSI standard

E894(UNF)

- UNF thread range: No. 10 × 32 – 3/4
- Thread tolerance: 2BX
- DIN/ANSI standard

E894(M)

- Metric thread range: M3 – M20
- Thread tolerance: 6HX
- DIN/ANSI standard

FEATURES & BENEFITS

New forming lobe geometry combined with the latest post-treatment process reduces friction and torque.

LONG TOOL LIFE
and lower load on spindle.

Optimized oil grooves secure full lubrication and cooling in the whole length of forming lobes.

HIGH PROCESS RELIABILITY
up to 3.5xD depth of hole.

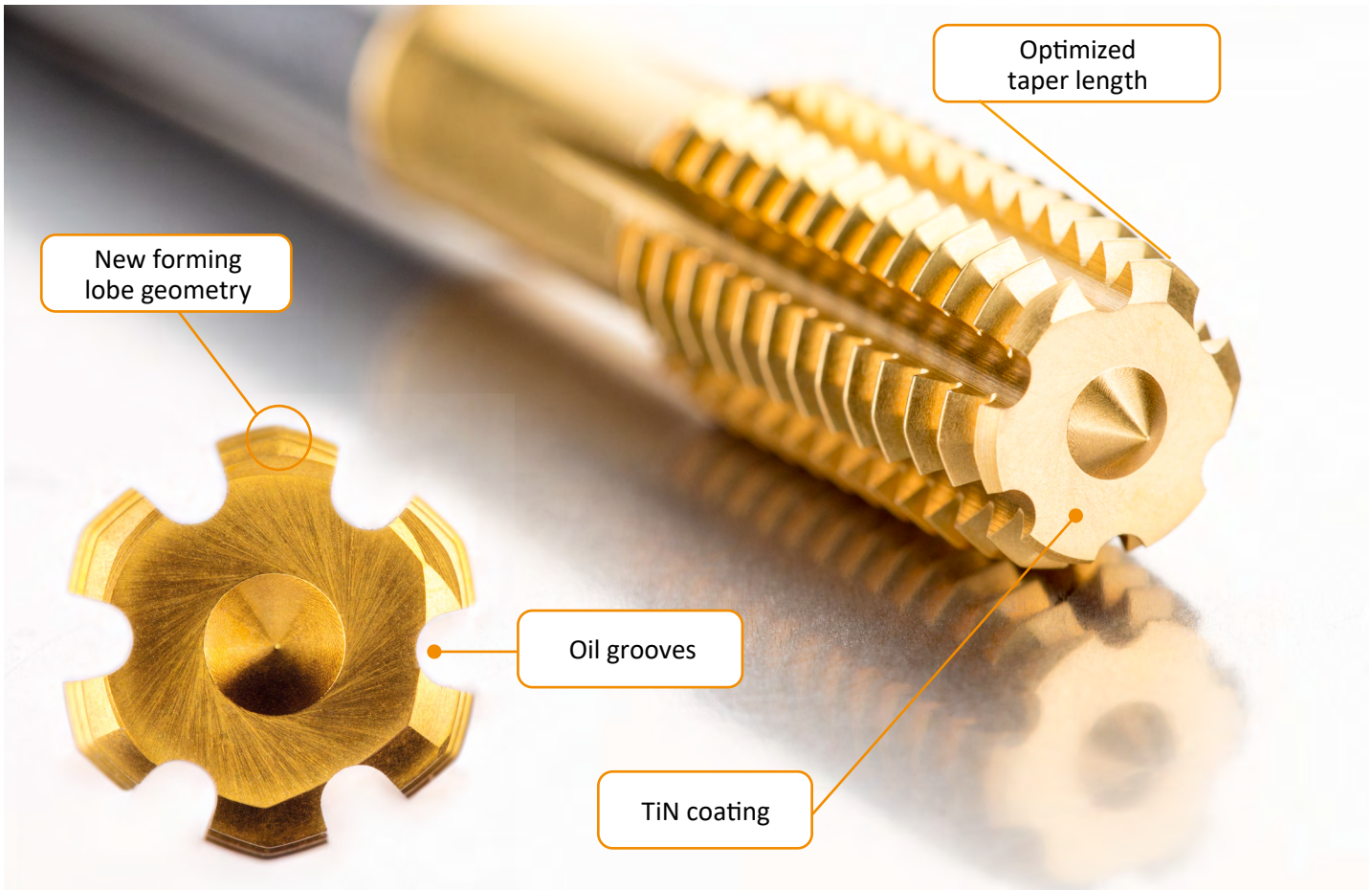
TiN coating secures high wear resistance and low coefficient of friction.

COLD WELDING PROTECTION
supports perfect thread quality.

Premium HSS-E substrate provides perfect ratio of toughness, hardness and heat resistance to the whole tap.

HIGH FORMING TEMPERATURES
widens taps application area.

TECHNICAL DETAILS



E894(UNC)

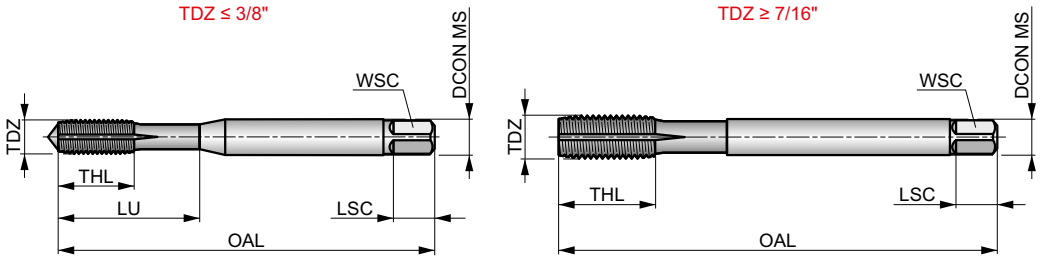
DORMER

HSS-E SHARK Forming Tap with Lube Grooves, UNC, DIN/ANSI Standard, TiN Coated

High-performance fluteless tap for blind and through holes. Provide strong, clean, chip-free and accurate threads with excellent tolerance. Highly versatile for steel, stainless steel and non-ferrous metal. TiN coated HSS-E substrate for higher cutting speeds, improved thread quality, reduced cycle times and longer tool-life.

SHARK

UNC	DIN ANSI	2BX
LU	3.5×D	HSS-E
C 2-3		R
TiN		



Workpiece material group suitability and starting values for cutting speed (ft/min).

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	M1.1	M1.2	M2.1
■148	■167	■167	■167	■148	◪131	■95	■79	■66	■59	■49	■82	■69	■72
M2.2	**M2.3**	**M3.1**	**M3.2**	**M3.3**	**M4.1**	**N1.1**	**N1.2**	**N1.3**	**N2.1**	**N2.2**	**N2.3**	**N3.1**	**N3.2**
■59	◪39	■56	■49	■46	■33	■180	■135	■92	■203	■180	■131	◪131	◪39

Product	TDZ	TPI	OAL (inch)	THL (inch)	DCON MS (inch)	WSC (inch)	LSC (inch)	NOF	PHD (mm)	PHD (inch)	LU (inch)	MID
E894UNC4X40	4	40	2.205	.354	.141	.110	.190	3	2.55	.100	.709	8450647
E894UNC6X32	6	32	2.205	.433	.141	.110	.190	4	3.15	.124	.787	8450648
E894UNC8X32	8	32	2.480	.472	.168	.131	.250	5	3.80	.150	.984	8450649
E894UNC10X24	10	24	2.756	.512	.194	.152	.250	5	4.30	.169	.984	8450730
E894UNC1/4	1/4	20	3.150	.591	.255	.191	.313	5	5.75	.226	1.181	8450731
E894UNC5/16	5/16	18	3.543	.709	.318	.238	.380	5	7.25	.285	1.378	8450732
E894UNC3/8	3/8	16	3.937	.787	.381	.286	.437	5	8.75	.344	1.535	8450733
E894UNC7/16	7/16	14	3.937	.787	.323	.242	.406	6	10.30	.406	–	8450734
E894UNC1/2	1/2	13	4.331	.906	.367	.275	.437	6	11.80	.465	–	8450735
E894UNC5/8	5/8	11	4.331	.984	.480	.360	.563	6	14.80	.583	–	8450736
E894UNC3/4	3/4	10	4.921	1.181	.590	.442	.689	7	17.90	.705	–	8450737
E894UNC7/8	7/8	9	5.512	1.181	.697	.523	.750	7	20.95	.825	–	8450738

E894(UNF)

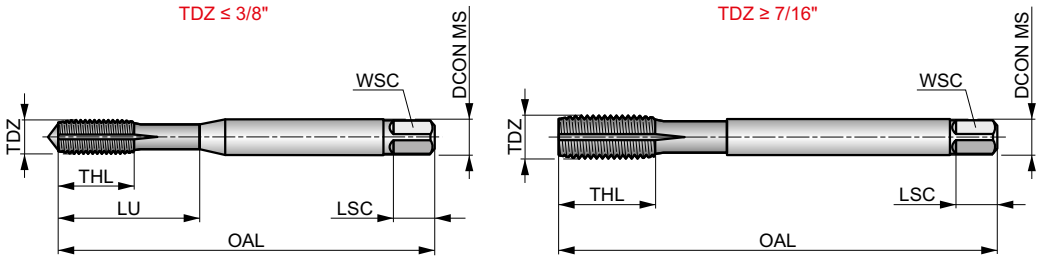
DORMER

HSS-E SHARK Forming Tap with Lube Grooves, UNF, DIN/ANSI Standard, TiN Coated

High-performance fluteless tap for blind and through holes. Provide strong, clean, chip-free and accurate threads with excellent tolerance. Highly versatile for steel, stainless steel and non-ferrous metal. TiN coated HSS-E substrate for higher cutting speeds, improved thread quality, reduced cycle times and longer tool-life.

SHARK

UNF	DIN ANSI	2BX
LU	3.5×D	HSS-E
C 2-3		R
TiN		



Workpiece material group suitability and starting values for cutting speed (ft/min).

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	M1.1	M1.2	M2.1
■148	■167	■167	■167	■148	◪131	■95	■79	■66	■59	■49	■82	■69	■72
M2.2	**M2.3**	**M3.1**	**M3.2**	**M3.3**	**M4.1**	**N1.1**	**N1.2**	**N1.3**	**N2.1**	**N2.2**	**N2.3**	**N3.1**	**N3.2**
■59	◪39	■56	■49	■46	■33	■180	■135	■92	■203	■180	■131	◪131	◪39

Product	TDZ	TPI	OAL (inch)	THL (inch)	DCON MS (inch)	WSC (inch)	LSC (inch)	NOF	PHD (mm)	PHD (inch)	LU (inch)	MID
E894UNF10X32	10	32	2.756	.512	.194	.152	.250	5	4.45	.175	.984	8450739
E894UNF1/4	1/4	28	3.150	.591	.255	.191	.313	5	5.90	.232	1.181	8450740
E894UNF5/16	5/16	24	3.543	.709	.318	.238	.380	5	7.45	.293	1.378	8450741
E894UNF3/8	3/8	24	3.937	.787	.381	.286	.437	5	9.00	.354	1.535	8450742
E894UNF7/16	7/16	20	3.937	.787	.323	.242	.406	6	10.50	.413	–	8450743
E894UNF1/2	1/2	20	3.937	.827	.367	.275	.437	6	12.10	.476	–	8450744
E894UNF3/4	3/4	16	4.331	.945	.590	.442	.689	7	18.40	.724	–	8450745

E894(M)

DORMER

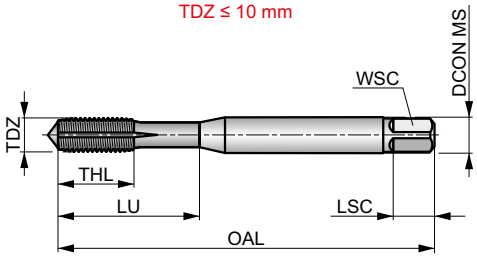
HSS-E SHARK Forming Tap with Lube Grooves, M, DIN/ANSI Standard, TiN Coated

High-performance fluteless tap for blind and through holes. Provide strong, clean, chip-free and accurate threads with excellent tolerance. Highly versatile for steel, stainless steel and non-ferrous metal. TiN coated HSS-E substrate for higher cutting speeds, improved thread quality, reduced cycle times and longer tool-life.

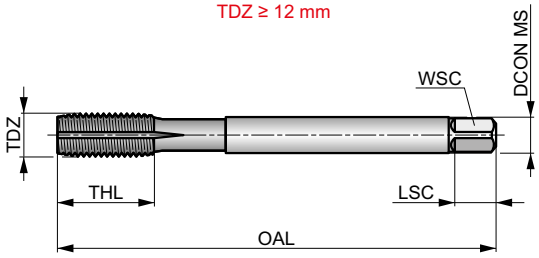
SHARK

M	DIN ANSI	6HX
	3.5×D	HSS-E
C 2-3		R
TiN		

TDZ ≤ 10 mm



TDZ ≥ 12 mm



Workpiece material group suitability and starting values for cutting speed (ft/min).

P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	M1.1	M1.2	M2.1
■148	■167	■167	■167	■148	◪131	■95	■79	■66	■59	■49	■82	■69	■72
M2.2	**M2.3**	**M3.1**	**M3.2**	**M3.3**	**M4.1**	**N1.1**	**N1.2**	**N1.3**	**N2.1**	**N2.2**	**N2.3**	**N3.1**	**N3.2**
■59	◪39	■56	■49	■46	■33	■180	■135	■92	■203	■180	■131	◪131	◪39

Product	TDZ	TP (mm)	OAL (mm)	THL (mm)	DCON MS (inch)	WSC (inch)	LSC (mm)	NOF	PHD (mm)	PHD (inch)	LU (mm)	MID
E894M3	3	0.50	56.0	9	.141	.110	5	4	2.80	.110	18.00	8450746
E894M4	4	0.70	63.0	12	.168	.131	6	5	3.70	.146	21.00	8450747
E894M5	5	0.80	70.0	13	.194	.152	6	5	4.65	.183	25.00	8450748
E894M6	6	1.00	80.0	15	.255	.191	8	5	5.55	.219	30.00	8450749
E894M8	8	1.25	90.0	18	.318	.238	10	5	7.40	.291	35.00	8450750
E894M10	10	1.50	100.0	20	.381	.286	11	6	9.30	.366	39.00	8450751
E894M12	12	1.75	110.0	23	.367	.275	11	6	11.20	.441	–	8450752
E894M16	16	2.00	110.0	25	.480	.360	14	6	15.10	.595	–	8450753
E894M20	20	2.50	140.0	30	.652	.489	18	7	18.90	.744	–	8450754

M90. SPIRAL FLUTED SCREW EXTRACTORS

INTRODUCTION

The Dormer assortment for MRO & General Engineering applications has been expanded with a range of screw extractors, a problem solver for removing broken or seized screws. There are nine individual products, each one for different bolt size starting from M5 up to M50, or 3/16“ up to 2 1/8“ respectively. All are manufactured from specific high-quality steel to withstand the flex and high torque loads experienced during operation. We also introduce two variants of extractor sets and five variants of bolt removal kits, which contains Burrs P100, P101, HSS-E stub drill A117, and an extractor M900 of proper size.

VIDEO

M900

- Spiral fluted screw extractor
- Application range:
  M5 – M50 (3/16“ – 2 1/8“)

M901

- Two Set of extractors
- Variant A: Five pieces set
  M5-M20 (3/16“ – 3/4“)
- Variant B: Six pieces set
  M5-M30 (3/16“ – 1“)

M902

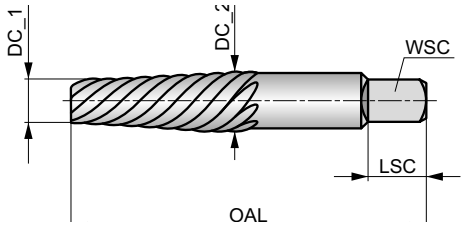
- Bolt removal kits
- Available in 5 variants
- Each contains:
  Burrs P100, P101
  HSS-E Stub Drill A117
  Extractor M900

M900

DORMER

Screw Extractor

Screw extractor is used counter-clockwise to remove broken right-handed bolts from threaded holes without damaging threads. It's necessary to drill guide hole of proper size before using the extractor.



Drill Size A: To be used on low or medium tensile screws. B: To be used on high tensile screws.

Product		A (mm)	B (mm)		A (inch)	B (inch)	DC_1 (mm)	DC_2 (mm)	WSC (mm)	LSC (mm)	OAL (mm)	MID
M9001	M5 – M6	2	2	3/16" – 1/4"	5/64	5/64	1.37	3.20	2.60	5.10	51.1	8430192
M9002	M6 – M8	2.8	3	1/4" – 5/16"	7/64	1/8	2.18	4.80	3.90	6.70	61.1	8430193
M9003	M8 – M12	4	4.2	5/16" – 7/16"	5/32	11/64	3.18	6.40	4.80	7.50	68.7	8430194
M9004	M12 – M14	5.5	6	7/16" – 9/16"	7/32	15/64	4.37	8.00	6.00	8.00	76.7	8430195
M9005	M14 – M20	7.2	8	9/16" – 3/4"	9/32	5/16	6.35	11.10	8.30	11.50	86.1	8430196
M9006	M20 – M30	10.5	11	3/4" – 1"	13/32	7/16	9.53	15.90	11.90	13.10	94.4	8430197
M9007	M30 – M42	13.5	14.5	1" – 1.3/8"	17/32	9/16	12.30	19.10	14.30	17.90	107.4	8430198
M9008	M42 – M45	20.5	21.5	1.3/8" – 1.3/4"	13/16	27/32	18.65	25.10	19.80	19.40	114.3	8430199
M9009	M45 – M50	27	28	1.3/4 – 2.1/8	1.1/16	1.3/32	24.61	32.30	24.60	22.60	121.3	8430220

M901

DORMER

Screw Extractor Set

Set of Screw Extractor sizes M9001 – M9005 or M9001 – M9006.

A = Styles in Set, B = No. in Set, C = Diameters in Set.

Product	Nr.	A	B	C	MID
M901A	A	M900	5	M9001 – M9005	8430221
M901B	B	M900	6	M9001 – M9006	8430222

M902

DORMER

Bolt Removal Kit

Tools for removing broken right-handed bolts come in a set of four. First, use the P100 burr to flatten the bolt. Second, use the P101 burr to create a starting cone. Third, use the HSS-E stub drill A117 to drill a hole for the extractor. Finally, use the screw extractor in a counter-clockwise motion to remove the broken bolt without damaging the threads.

A = Styles in Set, B = No. in Set, C = Diameters in Set.

Product	Nr. Inch	Nr.	A	B	C	MID
M902M6-M8	0.236 - 0.315	M6 – M8	M900, P100, P101, A117	4	P1004.9, P1014.9, A1173.0, M9002	8430223
M902M8-M10	0.315 - 0.394	M8 – M10	M900, P100, P101, A117	4	P1006.4, P1016.4, A1174.0, M9003	8430224
M902M10-M12	0.394 - 0.472	M10 – M12	M900, P100, P101, A117	4	P1007.8, P1017.8, A1174.2, M9003	8430225
M902M12-M14	0.472 - 0.551	M12 – M14	M900, P100, P101, A117	4	P1009.3, P1019.3, A1176.0, M9004	8430226
M902M14-M16	0.551 - 0.630	M14 – M16	M900, P100, P101, A117	4	P10010.7, P10110.7, A1178.0, M9005	8430227

SIMPLY RELIABLE

As a professional you can judge the quality of work by just looking at the chip. Our chip is a clean and uncomplicated shape that in itself tells a story. It is a clear and consistent signal and that's why we use it as a symbol for being **Simply Reliable**.

DORMER PRAMET

www.dormerpramet.com

DP-BRO-NEWS-2023.2-EN

FOLLOW US...

ONLINE

SEGMENTS

LIBRARY APP.

CALCULATOR APP.