

# WINTER WARMUP

## Live Center Sets With 7 Interchangeable Points

- Construction consists of double rows of ball bearings and thrust bearings
- Ground for higher accuracy
- 60° point

### SET INCLUDES:

- 5 male centers
- 1 female center
- 1 bull center
- 1 extractor
- Supplied in fitted storage case

Morse Taper	D Outside Diameter (Inch)	L Length (Inch)
2	1.57	5.20
3	1.81	6.22
4	1.81	7.08
5	2.50	9.21

MT2	MT3	MT4	MT5
Code 120122	Code 120123	Code 120124	Code 120125
244.88	250.96	267.83	427.80

## Dead Centers

Solid Centers | High Speed Steel



Morse Taper	HIGH SPEED STEEL		CARBIDE TIPPED	
	Code	Price	Code	Price
1	125101	11.17	125111	25.81
2	125102	12.64	125112	41.48
3	125103	14.74	125113	48.80
4	125104	19.31	125114	57.54
5	125105	42.78	125115	98.83
6	125106	88.54	125116	155.02

## IG Gold-P Drill Set

High Speed Steel  
TiN Coated

- 1/16" x 1/2" by 64ths
- 135° split point
- Straight shank
- Right hand spiral wide flutes
- Supplied in indexed metal case



Code 883345

159.99



# E.M. PRECISE TOOL LTD.

CUTTING TOOLS • PRECISION TOOLS • COOLANTS

📍 216A Arvin Avenue, Stoney Creek, ON L8E 2L8

☎ (905) 664-2644

☎ TF: 1 (800) 267-7569

✉ info@emprecise.com

🌐 www.emprecise.com

## Mounted Flap Wheels

1/4" Shanks

**30% OFF**

Sizes from 3/4"x3/4" to 3"x2"

Prices 5.71-16.07

## Power Table Feed

- Smooth running with high torque maximum of 650 in/lb
- New and stronger design assures long trouble-free life
- Electrical and mechanical parts are designed for easy maintenance

**Specifications:**  
Voltage: 110V, 50/60Hz  
Speed Range: 4-160 RPM  
Rapid Speed: 200 RPM  
Max. Torque: 650 lbs/in  
Dimensions:  
290 x 200 x 320mm



X-Axis | Code 302235    Y-Axis | Code 302234  
**999.00    1100.00**

## Morse Taper Adapters **KAR**

CAT40 & CAT50



- Coolant through spindle
- Taper shank ground to AT3 accuracy or better
- MT - CAT Form A
- CAT40 draw bar threads: 5/8"-11
- CAT50 draw bar threads: 1"-8

Taper Size	CAT40				Code	Price
	D (Inch)	L (Inch)	Weight (lbs)			
MT1	0.98	1.75	2.21		310984	<b>74.<sup>23</sup>/ea.</b>
MT2	1.26	2.44	2.30		310985	
MT3	1.57	3.00	2.49		310986	
MT4	1.89	3.88	2.86		310987	

Taper Size	CAT50				Code	Price
	D (Inch)	L (Inch)	Weight (lbs)			
MT1	2.75	1.75	6.90		312068	<b>92.<sup>79</sup>/ea.</b>
MT2	2.75	2.00	7.43		312069	
MT3	1.57	2.50	6.73		312070	
MT4	1.89	3.38	6.90		312071	
MT5	2.75	3.75	7.55		312072	

## Misting System



Code 217768

**378.<sup>68</sup>**

SPARE PARTS STOCKED!

- Reliable mist flow with precision control
- Get the right mist mixture with separate air and fluid controls
- Fully assembled, ready to use
- Special tank not required
- Magnetic base can be easily repositioned
- Made from high quality non-corrosive material

**INCLUDES:** 1/4" NPT ball valve, 1/4" NPT quick disconnect, 1/4" regulator, aspirator, pressure gage, foot strainer, 3/8" O.D. tubing, magnetic base, 12" hose assembly with 1/8" nozzle

## Dead Blow Hammers

Steel construction with Steel Shot



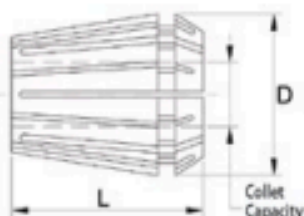
- One piece steel construction with steel shot
- Polyurethane coated thermoplastic rubber - no exposed metal on head or handle
- Textured non-slip handle with flanged end for a comfortable and safe grip
- Hammer hardness: 90A-95A

18 oz. Code 284560	24 oz. Code 284561
<b>25.<sup>47</sup></b>	<b>28.<sup>55</sup></b>
33 oz. Code 284562	41 oz. Code 284563
<b>35.<sup>60</sup></b>	<b>40.<sup>72</sup></b>
	49 oz. Code 284564
	<b>48.<sup>14</sup></b>



- Precision collets
- Collet accuracy: 0.0003" to 0.0004" T.I.R.
- Wide clamping ranges: 0.02" to 0.039" collapsibility
- Made of high quality spring steel

## ER Collets



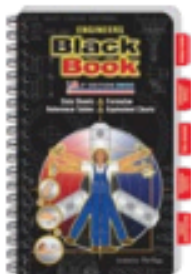
Collet Dimensions

Style	D (Inch)	L (Inch)
ER11	0.453	0.709
ER16	0.669	1.062
ER20	0.826	1.220
ER25	1.024	1.578
ER32	1.299	1.574
ER40	1.614	1.811

Nominal Diameter (Inch)	ER11		ER16		ER20		ER25		ER32		ER40	
	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price	Code	Price
1/32	-	-	826520	41.87	-	-	-	-	-	-	-	-
1/16	300641	21.96	826521	21.67	826532	26.79	826547	25.09	-	-	-	-
3/32	300642	19.01	826522	21.52	826533	23.85	826548	31.66	826566	31.42	-	-
1/8	300643	19.01	826523	26.79	826534	22.75	826549	28.50	826567	25.32	826588	38.14
5/32	300644	19.01	826524	21.52	826535	23.85	826550	28.03	826568	26.46	826589	38.14
3/16	300645	19.01	826525	21.52	826536	22.75	826551	28.50	826569	25.32	826590	30.87
7/32	300646	19.01	826526	21.52	826537	23.85	826552	31.66	826570	26.46	826591	38.14
1/4	300647	19.01	826527	21.52	826538	26.53	826553	25.09	826571	25.32	826592	30.87
9/32	-	-	826528	21.60	826539	23.85	826554	27.76	826572	26.46	826593	38.14
5/16	-	-	826529	21.52	826540	26.53	826555	25.09	826573	25.32	826594	30.87
11/32	-	-	826530	23.31	826541	23.85	826556	27.76	826574	29.55	826595	38.14
3/8	-	-	826531	21.52	826542	22.75	826557	25.09	826575	25.32	826596	30.87
13/32	-	-	300649	34.69	826543	19.99	826558	27.76	826576	26.46	826597	38.14
7/16	-	-	302697	40.95	826544	22.75	826559	29.55	826577	29.55	826598	30.87
15/32	-	-	-	-	826545	28.50	-	-	826578	26.46	826599	38.14
1/2	-	-	302690	40.95	826546	22.75	826561	25.09	826579	25.32	826600	30.87
17/32	-	-	-	-	-	-	826562	27.76	826580	26.46	826601	38.14
9/16	-	-	-	-	-	-	826563	25.09	826581	25.32	826602	38.14
19/32	-	-	-	-	-	-	826564	31.66	826582	26.46	826603	30.87
5/8	-	-	-	-	302691	40.95	826565	25.09	826583	25.32	826604	30.87
21/32	-	-	-	-	-	-	-	-	826584	26.46	826605	38.14
11/16	-	-	-	-	-	-	-	-	826585	38.14	826606	38.14
23/32	-	-	-	-	-	-	-	-	826586	26.46	826607	38.14
3/4	-	-	-	-	-	-	302692	40.95	826587	25.32	826608	30.87
25/32	-	-	-	-	-	-	-	-	-	-	826609	31.55
13/16	-	-	-	-	-	-	-	-	-	-	826610	38.14
27/32	-	-	-	-	-	-	-	-	-	-	826611	31.55
7/8	-	-	-	-	-	-	-	-	302693	40.95	826612	30.87
29/32	-	-	-	-	-	-	-	-	-	-	826613	31.55
15/16	-	-	-	-	-	-	-	-	-	-	826614	38.14
31/32	-	-	-	-	-	-	-	-	-	-	826615	31.55
1	-	-	-	-	-	-	-	-	302694	40.95	826616	36.03
1-1/8	-	-	-	-	-	-	-	-	-	-	302695	44.95
1-1/4	-	-	-	-	-	-	-	-	-	-	302696	44.01

## Reference Guides

Engineer's – 3rd Edition & Fastener Black Books



- Pocket size with 254 laminated, non-glare, tear and grease proof pages
- Non-slip rubberized cover
- Wired lay flat binding
- Self adhesive bookmark tabs



- Inch/Metric equivalences
- Fastener grades
- Standard dimensions
- Reference tables
- Includes thread pitch gage



## Precision Milling Machine Vises



FCD-60 Ductile Iron



## Broach Sets

Standard & Heavy Duty



- All Minute Man<sup>®</sup> Broach Sets are supplied in storage boxes, and come complete with precision broaches, slotted bushings, and necessary shims
- Collared bushings are recommended and are supplied unless plain bushings are specified on your order

TIN coated sets available on request

Set Description	Code	Price
<b>No. 00 PRECISION SET:</b> The most common keyway combinations for small keyways and bores. 3 broaches and 5 bushings = 15 keyway combinations (Collared bushings only)	605500	<b>616.29</b>
<b>No. 10 STANDARD SET:</b> Our best selling broach set. 4 broaches and 9 bushings = 18 keyway combinations (Collared bushings only)	605501	<b>1075.88</b>
<b>No. 10A STANDARD SET:</b> Same as No. 10 Set, but for sixteenth-sized bores. 4 broaches and 9 bushings = 18 keyway combinations (Collared bushings only)	605502	<b>1075.88</b>
<b>No. 10-10A COMBINATION SET:</b> Combines 10 and 10A sets features all bore sizes in 1/16 inch increments for keyways 1/8 to 3/8 inches. 4 broaches and 18 bushings = 36 keyway combinations (Collared bushings only)	605503	<b>1381.53</b>
<b>No. 20 COMBINATION SET:</b> Same as No. 10-10A combination set plus a 5/16" keyway for 11 extra combinations. 5 broaches and 18 bushings = 47 keyway combinations (Collared bushings only)	605504	<b>1592.17</b>
<b>No. 40A SET:</b> The most common keyway combinations for medium sized keyways and bores. 4 broaches and 8 bushings = 32 keyway combinations (Plain bushings only)	605505	<b>2015.95</b>
<b>No. 40 SET:</b> Same as No. 40A, but for sixteenth sized bores. 4 broaches and 8 bushings = 32 keyway combinations (Plain bushings only)	605506	<b>2015.95</b>
<b>No. 40-1/2A HEAVY DUTY SET:</b> The most common keyway combinations for large keyways and bores. 2 broaches and 6 bushings = 12 keyway combinations (Plain bushings only)	605507	<b>2077.64</b>
<b>No. 40-1/2 HEAVY DUTY SET:</b> Same as No. 40-1/2A but for sixteenth sized bores. 2 broaches and 6 bushings = 12 keyway combinations (Plain bushings only)	605508	<b>2077.64</b>
<b>No. 50 HEAVY DUTY SET:</b> Includes the most common keyway combinations for medium and large keyways. 3 broaches and 17 bushings = 29 keyway combinations (Plain bushings only)	605509	<b>3870.02</b>
<b>No. 60 METRIC SET:</b> The most common metric keyway combination for small keyways and bores. 2 broaches and 3 bushings = 6 keyway combinations (Collared bushings only)	605510	<b>493.20</b>
<b>No. 70 METRIC SET:</b> Our most popular metric broach set. 4 broaches and 13 bushings = 26 keyway combinations (Collared bushings only)	605511	<b>1266.13</b>
<b>No. 80 METRIC SET:</b> The most common metric keyway combination for medium-sized keyways and bores. 3 broaches and 12 bushings = 36 keyway combinations (Plain bushings only)	605512	<b>1982.49</b>
<b>No. 90 METRIC SET:</b> The most common metric keyway combination for large keyways and bores. 2 broaches and 8 bushings = 16 keyway combinations (Plain bushings only)	605513	<b>2668.22</b>
<b>No. 100 HEAVY DUTY COMBINATION SET:</b> The most complete set available including all popular combinations without duplication. Supplied in three wood boxes for convenient handling and storage, and comes with broaches, slotted bushings, and necessary shims. 9 broaches and 44 bushings = 102 keyway combinations (Collared bushings B & C; Plain bushings D & E)	605514	<b>6964.51</b>

## Annular Cutters

M42 Cobalt - 3/4 Inch Shank



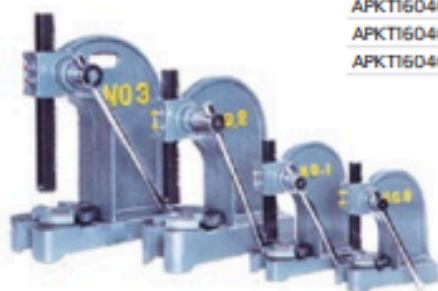
Size (mm)	Depth				Size (mm)	Depth			
	25 mm Code	Price	50 mm Code	Price		25 mm Code	Price	50 mm Code	Price
12	620100	43.19	620154	67.39	40	620128	163.96	620182	213.03
13	620101	43.19	620155	62.95	41	620129	168.47	620183	222.87
14	620102	43.19	620156	62.95	42	620130	177.53	620184	230.11
15	620103	44.89	620157	68.51	43	620131	182.00	620185	235.03
16	620104	46.76	620158	74.10	44	620132	193.13	620186	244.79
17	620105	48.46	620159	77.54	45	620133	202.13	620187	257.16
18	620106	50.31	620160	82.03	46	620134	213.44	620188	264.46
19	620107	51.44	620161	85.43	47	620135	217.93	620189	274.28
20	620108	56.30	620162	89.90	48	620136	224.66	620190	284.10
21	620109	60.02	620163	94.42	49	620137	233.62	620191	286.30
22	620110	62.50	620164	96.62	50	620138	238.10	620192	293.84
23	620111	64.89	620165	98.89	51	620139	245.04	620193	301.83
24	620112	67.39	620166	102.16	52	620140	251.55	620194	308.95
25	620113	69.78	620167	113.89	53	620141	258.00	620195	316.01
26	620114	72.16	620168	117.58	54	620142	264.51	620196	323.12
27	620115	74.63	620169	122.51	55	620143	271.03	620197	330.17
28	620116	77.07	620170	127.36	56	620144	277.49	620198	337.28
29	620117	79.60	620171	134.66	57	620145	284.01	620199	344.34
30	620118	81.97	620172	139.61	58	620146	290.47	620200	351.44
31	620119	94.42	620173	144.43	59	620147	296.99	620201	358.50
32	620120	101.05	620174	159.14	60	620148	303.47	620202	365.61
33	620121	105.56	620175	164.10	61	620149	309.94	620203	372.69
34	620122	119.29	620176	175.05	62	620150	316.46	620204	379.80
35	620123	137.05	620177	184.87	63	620151	322.97	620205	386.85
36	620124	146.05	620178	190.98	64	620152	329.45	620206	393.96
37	620125	150.51	620179	194.69	65	620153	335.96	620207	401.02
38	620126	152.81	620180	198.39					
39	620127	157.31	620181	202.07					

## Milling Inserts

APKT



Type	Grade	Length (Inch)	Width (Inch)	Thickness (Inch)	Ø Hole (Inch)	Radius (Inch)	Code	Price
APKT11T304PM	YBC301	0.482	0.256	0.142	0.262	0.016	573008	10.50
APKT11T308PM	YBM251	0.482	0.256	0.142	0.262	0.031	573028	10.50
APKT11T308-PF	YBM251	0.482	0.256	0.142	0.262	0.031	573035	10.50
APKT16D408PF	YBC301	0.704	0.367	0.226	0.173	0.031	573040	12.42
APKT16D408PF	YBM251	0.704	0.367	0.226	0.173	0.031	573044	12.42
APKT16D408PM	YBM251	0.704	0.367	0.226	0.173	0.031	573054	12.42



## Arbor Presses

- All main parts made of ductile cast iron
- Adjustable handle for convenient positioning
- Ram finite control with smooth gears
- Four 90 degree equally divided slotted round table

NOTE: Not recommended for broaching

Base Dimensions (Inch)	Press Height (Inch)	Press Tons	Maximum Work Height (Inch)	Largest Arbor (Inch)	Table Diameter (Inch)	Ram Dimensions (Inch)	Ram Length (Inch)	Press Distance Ram/Column (Inch)	Code	Price
4 x 9.5	10	0.5	4.5	1.12	3.35	0.75 x 0.75	75	3.37	218002	86.36
5 x 11	12	1	5.25	1.37	3.54	1 x 1	9.5	4.25	218003	124.25
6.75 x 17	17	2	8.5	1.75	6.5	1.25 x 1.25	14	6	218004	304.78
8 x 8	21.5	3	12.62	2.5	7.48	1.5 x 1.5	18	6	218005	481.87

## Deburring Sets

**SHAVIV**  
Leading Deburring Solutions

### Glo-Burr Sets | Standard B / Heavy Duty E



Hole  
Edge



Straight  
Edge

- Easy-to-grip, strong, yet lightweight
- Pocket clip and blade storage in handle
- Deburrs steel, aluminum, copper, and plastics
- Glo-Burr B with B10 (holds other B blades)
- Glo-Burr E with heavy duty E100 blade (holds other E blades)

Glo-Burr B Sets

**5.99** /ea.

Glo-Burr E Sets

**6.29** /ea.

**B SET CODES:** Green 550962 | Blue 550963 | Yellow 550961 | Red 550960

**E SET CODES:** Green 550967 | Blue 550968 | Yellow 550966 | Red 550965

### Uniburrs

- Popular, slim-grip deburring tools
- Strong, yet lightweight
- Features convenient pocket clip
- Deburrs steel, aluminum, copper and plastics



Hole  
Edge



Straight  
Edge



**UB1 DisposaBurr**  
Disposable. Heavy-duty E100 blade



**UB2000**  
B10 blade inserted axially or perpendicular to handle



**UB2 DisposaBurr**  
Disposable. B10 blade



**MB2000**  
Strong hexagon-shaped handle. E100 blade

Description	Code	Price	Description	Code	Price
UB1 DisposaBurr	550884	<b>6.92</b>	UB2000	550883	<b>14.50</b>
UB2 DisposaBurr	550885	<b>6.58</b>	MB2000	550882	<b>13.13</b>

### Scrape-Burrs

#### Scrape-Burr 42 The Heavy Duty Scraper

- Durable and secure
- Permanent heavy duty triangular blade with three cutting edges for high quality finishing and scraping



C42

Code 550975

**26.38**

#### Scrape-Burr 400 The Fine Finish Scraper

- Miniature tool for a fine finish on precision work pieces
- Extra thin, heavy duty triangular blade with three cutting edges for high quality and accurate finishing and scraping



E400

Code 550976

**12.67**

#### Scrape-Burr 40 The All-Purpose Scraper

- Useful and convenient all-purpose standard scraper
- Permanent heavy duty triangular blade with three cutting edges for high quality finishing and scraping



C40

Code 550974

**18.25**

### B12 Modified Blade

Special Blade for Plastics

SIMILAR TO B25 BLADE!  
MORE AGGRESSIVE CUT!

HSS | Short-nosed  
Fits B handles/holders



WHILE  
QUANTITIES  
LAST

**79.99** /box of 100

Code 550830 (individual)

**SHAVIV** Exclusively Available at **KAR** in Canada

## F-Clamps

- Material: ANSI 1045 medium carbon steel, chrome plated
- Hardness: HRC 56 $\pm$ 2
- T-handle
- P-type pad



Medium Duty 2400

A Span (Inch)	B Span (Inch)	Rail Thickness (Inch)	Weight (lbs)	Code	Price
10	4.75	1.06 x 0.51	4.6	412530	111.80
12	4.75	1.06 x 0.51	4.9	412531	114.24
16	4.75	1.06 x 0.51	5.4	412532	123.29
20	4.75	1.06 x 0.51	6.0	412533	133.26
24	4.75	1.06 x 0.51	6.1	412534	134.73



Heavy Duty 4600

A Span (Inch)	B Span (Inch)	Rail Thickness (Inch)	Weight (lbs)	Code	Price
12	5.50	1.18 x 0.59	6.7	412540	157.88
16	4.75	1.18 x 0.59	7.1	412541	171.30
20	5.50	1.18 x 0.59	8.1	412542	186.03
24	4.75	1.18 x 0.59	9.1	412543	206.09

## Wall Mount Clamping Sets

1 Inch Block Width



Table slot: 1/2"  
Stud size: 3/8-16  
Code 400010

241.74

Table slot: 5/8"  
Stud size: 1/2-13  
Code 400020

283.46

Table slot: 3/4"  
Stud size: 5/8-11  
Code 400030

328.87

## Tightening Fixtures

Universal Horizontal / Vertical  
CNC Tool Tightening Fixtures



Taper Size 40  
Code 310842

273.27

Taper Size 50  
Code 310843

297.12



Holders sold separately

Mount vertically and/or horizontally

ALL DIMENSIONS AT [WWW.KAR.CA](http://WWW.KAR.CA)

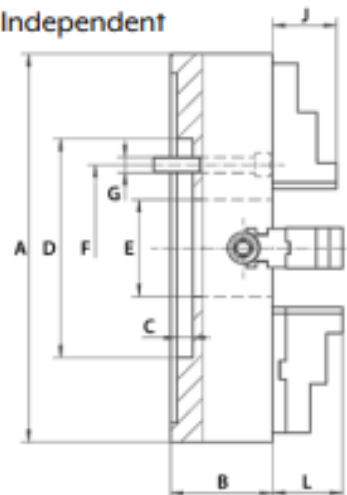
## Independent Lathe Chucks

Plain Back | Cast Iron | Solid Jaws | 4-jaw Independent

- Cast iron
- Plain back (Back plates required)
- Chucks 10" diameter and larger have additional T-slots

### Standard Accessories:

- 1 set of solid reversible jaws
- 1 wrench



Ø Chuck (Inch)	A (Inch)	B (Inch)	C (Inch)	D (Inch)	E (Inch)	F (Inch)	G	J (Inch)	L (Inch)	Weight (lbs)	Code	Price
8	7.87	3.15	0.20	4.33	1.97	3.24	4 x M10	1.59	1.83	30.86	355209	1683.74
10	9.84	3.35	0.28	5.91	2.56	4.13	4 x M12	1.59	2.38	55.12	355210	2081.29
12	12.40	3.74	0.28	6.89	3.15	5.25	4 x M16	1.96	2.40	85.98	355211	2690.16
16	15.75	4.13	0.39	7.87	3.94	6.75	4 x M16	1.96	2.85	134.48	355212	3950.08
20	19.69	4.72	0.47	10.63	4.92	9.25	4 x M20	2.35	3.85	231.49	355213	7296.80
25	24.80	5.51	0.47	10.63	6.30	9.25	4 x M20	2.35	3.85	359.35	355214	9418.94



## End Mills | Alu-Power

Micrograin Solid Carbide | 3 Flute | 45° Helix

- 3 flute and 45° helix allow harmonic balance at high speed conditions and smooth cutting
- Maximum material removal, chip evacuation, and stability



Tolerance: 0/-0.0005

### Regular Length



### Long Length



Cutter Diameter (Inch)	Shank Diameter (Inch)	Length of Cut (Inch)	Overall Length (Inch)	Code	Price
1/8	1/8	3/8	1-1/2	888409	41.08
3/16	3/16	9/16	2	888410	44.48
1/4	1/4	5/8	2-1/2	888411	50.04
5/16	5/16	5/8	2-1/2	888412	55.88
3/8	3/8	1	2-1/2	888413	65.03
7/16	7/16	1-1/4	2-3/4	888414	110.62
1/2	1/2	1-1/4	3	888415	121.04
5/8	5/8	1-5/8	3-1/2	888416	261.13
3/4	3/4	1-5/8	4	888417	323.34
1	1	2	5	888418	767.32

Cutter Diameter (Inch)	Shank Diameter (Inch)	Length of Cut (Inch)	Overall Length (Inch)	Code	Price
1/4	1/4	1-1/4	3-1/4	888419	65.59
5/16	5/16	1-1/4	3-1/2	888420	75.95
3/8	3/8	1-1/2	3-1/2	888421	90.05
7/16	7/16	2	4	888422	138.21
1/2	1/2	2	4	888423	152.31
5/8	5/8	2-1/2	5	888424	348.37
3/4	3/4	3-1/4	6	888425	435.69
1	1	3-1/4	6	888426	836.20

## CNC Spotting Drills

HSS-E Cobalt - Uncoated & RED-X Coated



- 90° angle
- 118° point geometry for improved penetration rates while reinforcing the point
- Double ended for cost savings
- Available in 4-Piece sets or sold individually
- RED-X coating provides increased speeds and feeds and allows machining up to 55 HRC



### 4-Piece Sets

(includes 1 of each individual size)

HSS-E Cobalt Code 540090    RED-X Coated Code 540095

72.34    103.16

## Combined Drill & Countersinks

High Speed Steel TiN Coated | 82° & 90° | Plain Type



Size	Ø Body (Inch)	Ø Point (Inch)	Point Length (Inch)	Overall Length (Inch)	82° Series 154 HSS M2		90° Series 155 HSS M2	
					Code	Price	Code	Price
1	1/8	3/64	1/16	1-1/4	540511	14.37	540521	14.37
2	3/16	5/64	7/64	1-7/8	540512	15.20	540522	15.20
3	1/4	7/64	9/64	2	540513	15.77	540523	15.77
4	5/16	1/8	5/32	2-1/8	540514	16.48	540524	16.48
5	7/16	3/16	1/4	2-3/4	540515	25.41	540525	25.41
6	1/2	7/32	19/64	3	540516	37.95	540526	37.95
7	5/8	1/4	5/16	3-1/4	540517	54.99	540527	55.07
8	3/4	5/16	13/32	3-1/2	540518	85.95	540528	85.95