

Reduced Shank

1/2" Reduced Shank Silver & Deming Styles 190, 190F

DRILLS

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SETS

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Features/Benefits:

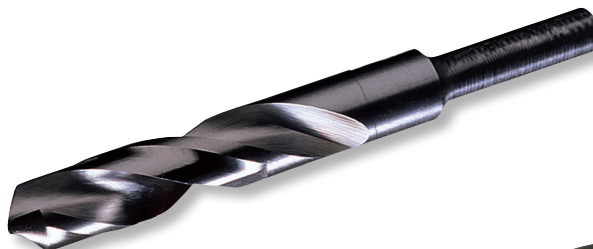
- Larger size general-purpose drills with 1/2" reduced shank.
- Manufactured from premium high-speed steel.
- 118° point; style 190F features 118° split point through 1-1/4" size.
- Round shank or shank with three flats for a more positive grip in the drill chuck; flats reduce drill slippage under high load.
- Standard 6" overall length and 3-1/8" flute length for increased rigidity, less deflection, and better hole accuracy.
- Standardized lengths result in minimal adjustment during tool changes in screw machines and machining centers.
- Ideal for portable drilling due to increased rigidity.
- Black oxide finish standard from stock.

Application Information:

- carbon steel
- cast iron
- alloy steel
- wood
- Use wherever maximum chuck capacity is 1/2".

Surface Treatment Information:

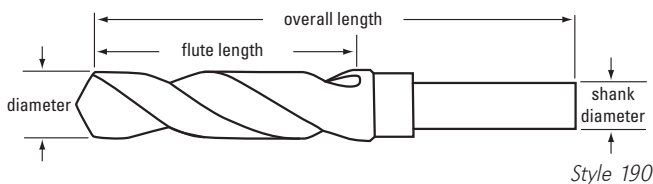
- Black oxide surface finish increases wear resistance and adds lubricity, improving chip flow.



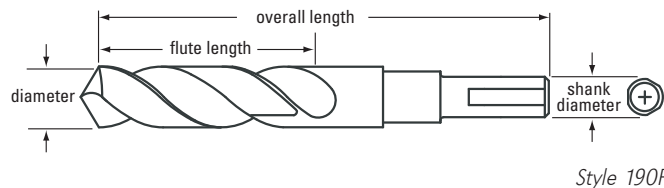
Style 190 Black Oxide with Round Shank



Style 190F Black Oxide with Flatted Shank



Style 190



Style 190F

INCH SIZES

Fract	Drill Diameter		Shank Diameter		Overall Length		Flute Length		Style 190	Style 190F
	Decimal	mm	Inch	mm	Inch	mm	inch	mm	Round	Flatted
1/2	.5000	12.70	.5000	12.70	6.0000	152.40	3.1250	79.38	55432	52432
33/64	.5156	13.10	.5000	12.70	6.0000	152.40	3.1250	79.38	55433	52433
17/32	.5312	13.49	.5000	12.70	6.0000	152.40	3.1250	79.38	55434	52434
35/64	.5469	13.89	.5000	12.70	6.0000	152.40	3.1250	79.38	55435	52435
9/16	.5625	14.29	.5000	12.70	6.0000	152.40	3.1250	79.38	55436	52436
37/64	.5781	14.68	.5000	12.70	6.0000	152.40	3.1250	79.38	55437	52437
19/32	.5938	15.08	.5000	12.70	6.0000	152.40	3.1250	79.38	55438	52438
39/64	.6094	15.48	.5000	12.70	6.0000	152.40	3.1250	79.38	55439	52439
5/8	.6250	15.88	.5000	12.70	6.0000	152.40	3.1250	79.38	55440	52440
41/64	.6406	16.27	.5000	12.70	6.0000	152.40	3.1250	79.38	55441	52441
21/32	.6562	16.67	.5000	12.70	6.0000	152.40	3.1250	79.38	55442	52442
43/64	.6719	17.07	.5000	12.70	6.0000	152.40	3.1250	79.38	55443	52443
11/16	.6875	17.46	.5000	12.70	6.0000	152.40	3.1250	79.38	55444	52444
45/64	.7031	17.86	.5000	12.70	6.0000	152.40	3.1250	79.38	55445	52445
23/32	.7188	18.26	.5000	12.70	6.0000	152.40	3.1250	79.38	55446	52446
47/64	.7344	18.65	.5000	12.70	6.0000	152.40	3.1250	79.38	55447	52447
3/4	.7500	19.05	.5000	12.70	6.0000	152.40	3.1250	79.38	55448	52448

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Reduced Shank

1/2" Reduced Shank Silver & Deming (continued) Styles 190, 190F

INCH SETS

Sets in Various Cases

Number of Tools	Size Range	Case Style	Style 190	Style 190F
			Round	Flatted
8	9/16 - 1 X 1/16	plastic	57840	69860
8	9/16 - 1 X 1/16	metal	69857	69859
16	17/32 - 1 X 1/32	pouch	69890	69849
33	1/2 - 1 X 1/64	metal stand	69858	69848



Set 69859

DRILLS

1/4" Reduced Shank Silver & Deming Style 239

Features/Benefits:

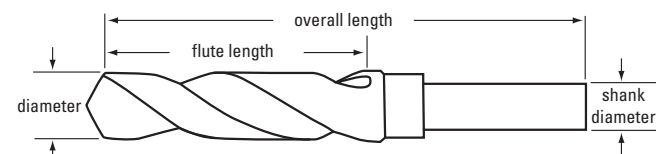
- General-purpose drills with 1/4" reduced round shank.
- Manufactured from high-speed steel.
- 118° point.
- Ideal for portable drilling due to increased rigidity.
- Black oxide finish standard from stock.

Application Information:

- wood
- sheet metal
- aluminum
- mild steels
- Ideal for use in portable electric drills where chuck capacity is 1/4".

Surface Treatment Information:

- Black oxide surface finish increases wear resistance and adds lubricity, improving chip flow.



Style 239 Black Oxide

REAMERS

OTHER TOOLS

INCH SIZES

Fract	Drill Diameter		Shank Diameter		Overall Length		Flute Length		Style 239 black oxide
	Decimal	mm	Inch	mm	Inch	mm	inch	mm	
1/4	.2500	6.35	.2500	6.35	2.5000	63.50	1.3750	34.93	56316
5/16	.3125	7.94	.2500	6.35	2.8125	71.44	1.3750	34.93	56320
3/8	.3750	9.53	.2500	6.35	3.1250	79.38	1.6875	42.86	56324
7/16	.4375	11.11	.2500	6.35	3.4375	87.31	2.0000	50.80	56328
1/2	.5000	12.70	.2500	6.35	3.7500	95.25	2.2500	57.15	56332

SETS

INCH SETS

Sets in Metal Case

Number of Tools	Size Range	Case Style	Style 239
			Round
5	1/4 - 1/2 X 1/16	metal	56340

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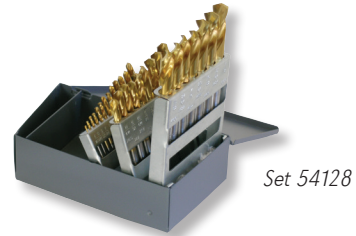
Sets

Drill Sets

Screw Machine Length Drill Sets High-Speed Steel and Cobalt

SETS IN METAL INDEX CASES

Number of Tools	Sizes in Set	General Purpose	Heavy-Duty		Cobalt Heavy-Duty
		Style 157 Bright	Style 159 Black Oxide	Style 159-TN TiN	Style 559 Straw
Inch Sizes					
15	1/16 - 1/2 x 1/32		69889		69856
21	1/16 - 3/8 x 1/64		69852		
29	1/16 - 1/2 x 1/64	69900	57719	54128	69853
26	Let A - Let Z	69901			69855
60	#1 - #60	69902	69885		69854



Set 54128

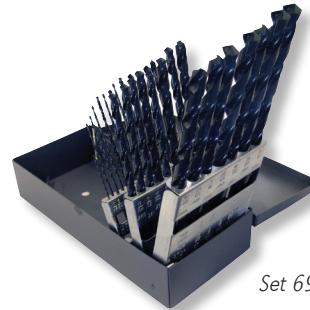


Set 69855

Long Length Drill Sets High-Speed Steel

SETS IN METAL INDEX OR PLASTIC CASES

Number of Tools	Sizes in Set	Case	General Purpose	General Purpose
			Taper Length Style 120 Black Oxide	12" Overall Length Style 120X Black Oxide
Inch Sizes				
15	1/16 - 1/2 x 1/32	metal	69884	
25	1/8 - 1/2 x 1/64	plastic		69869
29	1/16 - 1/2 x 1/64	metal	69864	
60	#1 - #60	metal	69865	



Set 69864



Set 69869

Reduced Shank Drill Sets High-Speed Steel and Cobalt

SETS IN METAL INDEX OR PLASTIC CASES

Number of Tools	Sizes in Set	Case	1/2" Shank High-Speed Steel		1/2" Shank Cobalt
			Round Shanks Style 190 Black Oxide	Flatted Shanks Style 190F Black Oxide	Round Shanks Style 190C Straw
Inch Sizes					
8	9/16 - 1 x 1/16	pouch	57840	69860	
8	9/16 - 1 x 1/16	metal index	69857	69859	69868
16	17/32 - 1 x 1/32	pouch	69890	69849	
33	1/2 - 1 x 1/64	metal stand	69858	69848	



Set 69859

1/4" Shank High-Speed Steel Style 239

Number of Tools	Sizes in Set	Case	Black Oxide
Inch Sizes			
5	1/4 - 1/2 x 1/16	metal index	56340

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DRILLS

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