

## Heavy-Duty Style 159, 159-TN (2159)

### Features/Benefits:

- Heavy-duty geometry for drilling tougher materials by hand or machine.
- Shorter flute and overall length provide superior rigidity to minimize deflection when using heavy feed rates.
- Manufactured from premium high-speed steel.
- 135° P3 split point is self-centering for reduced thrust and easier penetration. Sizes under .0625" do not have split points.
- Black oxide and titanium nitride (TiN) finishes standard from stock; alternate coatings available as stock modifications.

### Application Information:

- tool steel (black oxide, TiN)
- alloy steel (black oxide, TiN)
- carbon steel (black oxide, TiN)
- cast iron (black oxide, TiN)

### Surface Treatment Information:

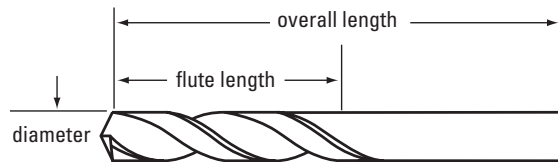
- Black oxide surface finish increases wear resistance and adds lubricity, improving chip flow.
- Titanium nitride (TiN) PVD coating adds lubricity and hardness which enhances chip flow, finish hole quality, and drill life.



Style 159 Black Oxide



Style 159-TN TiN-Coated



### INCH SIZES

Fraction	Drill Diameter		Overall Length		Flute Length		Style 159	Style 159-TN	
	Wire/Let	Decimal	mm	Inch	mm	Inch	Black Oxide	TiN	
1/32		.0312	0.79	1.3750	34.93	.5000	12.70	49202	48202
	60	.0400	1.02	1.3750	34.93	.5000	12.70	49430	48430
	59	.0410	1.04	1.3750	34.93	.5000	12.70	49429	48429
	58	.0420	1.07	1.3750	34.93	.5000	12.70	49428	48428
	57	.0430	1.09	1.3750	34.93	.5000	12.70	49427	48427
3/64	56	.0465	1.18	1.3750	34.93	.5000	12.70	49426	48426
		.0469	1.19	1.3750	34.93	.5000	12.70	49203	48203
	55	.0520	1.32	1.6250	41.28	.6250	15.88	49425	48425
	54	.0550	1.40	1.6250	41.28	.6250	15.88	49424	48424
1/16	53	.0595	1.51	1.6250	41.28	.6250	15.88	49423	48423
		.0625	1.59	1.6250	41.28	.6250	15.88	49204	48204
	52	.0635	1.61	1.6875	42.86	.6875	17.46	49422	48422
	51	.0670	1.70	1.6875	42.86	.6875	17.46	49421	48421
	50	.0700	1.78	1.6875	42.86	.6875	17.46	49420	48420
5/64	49	.0730	1.85	1.6875	42.86	.6875	17.46	49419	48419
	48	.0760	1.93	1.6875	42.86	.6875	17.46	49418	48418
		.0781	1.98	1.6875	42.86	.6875	17.46	49205	48205
	47	.0785	1.99	1.7500	44.45	.7500	19.05	49417	48417
	46	.0810	2.06	1.7500	44.45	.7500	19.05	49416	48416
3/32	45	.0820	2.08	1.7500	44.45	.7500	19.05	49415	48415
	44	.0860	2.18	1.7500	44.45	.7500	19.05	49414	48414
	43	.0890	2.26	1.7500	44.45	.7500	19.05	49413	48413
	42	.0935	2.37	1.7500	44.45	.7500	19.05	49412	48412
		.0938	2.38	1.7500	44.45	.7500	19.05	49206	48206
	.0960	2.44	1.8125	46.04	.8125	20.64	49411	48411	

Sizes smaller than .0625" do not have split points.

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**Heavy-Duty (continued)**  
**Style 159, 159-TN (2159)**

**INCH SIZES**

Fraction	Drill Diameter		Overall Length		Flute Length		Style 159	Style 159-TN	
	Wire/Let	Decimal	mm	Inch	mm	Inch	Black Oxide	TiN	
	40	.0980	2.49	1.8125	46.04	.8125	20.64	49410	48410
	39	.0995	2.53	1.8125	46.04	.8125	20.64	49409	48409
	38	.1015	2.58	1.8125	46.04	.8125	20.64	49408	48408
	37	.1040	2.64	1.8125	46.04	.8125	20.64	49407	48407
	36	.1065	2.71	1.8125	46.04	.8125	20.64	49406	48406
7/64		.1094	2.78	1.8125	46.04	.8125	20.64	49207	48207
	35	.1100	2.79	1.8750	47.63	.8750	22.23	49405	48405
	34	.1110	2.82	1.8750	47.63	.8750	22.23	49404	48404
	33	.1130	2.87	1.8750	47.63	.8750	22.23	49403	48403
	32	.1160	2.95	1.8750	47.63	.8750	22.23	49402	48402
	31	.1200	3.05	1.8750	47.63	.8750	22.23	49401	48401
1/8		.1250	3.18	1.8750	47.63	.8750	22.23	49208	48208
	30	.1285	3.26	1.9375	49.21	.9375	23.81	49400	48400
	29	.1360	3.45	1.9375	49.21	.9375	23.81	49399	48399
	28	.1405	3.57	1.9375	49.21	.9375	23.81	49398	48398
9/64		.1406	3.57	1.9375	49.21	.9375	23.81	49209	48209
	27	.1440	3.66	2.0625	52.39	1.0000	25.40	49397	48397
	26	.1470	3.73	2.0625	52.39	1.0000	25.40	49396	48396
	25	.1495	3.80	2.0625	52.39	1.0000	25.40	49395	48395
	24	.1520	3.86	2.0625	52.39	1.0000	25.40	49394	48394
	23	.1540	3.91	2.0625	52.39	1.0000	25.40	49393	48393
5/32		.1562	3.97	2.0625	52.39	1.0000	25.40	49210	48210
	22	.1570	3.99	2.1250	53.98	1.0625	26.99	49392	48392
	21	.1590	4.04	2.1250	53.98	1.0625	26.99	49391	48391
	20	.1610	4.09	2.1250	53.98	1.0625	26.99	49390	48390
	19	.1660	4.22	2.1250	53.98	1.0625	26.99	49389	48389
	18	.1695	4.31	2.1250	53.98	1.0625	26.99	49388	48388
11/64		.1719	4.37	2.1250	53.98	1.0625	26.99	49211	48211
	17	.1730	4.39	2.1875	55.56	1.2500	31.75	49387	48387
	16	.1770	4.50	2.1875	55.56	1.2500	31.75	49386	48386
	15	.1800	4.57	2.1875	55.56	1.2500	31.75	49385	48385
	14	.1820	4.62	2.1875	55.56	1.2500	31.75	49384	48384
	13	.1850	4.70	2.1875	55.56	1.2500	31.75	49383	48383
3/16		.1875	4.76	2.1875	55.56	1.2500	31.75	49212	48212
	12	.1890	4.80	2.2500	57.15	1.1875	30.16	49382	48382
	11	.1910	4.85	2.2500	57.15	1.1875	30.16	49381	48381
	10	.1935	4.91	2.2500	57.15	1.1875	30.16	49380	48380
	9	.1960	4.98	2.2500	57.15	1.1875	30.16	49379	48379
	8	.1990	5.05	2.2500	57.15	1.1875	30.16	49378	48378
	7	.2010	5.11	2.2500	57.15	1.1875	30.16	49377	48377
13/64		.2031	5.16	2.2500	57.15	1.1875	30.16	49213	48213
	6	.2040	5.18	2.3750	60.33	1.2500	31.75	49376	48376
	5	.2055	5.22	2.3750	60.33	1.2500	31.75	49375	48375
	4	.2090	5.31	2.3750	60.33	1.2500	31.75	49374	48374
	3	.2130	5.41	2.3750	60.33	1.2500	31.75	49373	48373
7/32		.2188	5.56	2.3750	60.33	1.2500	31.75	49214	48214
	2	.2210	5.61	2.4375	61.91	1.3125	33.34	49372	48372
	1	.2280	5.79	2.4375	61.91	1.3125	33.34	49371	48371
	A	.2340	5.94	2.4375	61.91	1.3125	33.34	49233	48233
15/64		.2344	5.95	2.4375	61.91	1.3125	33.34	49215	48215
	B	.2380	6.05	2.5000	63.50	1.3750	34.93	49234	48234
	C	.2420	6.15	2.5000	63.50	1.3750	34.93	49235	48235
	D	.2460	6.25	2.5000	63.50	1.3750	34.93	49236	48236

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## Heavy-Duty (continued) Style 159, 159-TN (2159)

### INCH SIZES

Fraction	Drill Diameter		Overall Length		Flute Length		Style 159	Style 159-TN	
	Wire/Let	Decimal	mm	Inch	mm	Inch	Black Oxide	TiN	
1/4	E	.2500	6.35	2.5000	63.50	1.3750	34.93	49216	48216
	F	.2570	6.53	2.6250	66.68	1.4375	36.51	49237	48237
	G	.2610	6.63	2.6250	66.68	1.4375	36.51	49238	48238
17/64		.2656	6.75	2.6250	66.68	1.4375	36.51	49217	48217
	H	.2660	6.76	2.6875	68.26	1.5000	38.10	49239	48239
	I	.2720	6.91	2.6875	68.26	1.5000	38.10	49240	48240
	J	.2770	7.04	2.6875	68.26	1.5000	38.10	49241	48241
	K	.2812	7.14	2.6875	68.26	1.5000	38.10	49242	48242
9/32		.2812	7.14	2.6875	68.26	1.5000	38.10	49218	48218
	L	.2900	7.37	2.7500	69.85	1.5625	39.69	49243	48243
	M	.2950	7.49	2.7500	69.85	1.5625	39.69	49244	48244
19/64		.2969	7.54	2.7500	69.85	1.5625	39.69	49219	48219
	N	.3020	7.67	2.8125	71.44	1.6250	41.28	49245	48245
5/16		.3125	7.94	2.8125	71.44	1.6250	41.28	49220	48220
	O	.3160	8.03	2.9375	74.61	1.6875	42.86	49246	48246
	P	.3230	8.20	2.9375	74.61	1.6875	42.86	49247	48247
21/64		.3281	8.33	2.9375	74.61	1.6875	42.86	49221	48221
	Q	.3320	8.43	3.0000	76.20	1.6875	42.86	49248	48248
	R	.3390	8.61	3.0000	76.20	1.6875	42.86	49249	48249
11/32		.3438	8.73	3.0000	76.20	1.6875	42.86	49222	48222
	S	.3480	8.84	3.0625	77.79	1.7500	44.45	49250	48250
	T	.3580	9.09	3.0625	77.79	1.7500	44.45	49251	48251
23/64		.3594	9.13	3.0625	77.79	1.7500	44.45	49223	48223
	U	.3680	9.35	3.1250	79.38	1.8125	46.04	49252	48252
3/8		.3750	9.53	3.1250	79.38	1.8125	46.04	49224	48224
	V	.3770	9.58	3.2500	82.55	1.8750	47.63	49253	48253
	W	.3860	9.80	3.2500	82.55	1.8750	47.63	49254	48254
25/64		.3906	9.92	3.2500	82.55	1.8750	47.63	49225	48225
	X	.3970	10.08	3.3125	84.14	1.9375	49.21	49255	48255
	Y	.4040	10.26	3.3125	84.14	1.9375	49.21	49256	48256
13/32		.4062	10.32	3.3125	84.14	1.9375	49.21	49226	48226
	Z	.4130	10.49	3.3750	85.73	2.0000	50.80	49257	48257
	27/64		.4219	10.72	3.3750	85.73	2.0000	49227	48227
7/16		.4375	11.11	3.4375	87.31	2.0625	52.39	49228	48228
29/64		.4531	11.51	3.5625	90.49	2.1250	53.98	49229	48229
15/32		.4688	11.91	3.6250	92.08	2.1250	53.98	49230	48230
31/64		.4844	12.30	3.6875	93.66	2.1875	55.56	49231	48231
1/2		.5000	12.70	3.7500	95.25	2.2500	57.15	49232	48232

### INCH SETS

#### Sets in Metal Index Cases

Number of Tools	Size Range	Style 159	Style 159-TN
		Black Oxide	TiN
15	1/16 - 1/2 X 1/32	69889	—
21	1/16 - 3/8 X 1/64	69852	—
29	1/16 - 1/2 X 1/64	57719	54128
60	#1 - #60 wire gauge	69885	—



Set 57719