Cobalt Heavy-Duty
Style 559, 559-TN (2559), 559-TA

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 cobalt high-speed steel.
- 135° P3 split point is self-centering for reduced thrust and easier penetration. Sizes under .0625" do not have split points.
- Straw and titanium nitride (TiN) finishes standard from stock; titanium aluminum nitride (TiAlN) is a non-stocked standard; alternate coatings available as stock modifications.

Application Information:

- tool steel (TiAlN, TiN, straw)
- alloy steel (TiAlN, straw)
- carbon steel (TiAlN, TiN, straw)
- cast iron (TiAlN, TiN, straw)

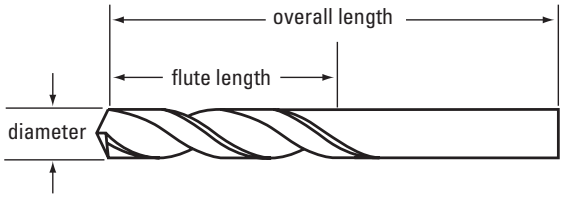
Surface Treatment Information:

- Straw finish allows for easy identification of cobalt tools.
- Titanium nitride (TiN) PVD coating adds lubricity and hardness which enhances chip flow, finish hole quality, and drill life.
- Titanium aluminum nitride (TiAlN) PVD coating combines the ability to work in high temperatures with added hardness to increase drill life.

Style 559 Straw Finish

Style 559-TN TiN-Coated

Style 559-TA TiAlN-Coated



INCH SIZES

Drill Diameter Fraction	Wire/Let	Metric	Decimal	mm	Overall Length Inch	mm	Flute Length Inch	mm	Style 559 Straw	Style 559-TN TiN	Style 559-TA TiAlN
	60		.0400	1.02	1.3750	34.93	.5000	12.70	50915	—	—
	59		.0410	1.04	1.3750	34.93	.5000	12.70	50914	—	—
	58		.0420	1.07	1.3750	34.93	.5000	12.70	50913	—	—
	57		.0430	1.09	1.3750	34.93	.5000	12.70	50912	—	—
	56		.0465	1.18	1.3750	34.93	.5000	12.70	50911	—	—
		1.0	.0472		1.1811	30	.3150	8	49000	—	—
	55		.0520	1.32	1.6250	41.28	.6250	15.88	50910	—	—
	54		.0550	1.40	1.6250	41.28	.6250	15.88	50909	—	—
		1.5	.0591		1.2598	32	.3543	9	49001	—	—
	53		.0595	1.51	1.6250	41.28	.6250	15.88	50908	—	—
1/16			.0625	1.59	1.6250	41.28	.6250	15.88	50801	51801	52804
		1.6	.0630		1.3386	34	.3937	10	49002	—	—
	52		.0635	1.61	1.6875	42.86	.6875	17.46	50907	—	—
	51		.0670	1.70	1.6875	42.86	.6875	17.46	50906	—	—
	50		.0700	1.78	1.6875	42.86	.6875	17.46	50905	—	—
	49		.0730	1.85	1.6875	42.86	.6875	17.46	50904	—	—
	48		.0760	1.93	1.6875	42.86	.6875	17.46	50903	—	—
5/64			.0781	1.98	1.6875	42.86	.6875	17.46	50802	51802	52805
	47		.0785	1.99	1.7500	44.45	.7500	19.05	50902	—	—
		2	.0787		1.4961	38	.4724	12	49003	—	—
		2.05	.0807		1.4961	38	.4724	12	49004	—	—

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

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Cobalt Heavy-Duty (continued)
Style 559, 559-TN (2559), 559-TA

INCH SIZES

Drill Diameter Fraction	Wire/Let	Metric	Decimal	mm	Overall Length Inch	mm	Flute Length Inch	mm	Style 559 Straw	Style 559-TN TiN	Style 559-TA TiAlN
	46		.0810	2.06	1.7500	44.45	.7500	19.05	50901	—	—
	45		.0820	2.08	1.7500	44.45	.7500	19.05	50900	—	—
	44		.0860	2.18	1.7500	44.45	.7500	19.05	50899	—	—
	43		.0890	2.26	1.7500	44.45	.7500	19.05	50898	—	—
	42		.0935	2.37	1.7500	44.45	.7500	19.05	50897	—	—
3/32			.0938	2.38	1.7500	44.45	.7500	19.05	50803	51803	52806
	41		.0960	2.44	1.8125	46.04	.8125	20.64	50896	—	—
	40		.0980	2.49	1.8125	46.04	.8125	20.64	50895	—	—
		2.5	.0984		1.6929	43	.5512	14	49005	—	—
	39		.0995	2.53	1.8125	46.04	.8125	20.64	50894	—	—
	38		.1015	2.58	1.8125	46.04	.8125	20.64	50893	—	—
		2.6	.1024	2.6	1.6929	43	.5512	14	49006	—	—
	37		.1040	2.64	1.8125	46.04	.8125	20.64	50892	—	—
	36		.1065	2.71	1.8125	46.04	.8125	20.64	50891	—	—
7/64			.1094	2.78	1.8125	46.04	.8125	20.64	50804	51804	52807
	35		.1100	2.79	1.8750	47.63	.8750	22.23	50890	—	—
	34		.1110	2.82	1.8750	47.63	.8750	22.23	50889	—	—
	33		.1130	2.87	1.8750	47.63	.8750	22.23	50888	—	—
	32		.1160	2.95	1.8750	47.63	.8750	22.23	50887	—	—
	31		.1200	3.05	1.8750	47.63	.8750	22.23	50886	—	—
1/8			.1250	3.18	1.8750	47.63	.8750	22.23	50805	51805	52808
	30		.1285	3.26	1.9375	49.21	.9375	23.81	50885	—	—
		3.3	.1299		1.9291	49	.7087	18	49007	—	—
	29		.1360	3.45	1.9375	49.21	.9375	23.81	50884	—	—
		3.5	.1378	3.5	2.0472	52	.7874	20	49008	—	—
	28		.1405	3.57	1.9375	49.21	.9375	23.81	50883	—	—
9/64			.1406	3.57	1.9375	49.21	.9375	23.81	50806	51806	52809
	27		.1440	3.66	2.0625	52.39	1.0000	25.40	50882	—	—
	26		.1470	3.73	2.0625	52.39	1.0000	25.40	50881	—	—
	25		.1495	3.80	2.0625	52.39	1.0000	25.40	50880	—	—
	24		.1520	3.86	2.0625	52.39	1.0000	25.40	50879	—	—
	23		.1540	3.91	2.0625	52.39	1.0000	25.40	50878	—	—
5/32			.1562	3.97	2.0625	52.39	1.0000	25.40	50807	51807	52810
	22		.1570	3.99	2.1250	53.98	1.0625	26.99	50877	—	—
		4	.1575		2.1654	55	.8661	22	49009	—	—
	21		.1590	4.04	2.1250	53.98	1.0625	26.99	50876	—	—
	20		.1610	4.09	2.1250	53.98	1.0625	26.99	50875	—	—
		4.2	.1654		2.1654	55	.8661	22	49010	—	—
	19		.1660	4.22	2.1250	53.98	1.0625	26.99	50874	—	—
	18		.1695	4.31	2.1250	53.98	1.0625	26.99	50873	—	—
11/64			.1719	4.37	2.1250	53.98	1.0625	26.99	50808	51808	52811
	17		.1730	4.39	2.1875	55.56	1.1250	31.75	50872	—	—
	16		.1770	4.50	2.1875	55.56	1.1250	31.75	50871	—	—
		4.5	.1772		2.2835	58	.9449	24	49011	—	—
	15		.1800	4.57	2.1875	55.56	1.1250	31.75	50870	—	—
	14		.1820	4.62	2.1875	55.56	1.1250	31.75	50869	—	—
	13		.1850	4.70	2.1875	55.56	1.1250	31.75	50868	—	—
3/16			.1875	4.76	2.1875	55.56	1.1250	31.75	50809	51809	52812
	12		.1890	4.80	2.2500	57.15	1.1875	30.16	50867	—	—
	11		.1910	4.85	2.2500	57.15	1.1875	30.16	50866	—	—
	10		.1935	4.91	2.2500	57.15	1.1875	30.16	50865	—	—

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Chicago-Latrobe®

Cobalt Heavy-Duty (continued)
Style 559, 559-TN (2559), 559-TA

INCH SIZES

Drill Diameter					Overall Length		Flute Length		Style 559	Style 559-TN	Style 559-TA
Fraction	Wire/Let	Metric	Decimal	mm	Inch	mm	Inch	mm	Straw	TiN	TiAlN
	9		.1960	4.98	2.2500	57.15	1.1875	30.16	50864	—	—
		5	.1969		2.4409	62	1.0236	26	49012	—	—
	8		.1990	5.05	2.2500	57.15	1.1875	30.16	50863	—	—
	7		.2010	5.11	2.2500	57.15	1.1875	30.16	50862	—	—
13/64			.2031	5.16	2.2500	57.15	1.1875	30.16	50810	51810	52813
	6		.2040	5.18	2.3750	60.33	1.2500	31.75	50861	—	—
	5		.2055	5.22	2.3750	60.33	1.2500	31.75	50860	—	—
	4		.2090	5.31	2.3750	60.33	1.2500	31.75	50859	—	—
	3		.2130	5.41	2.3750	60.33	1.2500	31.75	50858	—	—
		5.5	.2165		2.5984	66	1.1024	28	49013	—	—
7/32			.2188	5.56	2.3750	60.33	1.2500	31.75	50811	51811	52814
	2		.2210	5.61	2.4375	61.91	1.3125	33.34	50857	—	—
	1		.2280	5.79	2.4375	61.91	1.3125	33.34	50856	—	—
	A		.2340	5.94	2.4375	61.91	1.3125	33.34	50830	—	—
15/64			.2344	5.95	2.4375	61.91	1.3125	33.34	50812	51812	52815
		6	.2362		2.5984	66	1.1024	28	49014	—	—
	B		.2380	6.05	2.5000	63.50	1.3750	34.93	50831	—	—
	C		.2420	6.15	2.5000	63.50	1.3750	34.93	50832	—	—
	D		.2460	6.25	2.5000	63.50	1.3750	34.93	50833	—	—
1/4	E		.2500	6.35	2.5000	63.50	1.3750	34.93	50813	51813	52816
		6.4	.2520		2.7559	70	1.2205	31	49015	—	—
	F		.2570	6.53	2.6250	66.68	1.4375	36.51	50835	—	—
	G		.2610	6.63	2.6250	66.68	1.4375	36.51	50836	—	—
		6.7	.2638		2.9134	74	1.3386	34	49016	—	—
17/64			.2656	6.75	2.6250	66.68	1.4375	36.51	50814	51814	52817
	H		.2660	6.76	2.6875	68.26	1.5000	38.10	50837	—	—
	I		.2720	6.91	2.6875	68.26	1.5000	38.10	50838	—	—
		7	.2756		2.9134	74	1.3386	34	49017	—	—
	J		.2770	7.04	2.6875	68.26	1.5000	38.10	50839	—	—
	K		.2812	7.14	2.6875	68.26	1.5000	38.10	50840	—	—
9/32			.2812	7.14	2.6875	68.26	1.5000	38.10	50815	51815	52818
	L		.2900	7.37	2.7500	69.85	1.5625	39.69	50841	—	—
	M		.2950	7.49	2.7500	69.85	1.5625	39.69	50842	—	—
19/64			.2969	7.54	2.7500	69.85	1.5625	39.69	50816	51816	52819
	N		.3020	7.67	2.8125	71.44	1.6250	41.28	50843	—	—
5/16			.3125	7.94	2.8125	71.44	1.6250	41.28	50817	51817	52820
		8	.3150		3.1102	79	1.4567	37	49018	—	—
	O		.3160	8.03	2.9375	74.61	1.6875	42.86	50844	—	—
	P		.3230	8.20	2.9375	74.61	1.6875	42.86	50845	—	—
21/64			.3281	8.33	2.9375	74.61	1.6875	42.86	50818	51818	52821
	Q		.3320	8.43	3.0000	76.20	1.6875	42.86	50846	—	—
		8.5	.3346		3.1102	79	1.4567	37	49019	—	—
	R		.3390	8.61	3.0000	76.20	1.6875	42.86	50847	—	—
11/32			.3438	8.73	3.0000	76.20	1.6875	42.86	50819	51819	52822
	S		.3480	8.84	3.0625	77.79	1.7500	44.45	50848	—	—
		9	.3543		3.3071	84	1.5748	40	49020	—	—
	T		.3580	9.09	3.0625	77.79	1.7500	44.45	50849	—	—
23/64			.3594	9.13	3.0625	77.79	1.7500	44.45	50820	51820	52823
	U		.3680	9.35	3.1250	79.38	1.8125	46.04	50850	—	—
3/8			.3750	9.53	3.1250	79.38	1.8125	46.04	50821	51821	52824
	V		.3770	9.58	3.2500	82.55	1.8750	47.63	50851	—	—
	W		.3860	9.80	3.2500	82.55	1.8750	47.63	50852	—	—

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GREENFIELD INDUSTRIES

Cobalt Heavy-Duty (continued)
Style 559, 559-TN (2559), 559-TA

Drill Diameter Fraction	Wire/Let	Metric	Decimal	mm	Overall Length Inch	mm	Flute Length Inch	mm	Style 559 Straw	Style 559-TN TiN	Style 559-TA TiAlN
25/64			.3906	9.92	3.2500	82.55	1.8750	47.63	50822	51822	52825
		10	.3937		3.5039	89	1.6929	43	49021	—	—
	X		.3970	10.08	3.3125	84.14	1.9375	49.21	50853	—	—
		10.2	.4016		3.5039	89	1.6929	43	49022	—	—
	Y		.4040	10.26	3.3125	84.14	1.9375	49.21	50854	—	—
13/32			.4062	10.32	3.3125	84.14	1.9375	49.21	50823	51823	52826
	Z		.4130	10.49	3.3750	85.73	2.0000	50.80	50855	—	—
27/64			.4219	10.72	3.3750	85.73	2.0000	50.80	50824	51824	52827
		11	.4331		3.7402	95	1.8504	47	49023	—	—
7/16			.4375	11.11	3.4375	87.31	2.0625	52.39	50825	51825	52828
29/64			.4531	11.51	3.5625	90.49	2.1250	53.98	50826	51826	52829
15/32			.4688	11.91	3.6250	92.08	2.1250	53.98	50827	51827	52830
		12	.4724		4.0157	102	2.0079	51	49024	—	—
31/64			.4844	12.30	3.6875	93.66	2.1875	55.56	50828	51828	52831
1/2			.5000	12.70	3.7500	95.25	2.2500	57.15	50829	51829	52832
		13	.5118		4.0157	102	2.0079	51	49025	—	—

INCH SETS

Sets in Metal Index Cases

Number of Tools	Size Range	Style 559 Straw
15	1/16 - 1/2 X 1/32	69856
29	1/16 - 1/2 X 1/64	69853
26	Letter A - Z	69855
60	#1 - #60 wire gauge	69854

Set 69855

TECH TIP

DRILL POINT ANGLES

118° point angles are used primarily in softer materials such as mild steels and cast irons. The advantages of a 118° point in these materials include control over chips, which are wide and thin.

135° split points should be engaged to cut harder steel materials, especially in deep holes over 4 times drill diameter. A 135° point cutting harder materials will produce narrower chips.

The length of the lips on a 135° point measured from the axis to the outer corners is relativity short and thus penetrates much quicker into the work piece reducing thrust and abrasion along the cutting edges.

If re-pointing a standard 118° point to 135° you must make a lip correction to reduce the hook of the cutting face. In drills, the cutting rake angles are generated by the flute shape. Reducing the hook adjusts the rake cutting angles for a 135° point.