

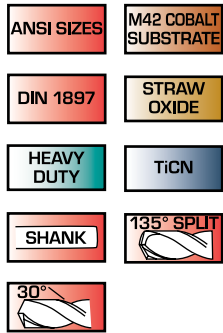
# General Application Drills

## Screw Machine Length

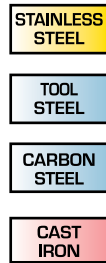
### Style 2133, 2133-TC • Cobalt Heavy-Duty Screw Machine Length

DRILLING

#### FEATURES



#### APPLICATIONS



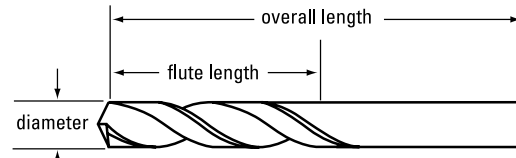
High red hardness for extended wear life in high heat conditions.



Style 2133 Straw Oxide



Style 2133-TC TiCN-coated



Operating parameters on page 23.

HOLE FINISHING

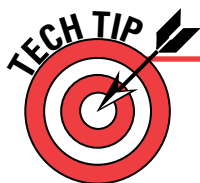
THREADING

MILLING

Drill Diameter Fract Wire/Let	Decimal Metric	Metric Equiv.	Metric Equiv.	Flute Length		Overall Length		Order Number	
				in	mm	in	mm	Straw	TiCN
60		.0400	1.02	.500	12.70	1.375	34.93	C14501	–
59		.0410	1.04	.500	12.70	1.375	34.93	C14502	–
58		.0420	1.07	.500	12.70	1.375	34.93	C14504	–
57		.0430	1.09	.500	12.70	1.375	34.93	C14505	–
56		.0465	1.18	.500	12.70	1.375	34.93	C14508	–
3/64		.0469	1.19	.500	12.70	1.375	34.93	C14509	–
	1.2	.0472	1.20	.315	8.00	1.181	30.00	C14835	–
55		.0520	1.32	.625	15.88	1.625	41.28	C14513	–
54		.0550	1.40	.625	15.88	1.625	41.28	C14515	–
1/16	1.5	.0591	1.50	.354	9.00	1.260	32.00	C14838	–
		.0595	1.51	.625	15.88	1.625	41.28	C14519	–
53		.0625	1.59	.625	15.88	1.625	41.28	C14521	C14846
	1.6	.0630	1.60	.394	10.00	1.339	34.00	C14748	–
52		.0635	1.61	.688	17.46	1.688	42.86	C14523	–
51		.0670	1.70	.688	17.46	1.688	42.86	C14526	–
50		.0700	1.78	.688	17.46	1.688	42.86	C14528	–
49		.0730	1.85	.688	17.46	1.688	42.86	C14531	–
48		.0760	1.93	.688	17.46	1.688	42.86	C14533	–
5/64		.0781	1.98	.688	17.46	1.688	42.86	C14535	–
	47	.0785	1.99	.750	19.05	1.750	44.45	C14536	–
46	2.0	.0787	2.00	.472	12.00	1.496	38.00	C14800	C14749
		.0810	2.06	.750	19.05	1.750	44.45	C14539	–
45		.0820	2.08	.750	19.05	1.750	44.45	C14540	–
44		.0860	2.18	.750	19.05	1.750	44.45	C14543	–
43		.0890	2.26	.750	19.05	1.750	44.45	C14546	–
42		.0935	2.38	.750	19.05	1.750	44.45	C14549	–
3/32		.0938	2.38	.750	19.05	1.750	44.45	C14550	C14848
	2.4	.0945	2.40	.551	14.00	1.693	43.00	C14790	–

continued on next page

OTHER TOOLS



#### Benefits of 2133 Cobalt Screw Machine Drill

- Cobalt provides high heat resistance for tough applications.
- Short flutes provide enhanced rigidity and drill more accurate holes.



Style 2133, 2133-TC • Cobalt Heavy-Duty Screw Machine Length (continued)

Drill Diameter		Decimal	Metric	Flute Length		Overall Length		Order Number	
Fract	Wire/Let	Equiv.	Equiv.	in	mm	in	mm	Straw	TiCN
	41	.0960	2.44	.813	20.64	1.813	46.04	C14552	–
	40	.0980	2.49	.813	20.64	1.813	46.04	C14554	–
		2.5	.0984	2.50	.551	14.00	1.693	43.00	C14820 C14750
	39	.0995	2.53	.813	20.64	1.813	46.04	C14556	–
	39	.1015	2.58	.813	20.64	1.813	46.04	C14557	–
		2.6	.1024	2.60	.551	14.00	1.693	43.00	C14840 C14730
	37	.1040	2.64	.813	20.64	1.813	46.04	C14559	–
	36	.1065	2.71	.813	20.64	1.813	46.04	C14561	–
7/64		.1094	2.78	.813	20.64	1.813	46.04	C14562	–
	35	.1100	2.79	.875	22.23	1.875	47.63	C14563	–
		2.8	.1102	2.80	.630	16.00	1.811	46.00	C14841 –
	34	.1110	2.82	.875	22.23	1.875	47.63	C14565	–
	33	.1130	2.87	.875	22.23	1.875	47.63	C14566	–
	32	.1160	2.95	.875	22.23	1.875	47.63	C14568	–
		3.0	.1181	3.00	.630	16.00	1.811	46.00	C14821 C14751
	31	.1200	3.05	.875	22.23	1.875	47.63	C14570	–
		3.1	.1220	3.10	.709	18.00	1.929	49.00	C14822 C14752
1/8		.1250	3.18	.875	22.23	1.875	47.63	C14572	C14850
		3.2	.1260	3.20	.709	18.00	1.929	49.00	C14801 C14753
	30	.1285	3.26	.938	23.81	1.938	49.21	C14574	–
		3.3	.1299	3.30	.709	18.00	1.929	49.00	C14802 C14754
	29	.1360	3.45	.938	23.81	1.938	49.21	C14577	–
		3.5	.1378	3.50	.787	20.00	2.047	52.00	C14803 C14755
	28	.1405	3.57	.938	23.81	1.938	49.21	C14579	–
9/64		.1406	3.57	.938	23.81	1.938	49.21	C14580	–
	27	.1440	3.66	1.000	25.40	2.063	52.39	C14582	–
		3.7	.1457	3.70	.787	20.00	2.047	52.00	C14823 –
	26	.1470	3.73	1.000	25.40	2.063	52.39	C14584	–
	25	.1495	3.80	1.000	25.40	2.063	52.39	C14585	–
	24	.1520	3.86	1.000	25.40	2.063	52.39	C14587	–
	23	.1540	3.91	1.000	25.40	2.063	52.39	C14589	–
5/32		.1562	3.97	1.000	25.40	2.063	52.39	C14590	C14852
	22	.1570	3.99	1.063	26.99	2.125	53.98	C14591	–
		4.0	.1575	4.00	.866	22.00	2.165	55.00	C14824 C14756
	21	.1590	4.04	1.063	26.99	2.125	53.98	C14593	–
	20	.1610	4.09	1.063	26.99	2.125	53.98	C14594	–
		4.1	.1614	4.10	.866	22.00	2.165	55.00	C14825 C14757
		4.2	.1654	4.20	.866	22.00	2.165	55.00	C14804 C14758
	19	.1660	4.22	1.063	26.99	2.125	53.98	C14597	–
	18	.1695	4.31	1.063	26.99	2.125	53.98	C14599	–
11/64		.1719	4.37	1.063	26.99	2.125	53.98	C14600	–
	17	.1730	4.39	1.125	28.58	2.188	55.56	C14601	–
	16	.1770	4.50	1.125	28.58	2.188	55.56	C14603	–
		4.5	.1772	4.50	.945	24.00	2.283	58.00	C14805 C14759
	15	.1800	4.57	1.125	28.58	2.188	55.56	C14605	–
		4.6	.1811	4.60	.945	24.00	2.283	58.00	C14842 C14728
	14	.1820	4.62	1.125	28.58	2.188	55.56	C14607	–
	13	.1850	4.70	1.125	28.58	2.188	55.56	C14608	–
3/16		.1875	4.76	1.125	28.58	2.188	55.56	C14610	C14854
		4.8	.1890	4.80	1.024	26.00	2.441	62.00	C14806 C14760
	12	.1890	4.80	1.188	30.16	2.250	57.15	C14611	–
	11	.1910	4.85	1.188	30.16	2.250	57.15	C14613	–

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DRILLING

HOLE FINISHING

THREADING

MILLING

OTHER TOOLS

# Screw Machine Length

Style 2133, 2133-TC • Cobalt Heavy-Duty Screw Machine Length (continued)

Fract	Drill Diameter		Decimal Equiv.	Metric Equiv.	Flute Length		Overall Length		Order Number	
	Wire/Let	Metric			in	mm	in	mm	Straw	TiCN
10		4.9	.1929	4.90	1.024	26.00	2.441	62.00	C14826	–
			.1935	4.92	1.188	30.16	2.250	57.15	C14615	–
9		5.0	.1960	4.98	1.188	30.16	2.250	57.15	C14616	–
			.1969	5.00	1.024	26.00	2.441	62.00	C14827	C14761
8		5.1	.1990	5.06	1.188	30.16	2.250	57.15	C14618	–
			.2008	5.10	1.024	26.00	2.441	62.00	C14807	C14762
13/64		7	.2010	5.11	1.188	30.16	2.250	57.15	C14620	–
			.2031	5.16	1.188	30.16	2.250	57.15	C14621	–
6		5	.2040	5.18	1.250	31.75	2.375	60.33	C14622	–
			.2055	5.22	1.250	31.75	2.375	60.33	C14624	–
4		3	.2090	5.31	1.250	31.75	2.375	60.33	C14626	–
			.2130	5.41	1.250	31.75	2.375	60.33	C14628	–
7/32		5.5	.2165	5.50	1.102	28.00	2.598	66.00	C14828	C14786
			.2188	5.56	1.250	31.75	2.375	60.33	C14630	C14856
2		5.6	.2205	5.60	1.102	28.00	2.598	66.00	C14843	–
			.2210	5.61	1.313	33.34	2.438	61.91	C14632	–
1		5.7	.2244	5.70	1.102	28.00	2.598	66.00	C14844	–
			.2280	5.79	1.313	33.34	2.438	61.91	C14634	–
15/64		A	.2340	5.94	1.313	33.34	2.438	61.91	C14637	–
			.2344	5.95	1.313	33.34	2.438	61.91	C14638	–
6.0		B	.2362	6.00	1.102	28.00	1.102	28.00	C14829	C14763
			.2380	6.05	1.375	34.93	2.500	63.50	C14640	–
6.1		C	.2402	6.10	1.220	31.00	2.756	70.00	C14869	–
			.2420	6.15	1.375	34.93	2.500	63.50	C14642	–
1/4, E		D	.2460	6.25	1.375	34.93	2.500	63.50	C14644	–
			E	.2500	6.35	1.375	34.93	2.500	63.50	C14646
6.5		F	.2559	6.50	1.220	31.00	2.756	70.00	C14808	C14764
			.2570	6.53	1.438	36.51	2.625	66.68	C14649	–
6.6		G	.2598	6.60	1.220	31.00	2.756	70.00	C14809	–
			.2610	6.63	1.438	36.51	2.625	66.68	C14651	–
17/64		H	.2656	6.75	1.438	36.51	2.625	66.68	C14653	–
			.2660	6.76	1.500	38.10	2.688	68.26	C14654	–
6.8		I	.2677	6.80	1.339	34.00	2.913	74.00	C14810	C14765
			.2720	6.91	1.500	38.10	2.688	68.26	C14657	–
7.0		J	.2756	7.00	1.339	34.00	2.913	74.00	C14830	C14766
			.2770	7.04	1.500	38.10	2.688	68.26	C14659	–
9/32		K	.2810	7.14	1.500	38.10	2.688	68.26	C14661	–
			.2812	7.14	1.500	38.10	2.688	68.26	C14664	C14860
L		7.4	.2900	7.37	1.563	39.69	2.750	69.85	C14665	–
			.2913	7.40	1.339	34.00	2.913	74.00	C14811	–
M		7.5	.2950	7.49	1.563	39.69	2.750	69.85	C14667	–
			.2953	7.50	1.339	34.00	2.913	74.00	C14831	C14787
19/64		N	.2969	7.54	1.563	39.69	2.750	69.85	C14669	–
			.3020	7.67	1.625	41.28	2.813	71.44	C14671	–
5/16		8.0	.3125	7.94	1.625	41.28	2.813	71.44	C14675	C14861
			.3150	8.00	1.457	37.00	3.110	79.00	C14812	C14767
O		8.1	.3160	8.03	1.688	42.86	2.938	74.61	C14677	–
			.3189	8.10	1.457	37.00	3.110	79.00	C14670	–
P		8.2	.3230	8.20	1.688	42.86	2.938	74.61	C14680	–
			.3281	8.33	1.688	42.86	2.938	74.61	C14682	–
21/64		Q	.3320	8.43	1.688	42.86	3.000	76.20	C14684	–
			.3346	8.50	1.457	37.00	3.110	79.00	C14813	C14768

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Style 2133, 2133-TC • Cobalt Heavy-Duty Screw Machine Length (continued)

Drill Diameter		Decimal	Metric	Flute Length		Overall Length		Order Number		
Fract	Letter	Equiv.	Equiv.	in	mm	in	mm	Straw	TiCN	
11/32	R	.3390	8.61	1.688	42.86	3.000	76.20	C14687	–	
		.3438	8.73	1.688	42.86	3.000	76.20	C14689	C14862	
	S	9.0	.3480	8.84	1.750	44.45	3.063	77.79	C14691	–
			.3543	9.00	1.575	40.00	3.307	84.00	C14814	C14769
23/64	T		.3580	9.09	1.750	44.45	3.063	77.79	C14694	–
			.3594	9.13	1.750	44.45	3.063	77.79	C14696	–
3/8	U	9.5	.3680	9.35	1.813	46.04	3.125	79.38	C14699	–
			.3740	9.50	1.575	40.00	3.307	84.00	–	C14770
	V		.3750	9.53	1.813	46.04	3.125	79.38	C14702	C14863
			.3770	9.58	1.875	47.63	3.250	82.55	C14703	–
25/64	W		.3860	9.80	1.875	47.63	3.250	82.55	C14707	–
			.3906	9.92	1.875	47.63	3.250	82.55	C14709	–
	X	10.0	.3937	10.00	1.693	43.00	3.504	89.00	C14815	C14771
			.3970	10.08	1.938	49.21	3.313	84.14	C14711	–
13/32	Y		.4040	10.26	1.938	49.21	3.313	84.14	C14713	–
			.4062	10.32	1.938	49.21	3.313	84.14	C14715	C14864
	Z	10.5	.4130	10.49	2.000	50.80	3.375	85.73	C14716	–
			.4134	10.50	1.693	43.00	3.504	89.00	C14816	C14788
27/64			.4219	10.72	2.000	50.80	3.375	85.73	C14718	–
7/16		11.0	.4331	11.00	1.850	47.00	3.740	95.00	C14817	C14772
				.4375	11.11	2.063	52.39	3.438	87.31	C14721
29/64		11.5	.4528	11.50	1.850	47.00	3.740	95.00	C14832	C14773
				.4531	11.51	2.125	53.98	3.563	90.49	C14724
15/32			.4688	11.91	2.125	53.98	3.625	92.08	C14726	C14867
		12.0	.4724	12.00	2.008	51.00	4.016	102.00	C14818	C14774
				.4844	12.30	2.188	55.56	3.688	93.66	C14729
31/64			.4921	12.50	2.008	51.00	4.016	102.00	C14819	C14775
1/2			.5000	12.70	2.250	57.15	3.750	95.25	C14731	C14866

DRILLING

HOLE FINISHING

THREADING

MILLING

OTHER TOOLS

