

NAS-Type Heavy-Duty Styles 150ASP, 150ASP-TN, 150ASP-TC, 150ASP-TA

Features/Benefits:

- Manufactured to NAS 907 Type B geometry aerospace specifications.
- Heavy-duty construction for drilling in tougher materials.
- Manufactured from premium high-speed steel.
- 135° P3 split point is self-centering for reduced thrust and easier penetration. Sizes smaller than .0625" do not have split point.
- Black oxide, titanium nitride (TiN), titanium carbonitride (TiCN), and titanium aluminum nitride (TiAlN) finishes standard; alternate coatings available as stock modifications.

Application Information:

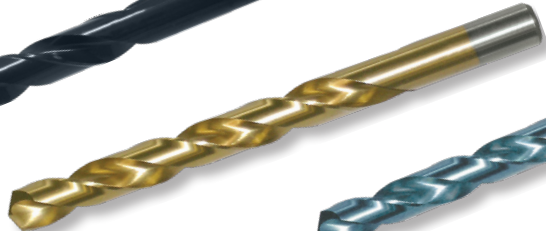
- stainless steel (TiAlN, TiCN, TiN, black oxide)
- tool steel (TiAlN, TiCN, TiN, black oxide)
- alloy steel (TiAlN, TiCN, TiN, black oxide)
- titanium (TiAlN)
- cast iron (TiAlN, TiCN, TiN, black oxide)

Surface Treatment Information:

- Black oxide surface finish increases wear resistance and adds lubricity to improve chip flow.
- Titanium nitride (TiN) coating adds lubricity and hardness, enhancing chip flow, finish hole quality, and drill life.
- Titanium carbonitride (TiCN) coating increases cutting surface hardness, making the tool highly resistant to abrasive wear.
- Titanium aluminum nitride (TiAlN) coating combines the ability to work in high temperatures with added hardness to increase drill life.



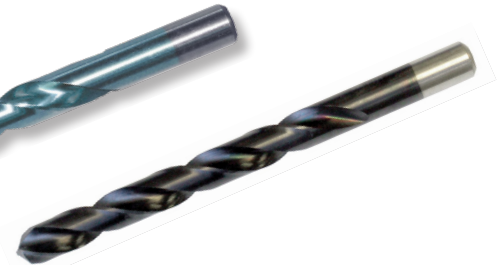
Style 150ASP
Black Oxide Finish



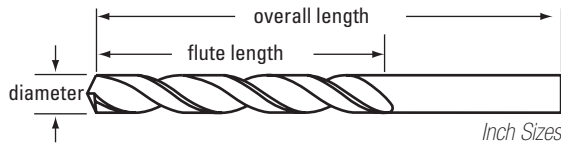
Style 150ASP-TN
TiN Coated



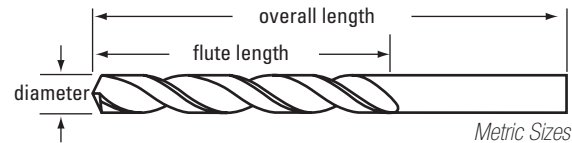
Style 150ASP-TC
TiCN Coated



Style 150ASP-TA
TiAlN Coated



Inch Sizes



Metric Sizes

INCH AND METRIC SIZES

Drill Diameter					Overall Length		Flute Length		Style 150ASP	Style 150ASP-TN	Style 150ASP-TC	Style 150ASP-TA
Fraction	Wire/Let	Metric	Decimal	mm	Inch	mm	Inch	mm	Black Oxide	TiN	TiCN	TiAlN
80*			.0135	0.34	.7500	19.05	.1250	3.18	44750	41750	—	—
79*			.0145	0.37	.7500	19.05	.1250	3.18	44749	41749	—	—
1/64*			.0156	0.40	.7500	19.05	.1875	4.76	44601	—	—	—
78*			.0160	0.41	.8750	22.23	.1875	4.76	44748	41748	—	—
77*			.0180	0.46	.8750	22.23	.1875	4.76	44747	41747	—	—
76*			.0200	0.51	.8750	22.23	.1875	4.76	44746	41746	—	—
75*			.0210	0.53	1.0000	25.40	.2500	6.35	44745	41745	—	—
74*			.0225	0.57	1.0000	25.40	.2500	6.35	44744	41744	—	—
73*			.0240	0.61	1.1250	28.58	.3125	7.94	44743	41743	—	—
72*			.0250	0.64	1.1250	28.58	.3125	7.94	44742	41742	—	—
71*			.0260	0.66	1.2500	31.75	.3750	9.53	44741	41741	—	—
70*			.0280	0.71	1.2500	31.75	.3750	9.53	44740	41740	—	—
69*			.0292	0.74	1.3750	34.93	.5000	12.70	44739	41739	—	—
68*			.0310	0.79	1.3750	34.93	.5000	12.70	44738	41738	—	—

*Sizes smaller than .0625 do not have split point.

continued on next page

NAS-Type Heavy-Duty (continued) Styles 150ASP, 150ASP-TN, 150ASP-TC, 150ASP-TA

INCH AND METRIC SIZES

Drill Diameter				Overall Length		Flute Length		Style 150ASP	Style 150ASP-TN	Style 150ASP-TC	Style 150ASP-TA
Fraction	Wire/Let	Metric	Decimal	mm	Inch	mm	Inch	Black Oxide	TiN	TiCN	TiAlN
1/32*			.0312	0.79	1.3750	34.93	.5000	12.70	44602	41602	43602
	67*		.0320	0.81	1.3750	34.93	.5000	12.70	44737	41737	—
	66*		.0330	0.84	1.3750	34.93	.5000	12.70	44736	41736	—
	65*		.0350	0.89	1.5000	38.10	.6250	15.88	44735	41735	—
	64*		.0360	0.91	1.5000	38.10	.6250	15.88	44734	41734	—
	63*		.0370	0.94	1.5000	38.10	.6250	15.88	44733	41733	—
	62*		.0380	0.97	1.5000	38.10	.6250	15.88	44732	41732	—
	61*		.0390	0.99	1.6250	41.28	.6875	17.46	44731	41731	—
	1.00*		.0394		1.3386	34.00	.4724	12.00	45800	—	—
	60*		.0400	1.02	1.6250	41.28	.6875	17.46	44730	41730	—
	59*		.0410	1.04	1.6250	41.28	.6875	17.46	44729	41729	—
	58*		.0420	1.07	1.6250	41.28	.6875	17.46	44728	41728	—
	57*		.0430	1.09	1.7500	44.45	.7500	19.05	44727	41727	—
	1.10*		.0433		1.4173	36.00	.5512	14.00	45801	—	—
	56*		.0465	1.18	1.7500	44.45	.7500	19.05	44726	41726	—
3/64*			.0469	1.19	1.7500	44.45	.7500	19.05	44603	41603	43603
	1.20*		.0472		1.4961	38.00	.6299	16.00	45802	—	—
	55*		.0520	1.32	1.8750	47.63	.8750	22.23	44725	41725	—
	54*		.0550	1.40	1.8750	47.63	.8750	22.23	44724	41724	—
	1.40*		.0551		1.5748	40.00	.7087	18.00	45804	—	—
	1.50*		.0591		1.5748	40.00	.7087	18.00	45805	—	—
	53*		.0595	1.51	1.8750	47.63	.8750	22.23	44723	41723	—
1/16			.0625	1.59	1.8750	47.63	.8750	22.23	45604	41604	43604
	1.60		.0630		1.6929	43.00	.7874	20.00	45806	—	—
	52		.0635	1.61	1.8750	47.63	.8750	22.23	45722	41722	43722
	1.70		.0669		1.6929	43.00	.7874	20.00	45807	—	—
	51		.0670	1.70	2.0000	50.80	1.0000	25.40	45721	41721	43721
	50		.0700	1.78	2.0000	50.80	1.0000	25.40	45720	41720	43720
	49		.0730	1.85	2.0000	50.80	1.0000	25.40	45719	41719	43719
	1.90		.0748		1.8110	46.00	.8661	22.00	45810	—	—
	48		.0760	1.93	2.0000	50.80	1.0000	25.40	45718	41718	43718
5/64			.0781	1.98	2.0000	50.80	1.0000	25.40	45605	41605	43605
	47		.0785	1.99	2.0000	50.80	1.0000	25.40	45717	41717	43717
	2.00		.0787		1.9291	49.00	.9449	24.00	45811	—	—
	46		.0810	2.06	2.1250	53.98	1.1250	28.58	45716	41716	43716
	45		.0820	2.08	2.1250	53.98	1.1250	28.58	45715	41715	43715
	2.10		.0827		1.9291	49.00	.9449	24.00	45812	—	—
	44		.0860	2.18	2.1250	53.98	1.1250	28.58	45714	41714	43714
	2.20		.0866		2.0866	53.00	1.0630	27.00	45813	—	—
	43		.0890	2.26	2.2500	57.15	1.2500	31.75	45713	41713	43713
	42		.0935	2.37	2.2500	57.15	1.2500	31.75	45712	41712	43712
3/32			.0938	2.38	2.2500	57.15	1.2500	31.75	45606	41606	43606
	2.40		.0945		2.2441	57.00	1.1811	30.00	45816	—	—
	41		.0960	2.44	2.3750	60.33	1.3750	34.93	45711	41711	43711
	40		.0980	2.49	2.3750	60.33	1.3750	34.93	45710	41710	43710
	2.50		.0984		2.2441	57.00	1.1811	30.00	45817	—	—
	39		.0995	2.53	2.3750	60.33	1.3750	34.93	45709	41709	43709
	38		.1015	2.58	2.5000	63.50	1.4375	36.51	45708	41708	43708
	2.60		.1024		2.2441	57.00	1.1811	30.00	45818	—	—
	37		.1040	2.64	2.5000	63.50	1.4375	36.51	45707	41707	43707
	2.70		.1062		2.4016	61.00	1.2992	33.00	45819	—	—
	36		.1065	2.71	2.5000	63.50	1.4375	36.51	45706	41706	43706

*Sizes smaller than .0625 do not have split point.

continued on next page

NAS-Type Heavy-Duty (continued) Styles 150ASP, 150ASP-TN, 150ASP-TC, 150ASP-TA

INCH AND METRIC SIZES

DRILL AND METRIC SIZES									Style 150ASP	Style 150ASP-TN	Style 150ASP-TC	Style 150ASP-TA
Drill Diameter			Overall Length		Flute Length							
Fraction	Wire/Let	Metric	Decimal	mm	Inch	mm	Inch	mm	Black Oxide	TiN	TiCN	TiAlN
7/64			.1094	2.78	2.6250	66.68	1.5000	38.10	45607	41607	43607	42607
	35		.1100	2.79	2.6250	66.68	1.5000	38.10	45705	41705	43705	42705
		2.80	.1102		2.4016	61.00	1.2992	33.00	45820	—	—	—
	34		.1110	2.82	2.6250	66.68	1.5000	38.10	45704	41704	43704	42704
	33		.1130	2.87	2.6250	66.68	1.5000	38.10	45703	41703	43703	42703
		2.90	.1142		2.4016	61.00	1.2992	33.00	45821	—	—	—
	32		.1160	2.95	2.7500	69.85	1.6250	41.28	45702	41702	43702	42702
		3.00	.1181		2.4016	61.00	1.2992	33.00	45822	—	—	—
	31		.1200	3.05	2.7500	69.85	1.6250	41.28	45701	41701	43701	42701
		3.10	.1220		2.5591	65.00	1.4173	36.00	45823	—	—	—
1/8			.1250	3.18	2.7500	69.85	1.6250	41.28	45608	41608	43608	42608
		3.20	.1260		2.5591	65.00	1.4173	36.00	45824	—	—	—
		3.25	.1279		2.5591	65.00	1.4173	36.00	45825	—	—	—
	30		.1285	3.26	2.7500	69.85	1.6250	41.28	45700	41700	43700	42700
		3.30	.1299		2.5591	65.00	1.4173	36.00	45826	—	—	—
	29		.1360	3.45	2.8750	73.03	1.7500	44.45	45699	41699	43699	42699
		3.50	.1378		2.7559	70.00	1.5354	39.00	45828	—	—	—
	28		.1405	3.57	2.8750	73.03	1.7500	44.45	45698	41698	43698	42698
	9/64		.1406	3.57	2.8750	73.03	1.7500	44.45	45609	41609	43609	42609
		3.60	.1417		2.7559	70.00	1.5354	39.00	45829	—	—	—
	27		.1440	3.66	3.0000	76.20	1.8750	47.63	45697	41697	43697	42697
		3.70	.1457		2.7559	70.00	1.5354	39.00	45830	—	—	—
	26		.1470	3.73	3.0000	76.20	1.8750	47.63	45696	41696	43696	42696
	25		.1495	3.80	3.0000	76.20	1.8750	47.63	45695	41695	43695	42695
		3.80	.1496		2.9528	75.00	1.6929	43.00	45831	—	—	—
	24		.1520	3.86	3.1250	79.38	2.0000	50.80	45694	41694	43694	42694
		3.90	.1535		2.9528	75.00	1.6929	43.00	45832	—	—	—
	23		.1540	3.91	3.1250	79.38	2.0000	50.80	45693	41693	43693	42693
	5/32		.1562	3.97	3.1250	79.38	2.0000	50.80	45610	41610	43610	42610
		22		.1570	3.99	3.1250	79.38	2.0000	50.80	45692	41692	43692
		4.00	.1575		2.9528	75.00	1.6929	43.00	45833	—	—	—
	21		.1590	4.04	3.2500	82.55	2.1250	53.98	45691	41691	43691	42691
	20		.1610	4.09	3.2500	82.55	2.1250	53.98	45690	41690	43690	42690
		4.10	.1614		2.9528	75.00	1.6929	43.00	45834	—	—	—
		4.20	.1654		2.9528	75.00	1.6929	43.00	45835	—	—	—
	19		.1660	4.22	3.2500	82.55	2.1250	53.98	45689	41689	43689	42689
		4.30	.1692		3.1496	80.00	1.8504	47.00	45836	—	—	—
	18		.1695	4.31	3.2500	82.55	2.1250	53.98	45688	41688	43688	42688
	11/64		.1719	4.37	3.2500	82.55	2.1250	53.98	45611	41611	43611	42611
		17		.1730	4.39	3.3750	85.73	2.1875	55.56	45687	41687	43687
	16		.1770	4.50	3.3750	85.73	2.1875	55.56	45686	41686	43686	42686
		4.50	.1772		3.1496	80.00	1.8504	47.00	45838	—	—	—
	15		.1800	4.57	3.3750	85.73	2.1875	55.56	45685	41685	43685	42685
		4.60	.1811		3.1496	80.00	1.8504	47.00	45839	—	—	—
	14		.1820	4.62	3.3750	85.73	2.1875	55.56	45684	41684	43684	42684
	13		.1850	4.70	3.5000	88.90	2.3125	58.74	45683	41683	43683	42683
	3/16		.1875	4.76	3.5000	88.90	2.3125	58.74	45612	41612	43612	42612
		12		.1890	4.80	3.5000	88.90	2.3125	58.74	45682	41682	43682
		4.80	.1890		3.3858	86.00	2.0472	52.00	45841	—	—	—
		11		.1910	4.85	3.5000	88.90	2.3125	58.74	45681	41681	43681
		4.90	.1929		3.3858	86.00	2.0472	52.00	45842	—	—	—

continued on next page

NAS-Type Heavy-Duty (continued) Styles 150ASP, 150ASP-TN, 150ASP-TC, 150ASP-TA

INCH AND METRIC SIZES

NCH AND METRIC SIZES									Style 150ASP	Style 150ASP-TN	Style 150ASP-TC	Style 150ASP-TA
Drill Diameter			Overall Length		Flute Length							
Fraction	Wire/Let	Metric	Decimal	mm	Inch	mm	Inch	mm	Black Oxide	TiN	TiCN	TiAlN
	10		.1935	4.91	3.6250	92.08	2.4375	61.91	45680	41680	43680	42680
	9		.1960	4.98	3.6250	92.08	2.4375	61.91	45679	41679	43679	42679
		5.00	.1969		3.3858	86.00	2.0472	52.00	45843	—	—	—
	8		.1990	5.05	3.6250	92.08	2.4375	61.91	45678	41678	43678	42678
		5.10	.2008		3.3858	86.00	2.0472	52.00	45845	—	—	—
	7		.2010	5.11	3.6250	92.08	2.4375	61.91	45677	41677	43677	42677
13/64			.2031	5.16	3.6250	92.08	2.4375	61.91	45613	41613	43613	42613
	6		.2040	5.18	3.7500	95.25	2.5000	63.50	45676	41676	43676	42676
		5.20	.2047		3.3858	86.00	2.0472	52.00	45846	—	—	—
	5		.2055	5.22	3.7500	95.25	2.5000	63.50	45675	41675	43675	42675
	4		.2090	5.31	3.7500	95.25	2.5000	63.50	45674	41674	43674	42674
		5.40	.2125		3.6614	93.00	2.2441	57.00	45849	—	—	—
	3		.2130	5.41	3.7500	95.25	2.5000	63.50	45673	41673	43673	42673
		5.50	.2165		3.6614	93.00	2.2441	57.00	45850	—	—	—
7/32			.2188	5.56	3.7500	95.25	2.5000	63.50	45614	41614	43614	42614
		5.60	.2205		3.6614	93.00	2.2441	57.00	45851	—	—	—
	2		.2210	5.61	3.8750	98.43	2.6250	66.68	45672	41672	43672	42672
		5.70	.2244		3.6614	93.00	2.2441	57.00	45852	—	—	—
	1		.2280	5.79	3.8750	98.43	2.6250	66.68	45671	41671	43671	42671
	A		.2340	5.94	3.8750	98.43	2.6250	66.68	45771	41771	43771	42771
15/64			.2344	5.95	3.8750	98.43	2.6250	66.68	45615	41615	43615	42615
	6.00		.2362		3.6614	93.00	2.2441	57.00	45855	—	—	—
	B		.2380	6.05	4.0000	101.60	2.7500	69.85	45772	41772	43772	42772
		6.10	.2401		3.9764	101.00	2.4803	63.00	45856	—	—	—
	C		.2420	6.15	4.0000	101.60	2.7500	69.85	45773	41773	43773	42773
		6.20	.2440		3.9764	101.00	2.4803	63.00	45857	—	—	—
	D		.2460	6.25	4.0000	101.60	2.7500	69.85	45774	41774	43774	42774
1/4	E		.2500	6.35	4.0000	101.60	2.7500	69.85	45616	41616	43616	42616
		6.40	.2520		3.9764	101.00	2.4803	63.00	45859	—	—	—
		6.50	.2559		3.9764	101.00	2.4803	63.00	45860	—	—	—
	F		.2570	6.53	4.1250	104.78	2.8750	73.03	45776	41776	43776	42776
		6.60	.2598		3.9764	101.00	2.4803	63.00	45861	—	—	—
	G		.2610	6.63	4.1250	104.78	2.8750	73.03	45777	41777	43777	42777
		6.70	.2638		3.9764	101.00	2.4803	63.00	45862	—	—	—
17/64			.2656	6.75	4.1250	104.78	2.8750	73.03	45617	41617	43617	42617
	H		.2660	6.76	4.1250	104.78	2.8750	73.03	45778	41778	43778	42778
		6.80	.2677		4.2913	109.00	2.7165	69.00	45863	—	—	—
		6.90	.2717		4.2913	109.00	2.7165	69.00	45864	—	—	—
	I		.2720	6.91	4.1250	104.78	2.8750	73.03	45779	41779	43779	42779
		7.00	.2756		4.2913	109.00	2.7165	69.00	45865	—	—	—
	J		.2770	7.04	4.1250	104.78	2.8750	73.03	45780	41780	43780	42780
	K		.2810	7.14	4.2500	107.95	2.9375	74.61	45781	41781	43781	42781
9/32			.2812	7.14	4.2500	107.95	2.9375	74.61	45618	41618	43618	42618
	L		.2900	7.37	4.2500	107.95	2.9375	74.61	45782	41782	43782	42782
	M		.2950	7.49	4.3750	111.13	3.0625	77.79	45783	41783	43783	42783
		7.50	.2953		4.2913	109.00	2.7165	69.00	45870	—	—	—
19/64			.2969	7.54	4.3750	111.13	3.0625	77.79	45619	41619	43619	42619
	N		.3020	7.67	4.3750	111.13	3.0625	77.79	45784	41784	43784	42784
5/16			.3125	7.94	4.5000	114.30	3.1875	80.96	45620	41620	43620	42620
		8.00	.3150		4.6063	117.00	2.9528	75.00	45875	—	—	—
	O		.3160	8.03	4.5000	114.30	3.1875	80.96	45785	41785	43785	42785
	P		.3230	8.20	4.6250	117.48	3.3125	84.14	45786	41786	43786	42786
21/64			.3281	8.33	4.6250	117.48	3.3125	84.14	45621	41621	43621	42621

continued on next page

NAS-Type Heavy-Duty (continued)
Styles 150ASP, 150ASP-TN, 150ASP-TC, 150ASP-TA

INCH AND METRIC SIZES

Drill Diameter					Overall Length		Flute Length		Style 150ASP	Style 150ASP-TN	Style 150ASP-TC	Style 150ASP-TA
Fraction	Wire/Let	Metric	Decimal	mm	Inch	mm	Inch	mm	Black Oxide	TiN	TiCN	TiAlN
Q			.3320	8.43	4.7500	120.65	3.4375	87.31	45787	41787	43787	42787
		8.50	.3346		4.6063	117.00	2.9528	75.00	45880	—	—	—
R			.3390	8.61	4.7500	120.65	3.4375	87.31	45788	41788	43788	42788
		11/32	.3438	8.73	4.7500	120.65	3.4375	87.31	45622	41622	43622	42622
S			.3480	8.84	4.8750	123.83	3.5000	88.90	45789	41789	43789	42789
		9.00	.3543		4.9213	125.00	3.1890	81.00	45885	—	—	—
T			.3580	9.09	4.8750	123.83	3.5000	88.90	45790	41790	43790	42790
		23/64	.3594	9.13	4.8750	123.83	3.5000	88.90	45623	41623	43623	42623
U			.3680	9.35	5.0000	127.00	3.6250	92.08	45791	41791	43791	42791
		9.50	.3740		4.9213	125.00	3.1890	81.00	45890	—	—	—
3/8			.3750	9.53	5.0000	127.00	3.6250	92.08	45624	41624	43624	42624
			.3770	9.58	5.0000	127.00	3.6250	92.08	45792	41792	43792	42792
W			.3860	9.80	5.1250	130.18	3.7500	95.25	45793	41793	43793	42793
		25/64	.3906	9.92	5.1250	130.18	3.7500	95.25	45625	41625	43625	42625
X		10.00	.3937		5.2362	133.00	3.4252	87.00	45895	—	—	—
			.3970	10.08	5.1250	130.18	3.7500	95.25	45794	41794	43794	42794
Y		10.20	.4016		5.2362	133.00	3.4252	87.00	45896	—	—	—
			.4040	10.26	5.2500	133.35	3.8750	98.43	45795	41795	43795	42795
13/32			.4062	10.32	5.2500	133.35	3.8750	98.43	45626	41626	43626	42626
			.4130	10.49	5.2500	133.35	3.8750	98.43	45796	41796	43796	42796
Z		10.50	.4134		5.2362	133.00	3.4252	87.00	45897	—	—	—
		27/64	.4219	10.72	5.3750	136.53	3.9375	100.01	45627	41627	43627	42627
7/16		11.00	.4331		5.5905	142.00	3.7008	94.00	45899	—	—	—
			.4375	11.11	5.5000	139.70	4.0625	103.19	45628	41628	43628	42628
29/64		11.50	.4527		5.5905	142.00	3.7008	94.00	45900	—	—	—
			.4531	11.51	5.6250	142.88	4.1875	106.36	45629	41629	43629	42629
15/32			.4688	11.91	5.7500	146.05	4.3125	109.54	45630	41630	43630	42630
		12.00	.4724		5.9449	151.00	3.9764	101.00	45902	—	—	—
31/64			.4844	12.30	5.8750	149.23	4.3750	111.13	45631	41631	43631	42631
		12.50	.4921		5.9449	151.00	3.9764	101.00	45904	—	—	—
1/2			.5000	12.70	6.0000	152.40	4.5000	114.30	45632	41632	43632	42632
		13.00	.5118		5.9449	151.00	3.9764	101.00	45905	—	—	—

INCH AND METRIC SETS

Sets in Metal Index Cases

Number of Tools	Size Range	Style 150ASP Black Oxide	Style 150ASP-TN TiN	Style 150ASP-TC TiCN	Style 150ASP-TA TiAlN
13	1/16 - 1/4 X 1/64	69847	41798	43638	42801
15	1/16 - 1/2 X 1/32	69850	41797	43637	42800
21	1/16 - 3/8 X 1/64	69851	41799	43639	49026
29	1/16 - 1/2 X 1/64	45640	41800	43640	49027
26	Letters A - Z	45638	41801	—	—
60	#1 - #60 wire gauge	45639	41802	—	—
20	#61 - #80 wire gauge	45656	41803	—	—
115	1/16 - 1/2 X 1/64, A - Z, #1 - #60	45650	41804	—	—
25	1mm - 13mm X 0.5mm	45925	—	—	—



Set 42800