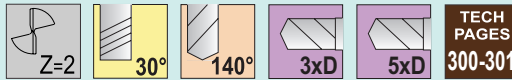


TOLERANCES

d	+.0000" - .0005" (+.0000 - .0127mm)	
l1	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)
l2	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)



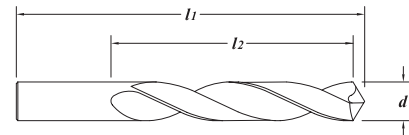
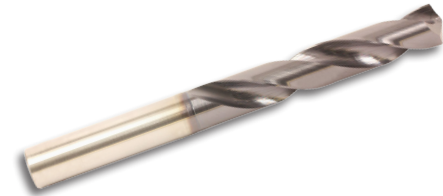
Series 1580H, 1280H

.1181" - .1719"
(3.000mm - 4.366mm)

Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

- High performance - high penetration solid submicron grain carbide drill
- Extended tool life and greater surface finish through faster SFM rates
- Up to 50% faster than standard carbide drills
- 30° helix for better chip evacuation
- Honed cutting edge
- Live tooling recommended on lathe processes



HIGH PERFORMANCE DRILLS

3xD (1580H) EDP#	5xD (1280H) EDP#	d †		l1 Overall Length	l2 Flute Length	1-11	12-24	25-49	50-100
		Decimal	Diameter Metric						
20301		.1181	3.000	46	16	30.13	28.82	27.51	26.20
	21301	.1181	3.000	50	19	31.49	30.12	28.75	27.38
20306		.1200	#31 3.048	1-13/16"	5/8"	30.44	29.12	27.79	26.47
	21306	.1200	#31 3.048	2"	3/4"	31.74	30.36	28.98	27.60
20311		.1250	1/8" 3.175	1-15/16"	11/16"	30.71	29.37	28.04	26.70
	21311	.1250	1/8" 3.175	2"	3/4"	31.99	30.60	29.21	27.82
20316		.1285	#30 3.264	1-15/16"	11/16"	30.98	29.63	28.29	26.94
	21316	.1285	#30 3.264	2-1/4"	3/4"	32.28	30.88	29.47	28.07
20321		.1360	#29 3.454	2-1/16"	3/4"	31.28	29.92	28.56	27.20
	21321	.1360	#29 3.454	2-1/4"	7/8"	32.52	31.11	29.69	28.28
20326		.1378	3.500	52	19	31.59	30.22	28.84	27.47
	21326	.1378	3.500	57	22	32.78	31.35	29.93	28.50
20331		.1405	#28 3.569	2-1/16"	3/4"	31.88	30.49	29.11	27.72
	21331	.1405	#28 3.569	2-1/4"	7/8"	33.04	31.60	30.17	28.73
20336		.1406	9/64" 3.571	2-1/16"	3/4"	32.15	30.76	29.36	27.96
	21336	.1406	9/64" 3.571	2-1/4"	7/8"	33.33	31.88	30.43	28.98
20341		.1440	#27 3.658	2-1/16"	3/4"	32.44	31.03	29.62	28.21
	21341	.1440	#27 3.658	2-1/4"	7/8"	33.55	32.09	30.63	29.17
20346		.1470	#26 3.734	2-3/16"	13/16"	32.69	31.27	29.85	28.43
	21346	.1470	#26 3.734	2-1/4"	7/8"	33.82	32.35	30.88	29.41
20351		.1495	#25 3.797	2-3/16"	13/16"	33.03	31.59	30.16	28.72
	21351	.1495	#25 3.797	2-1/4"	15/16"	34.09	32.60	31.12	29.64
20356		.1520	#24 3.861	2-3/16"	13/16"	33.29	31.85	30.40	28.95
	21356	.1520	#24 3.861	2-1/4"	15/16"	34.33	32.84	31.34	29.85
20361		.1540	#23 3.912	2-3/16"	13/16"	33.59	32.13	30.67	29.21
	21361	.1540	#23 3.912	2-1/4"	15/16"	34.62	33.11	31.61	30.10
20366		.1562	5/32" 3.967	2-3/16"	13/16"	33.86	32.38	30.91	29.44
	21366	.1562	5/32" 3.967	2-1/2"	15/16"	34.86	33.34	31.83	30.31
20371		.1570	#22 3.988	2-3/16"	13/16"	34.17	32.68	31.20	29.71
	21371	.1570	#22 3.988	2-1/2"	15/16"	35.11	33.58	32.06	30.53
20376		.1575	4.000	56	21	34.44	32.95	31.45	29.95
	21376	.1575	4.000	65	24	35.37	33.84	32.30	30.76
20381		.1590	#21 4.039	2-3/16"	13/16"	34.74	33.23	31.72	30.21
	21381	.1590	#21 4.039	2-1/2"	15/16"	35.63	34.08	32.53	30.98
20386		.1610	#20 4.089	2-3/16"	13/16"	35.04	33.52	31.99	30.47
	21386	.1610	#20 4.089	2-1/2"	15/16"	35.91	34.35	32.79	31.23
20391		.1660	#19 4.216	2-9/32"	15/16"	35.34	33.80	32.27	30.73
	21391	.1660	#19 4.216	2-1/2"	1"	36.17	34.60	33.02	31.45
20396		.1695	#18 4.305	2-9/32"	15/16"	35.62	34.07	32.52	30.97
	21396	.1695	#18 4.305	2-1/2"	1"	36.41	34.83	33.24	31.66
20401		.1719	11/64" 4.366	2-9/32"	15/16"	35.91	34.35	32.79	31.23
	21401	.1719	11/64" 4.366	2-1/2"	1"	36.67	35.08	33.48	31.89

continued →

Series 1580H, 1280H (continued)

.1730" - .2380"
(4.394mm - 6.045mm)

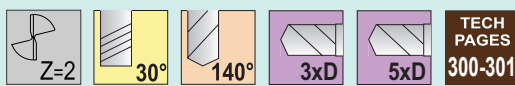
3xD (1580H) EDP#	5xD (1280H) EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Metric							
20406		.1730	#17	4.394	2-9/32"	15/16"	36.21	34.64	33.06	31.49
	21406	.1730	#17	4.394	2-1/2"	1"	36.92	35.31	33.71	32.10
20411		.1770	#16	4.496	2-9/32"	15/16"	36.46	34.87	33.29	31.70
	21411	.1770	#16	4.496	2-1/2"	1"	37.20	35.59	33.97	32.35
20416		.1772		4.500	58	24	36.77	35.17	33.57	31.97
	21416	.1772		4.500	65	25	37.47	35.84	34.21	32.58
20421		.1800	#15	4.572	2-9/32"	15/16"	37.02	35.41	33.80	32.19
	21421	.1800	#15	4.572	2-3/4"	1"	37.70	36.06	34.42	32.78
20426		.1820	#14	4.623	2-9/32"	15/16"	37.36	35.74	34.11	32.49
	21426	.1820	#14	4.623	2-3/4"	1"	37.95	36.30	34.65	33.00
20431		.1850	#13	4.700	2-9/32"	15/16"	37.63	35.99	34.36	32.72
	21431	.1850	#13	4.700	2-3/4"	1-1/4"	38.24	36.58	34.91	33.25
20436		.1875	3/16"	4.763	2-13/32"	1"	37.93	36.28	34.63	32.98
	21436	.1875	3/16"	4.763	2-3/4"	1-1/4"	38.51	36.84	35.16	33.49
20441		.1890	#12	4.801	2-13/32"	1"	38.21	36.55	34.89	33.23
	21441	.1890	#12	4.801	2-3/4"	1-1/4"	38.76	37.07	35.39	33.70
20446		.1910	#11	4.851	2-13/32"	1"	38.56	36.88	35.21	33.53
	21446	.1910	#11	4.851	2-3/4"	1-1/4"	39.00	37.30	35.61	33.91
20451		.1935	#10	4.915	2-13/32"	1"	38.79	37.10	35.42	33.73
	21451	.1935	#10	4.915	2-3/4"	1-1/4"	39.27	37.57	35.86	34.15
20456		.1960	#9	4.978	2-13/32"	1"	39.07	37.37	35.67	33.97
	21456	.1960	#9	4.978	3"	1-5/16"	39.51	37.80	36.08	34.36
20461		.1969		5.000	61	25	39.28	37.58	35.87	34.16
	21461	.1969		5.000	75	33	39.79	38.06	36.33	34.60
20466		.1990	#8	5.055	2-13/32"	1"	39.65	37.93	36.20	34.48
	21466	.1990	#8	5.055	3"	1-5/16"	40.00	38.26	36.52	34.78
20471		.2010	#7	5.105	2-13/32"	1"	39.77	38.04	36.31	34.58
	21471	.2010	#7	5.105	3"	1-5/16"	40.17	38.42	36.68	34.93
20476		.2031	13/64"	5.159	2-13/32"	1"	40.03	38.29	36.55	34.81
	21476	.2031	13/64"	5.159	3"	1-5/16"	40.47	38.71	36.95	35.19
20481		.2040	#6	5.182	2-13/32"	1"	40.31	38.56	36.80	35.05
	21481	.2040	#6	5.182	3"	1-3/8"	40.77	39.00	37.22	35.45
20486		.2055	#5	5.220	2-13/32"	1"	40.60	38.83	37.07	35.30
	21486	.2055	#5	5.220	3"	1-3/8"	41.04	39.26	37.47	35.69
20491		.2090	#4	5.309	2-13/32"	1"	40.84	39.06	37.29	35.51
	21491	.2090	#4	5.309	3"	1-3/8"	41.31	39.51	37.72	35.92
20496		.2130	#3	5.410	2-5/8"	1-3/32"	41.11	39.33	37.54	35.75
	21496	.2130	#3	5.410	3"	1-3/8"	41.60	39.79	37.98	36.17
20501		.2165		5.500	67	28	41.38	39.58	37.78	35.98
	21501	.2165		5.500	75	35	41.85	40.03	38.21	36.39
20506		.2188	7/32"	5.558	2-5/8"	1-3/32"	41.72	39.91	38.09	36.28
	21506	.2188	7/32"	5.558	3"	1-3/8"	42.11	40.28	38.45	36.62
20511		.2210	#2	5.613	2-5/8"	1-3/32"	42.02	40.19	38.37	36.54
	21511	.2210	#2	5.613	3"	1-3/8"	43.02	41.15	39.28	37.41
20516		.2280	#1	5.791	2-5/8"	1-3/32"	42.34	40.50	38.66	36.82
	21516	.2280	#1	5.791	3"	1-3/8"	43.24	41.36	39.48	37.60
20521		.2340	A	5.944	2-5/8"	1-3/32"	42.63	40.78	38.92	37.07
	21521	.2340	A	5.944	3-1/4"	1-1/2"	43.88	41.98	40.07	38.16
20526		.2344	15/64"	5.954	2-5/8"	1-3/32"	42.95	41.09	39.22	37.35
	21526	.2344	15/64"	5.954	3-1/4"	1-1/2"	44.00	42.09	40.17	38.26
20531		.2362		6.000	67	28	43.25	41.37	39.49	37.61
	21531	.2362		6.000	80	38	44.14	42.22	40.30	38.38
20536		.2380	B	6.045	2-3/4"	1-7/32"	43.55	41.66	39.76	37.87
	21536	.2380	B	6.045	3-1/4"	1-5/8"	44.26	42.34	40.41	38.49

3xD (1580H) EDP#	5xD (1280H) EDP#	d †		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Diameter							Metric
20541		.2420	C	6.147	2-3/4"	1-7/32"	43.90	41.99	40.08	38.17
	21541	.2420	C	6.147	3-1/4"	1-5/8"	44.56	42.63	40.69	38.75
20546		.2460	D	6.248	2-3/4"	1-7/32"	44.14	42.22	40.30	38.38
	21546	.2460	D	6.248	3-1/4"	1-5/8"	44.85	42.90	40.95	39.00
20551		.2500	1/4" / E	6.350	2-3/4"	1-7/32"	44.52	42.58	40.65	38.71
	21551	.2500	1/4" / E	6.350	3-1/4"	1-5/8"	45.10	43.14	41.18	39.22
20556		.2559		6.500	70	31	45.23	43.26	41.30	39.33
	21556	.2559		6.500	80	41	45.90	43.90	41.91	39.91
20561		.2570	F	6.528	2-3/4"	1-7/32"	45.94	43.95	41.95	39.95
	21561	.2570	F	6.528	3-1/4"	1-11/16"	46.69	44.66	42.63	40.60
20566		.2610	G	6.629	2-3/4"	1-7/32"	46.64	44.62	42.59	40.56
	21566	.2610	G	6.629	3-1/2"	1-11/16"	47.50	45.43	43.37	41.30
20571		.2656	17/64"	6.746	2-15/16"	1-11/32"	47.35	45.29	43.23	41.17
	21571	.2656	17/64"	6.746	3-1/2"	1-11/16"	48.27	46.17	44.07	41.97
20576		.2660	H	6.756	2-15/16"	1-11/32"	48.05	45.96	43.87	41.78
	21576	.2660	H	6.756	3-1/2"	1-11/16"	49.09	46.96	44.82	42.69
20581		.2720	I	6.909	2-15/16"	1-11/32"	48.76	46.64	44.52	42.40
	21581	.2720	I	6.909	3-1/2"	1-11/16"	49.88	47.71	45.54	43.37
20586		.2756		7.000	75	34	49.47	47.32	45.17	43.02
	21586	.2756		7.000	88	43	50.65	48.44	46.24	44.04
20591		.2770	J	7.036	2-15/16"	1-11/32"	50.16	47.98	45.80	43.62
	21591	.2770	J	7.036	3-1/2"	1-11/16"	51.44	49.20	46.97	44.73
20596		.2810	K	7.137	2-15/16"	1-11/32"	50.88	48.66	46.45	44.24
	21596	.2810	K	7.137	3-1/2"	1-3/4"	52.27	50.00	47.72	45.45
20601		.2812	9/32"	7.142	2-15/16"	1-11/32"	51.59	49.35	47.10	44.86
	21601	.2812	9/32"	7.142	3-1/2"	1-3/4"	53.05	50.74	48.44	46.13
20606		.2900	L	7.366	2-15/16"	1-11/32"	52.29	50.02	47.74	45.47
	21606	.2900	L	7.366	3-1/2"	1-3/4"	53.79	51.45	49.11	46.77
20611		.2950	M	7.493	2-15/16"	1-11/32"	53.30	50.99	48.67	46.35
	21611	.2950	M	7.493	3-3/4"	1-3/4"	54.56	52.18	49.81	47.44
20616		.2953		7.500	75	34	53.30	50.99	48.67	46.35
	21616	.2953		7.500	95	44	54.56	52.18	49.81	47.44
20621		.2969	19/64"	7.541	3-3/32"	1-15/32"	53.77	51.44	49.10	46.76
	21621	.2969	19/64"	7.541	3-3/4"	1-7/8"	55.10	52.70	50.31	47.91
20626		.3020	N	7.671	3-3/32"	1-15/32"	56.19	53.75	51.30	48.86
	21626	.3020	N	7.671	3-3/4"	1-7/8"	57.28	54.79	52.30	49.81
20631		.3125	5/16"	7.938	3-3/32"	1-15/32"	56.38	53.93	51.48	49.03
	21631	.3125	5/16"	7.938	3-3/4"	1-7/8"	57.45	54.96	52.46	49.96
20636		.3150		8.000	79	37	59.50	56.91	54.33	51.74
	21636	.3150		8.000	95	48	60.57	57.94	55.30	52.67
20641		.3160	O	8.026	3-3/32"	1-15/32"	59.50	56.91	54.33	51.74
	21641	.3160	O	8.026	3-3/4"	1-7/8"	60.57	57.94	55.30	52.67
20646		.3230	P	8.204	3-3/32"	1-15/32"	59.93	57.32	54.72	52.11
	21646	.3230	P	8.204	3-3/4"	2-3/32"	60.79	58.15	55.50	52.86
20651		.3281	21/64"	8.334	3-3/32"	1-15/32"	61.04	58.39	55.73	53.08
	21651	.3281	21/64"	8.334	4"	2-3/32"	61.35	58.69	56.02	53.35
20656		.3320	Q	8.433	3-3/32"	1-15/32"	62.13	59.43	56.73	54.03
	21656	.3320	Q	8.433	4"	2-3/32"	62.57	59.85	57.13	54.41
20661		.3346		8.500	79	37	62.40	59.69	56.97	54.26
	21661	.3346		8.500	100	53	63.03	60.29	57.55	54.81
20666		.3390	R	8.611	3-5/16"	1-9/16"	64.08	61.29	58.51	55.72
	21666	.3390	R	8.611	4"	2-3/32"	64.76	61.94	59.13	56.31
20671		.3438	11/32"	8.733	3-5/16"	1-9/16"	65.48	62.63	59.79	56.94
	21671	.3438	11/32"	8.733	4"	2-3/16"	67.03	64.12	61.20	58.29

continued →

Series 1580H, 1280H (continued)

.3480" - .4531"
(8.839mm - 11.509mm)



TOLERANCES		
<i>d</i>	+.0000" - .0005" (+.0000 - .0127mm)	
<i>l1</i>	≤ 1/8"	+ .125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+ .125" - .125" (+3.175 - 3.175mm)
<i>l2</i>	≤ 1/8"	+ .125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+ .125" - .125" (+3.175 - 3.175mm)

Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

High performance - high penetration solid submicron grain carbide drill



3xD (1580H) EDP#	5xD (1280H) EDP#	<i>d</i> † Diameter		<i>l1</i> Overall Length	<i>l2</i> Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Metric							
20676		.3480	S	8.839	3-5/16"	1-9/16"	67.65	64.71	61.77	58.83
	21676	.3480	S	8.839	4"	2-3/16"	69.66	66.63	63.60	60.57
20681		.3543		9.000	84	40	69.37	66.35	63.34	60.32
	21681	.3543		9.000	100	56	70.06	67.01	63.97	60.92
20686		.3580	T	9.093	3-5/16"	1-9/16"	72.09	68.96	65.82	62.69
	21686	.3580	T	9.093	4-1/4"	2-9/32"	72.83	69.66	66.50	63.33
20691		.3594	23/64"	9.129	3-5/16"	1-9/16"	72.54	69.39	66.23	63.08
	21691	.3594	23/64"	9.129	4-1/4"	2-9/32"	73.27	70.08	66.90	63.71
20696		.3680	U	9.347	3-5/16"	1-9/16"	74.05	70.83	67.61	64.39
	21696	.3680	U	9.347	4-1/4"	2-9/32"	77.44	74.07	70.71	67.34
20701		.3740		9.500	84	40	74.66	71.41	68.17	64.92
	21701	.3740		9.500	105	58	78.20	74.80	71.40	68.00
20706		.3750	3/8"	9.525	3-1/2"	1-11/16"	75.11	71.84	68.58	65.31
	21706	.3750	3/8"	9.525	4-1/4"	2-3/8"	78.99	75.56	72.12	68.69
20711		.3770	V	9.576	3-1/2"	1-11/16"	77.99	74.60	71.21	67.82
	21711	.3770	V	9.576	4-1/4"	2-3/8"	80.91	77.40	73.88	70.36
20716		.3860	W	9.804	3-1/2"	1-11/16"	79.36	75.91	72.46	69.01
	21716	.3860	W	9.804	4-1/2"	2-3/8"	82.35	78.77	75.19	71.61
20721		.3906	25/64"	9.921	3-1/2"	1-11/16"	80.36	76.87	73.37	69.88
	21721	.3906	25/64"	9.921	4-1/2"	2-3/8"	83.35	79.73	76.10	72.48
20726		.3937		10.000	89	43	82.79	79.19	75.59	71.99
	21726	.3937		10.000	115	60	85.86	82.13	78.39	74.66
20731		.3970	X	10.084	3-1/2"	1-11/16"	83.92	80.27	76.62	72.97
	21731	.3970	X	10.084	4-1/2"	2-1/2"	86.91	83.13	79.35	75.57
20736		.4040	Y	10.262	3-1/2"	1-11/16"	84.47	80.80	77.12	73.45
	21736	.4040	Y	10.262	4-1/2"	2-9/16"	89.53	85.64	81.74	77.85
20741		.4062	13/32"	10.317	3-1/2"	1-11/16"	87.07	83.28	79.50	75.71
	21741	.4062	13/32"	10.317	4-1/2"	2-9/16"	90.30	86.37	82.45	78.52
20746		.4130	Z	10.490	3-1/2"	1-11/16"	87.88	84.06	80.24	76.42
	21746	.4130	Z	10.490	4-1/2"	2-5/8"	91.13	87.16	83.20	79.24
20751		.4134		10.500	89	43	87.88	84.06	80.24	76.42
	21751	.4134		10.500	115	67	91.13	87.16	83.20	79.24
20756		.4219	27/64"	10.716	3-3/4"	1-13/16"	88.71	84.85	81.00	77.14
	21756	.4219	27/64"	10.716	4-1/2"	2-11/16"	91.94	87.95	83.95	79.95
20761		.4331		11.000	95	46	95.22	91.08	86.94	82.80
	21761	.4331		11.000	115	68	98.66	94.37	90.08	85.79
20766		.4375	7/16"	11.113	3-3/4"	1-13/16"	95.22	91.08	86.94	82.80
	21766	.4375	7/16"	11.113	4-3/4"	2-13/16"	99.05	94.74	90.44	86.13
20771		.4528		11.500	95	46	102.21	97.77	93.32	88.88
	21771	.4528		11.500	120	71	105.85	101.24	96.64	92.04
20776		.4531	29/64"	11.509	3-3/4"	1-13/16"	102.21	97.77	93.32	88.88
	21776	.4531	29/64"	11.509	4-3/4"	2-7/8"	105.85	101.24	96.64	92.04

3xD (1580H) EDP#	5xD (1280H) EDP#	d † Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Metric							
20781		.4688	15/32"	11.908	4"	1-15/16"	107.39	102.72	98.05	93.38
	21781	.4688	15/32"	11.908	4-3/4"	2-7/8"	111.17	106.34	101.50	96.67
20786		.4724		12.000	102	49	107.71	103.03	98.34	93.66
	21786	.4724		12.000	120	73	111.50	106.66	101.81	96.96
20791		.4844	31/64"	12.304	4"	1-15/16"	108.45	103.73	99.02	94.30
	21791	.4844	31/64"	12.304	5-5/16"	3"	112.75	107.84	102.94	98.04
20796		.4921		12.500	102	49	109.53	104.76	100.00	95.24
	21796	.4921		12.500	135	76	114.09	109.13	104.17	99.21
20801		.5000	1/2"	12.700	4"	1-15/16"	110.23	105.44	100.64	95.85
	21801	.5000	1/2"	12.700	5-3/8"	3-1/16"	114.32	109.35	104.38	99.41
20806		.5118		13.000	107	53	120.82	115.57	110.31	105.06
	21806	.5118		13.000	135	78	124.32	118.91	113.51	108.10
20811		.5156	33/64"	13.096	4-7/32"	2-3/32"	123.67	118.29	112.92	107.54
	21811	.5156	33/64"	13.096	5-3/8"	3-1/8"	127.22	121.69	116.16	110.63
20816		.5312	17/32"	13.492	4-7/32"	2-3/32"	126.52	121.02	115.52	110.02
	21816	.5312	17/32"	13.492	5-11/16"	3-5/16"	130.21	124.55	118.89	113.23
20821		.5315		13.500	110	56	129.38	123.75	118.13	112.50
	21821	.5315		13.500	145	84	133.09	127.30	121.52	115.73
20826		.5469	35/64"	13.891	4-5/16"	2-7/32"	132.22	126.47	120.72	114.97
	21826	.5469	35/64"	13.891	5-13/16"	3-3/8"	135.99	130.08	124.16	118.25
20831		.5512		14.000	110	56	135.08	129.21	123.33	117.46
	21831	.5512		14.000	145	86	138.93	132.89	126.85	120.81
20836		.5625	9/16"	14.288	4-9/16"	2-15/32"	145.41	139.08	132.76	126.44
	21836	.5625	9/16"	14.288	5-15/16"	3-1/2"	149.30	142.81	136.32	129.83
20841		.5709		14.500	116	63	148.13	141.69	135.25	128.81
	21841	.5709		14.500	150	89	152.05	145.44	138.83	132.22
20846		.5781	37/64"	14.684	4-15/16"	2-9/16"	150.78	144.22	137.67	131.11
	21846	.5781	37/64"	14.684	6"	3-1/2"	154.78	148.05	141.32	134.59
20851		.5906		15.000	125	65	153.56	146.88	140.21	133.53
	21851	.5906		15.000	150	90	157.68	150.82	143.97	137.11
20856		.5938	19/32"	15.083	4-15/16"	2-9/16"	154.40	147.69	140.97	134.26
	21856	.5938	19/32"	15.083	6"	3-9/16"	158.49	151.60	144.71	137.82
20861		.6094	39/64"	15.479	5-1/16"	2-13/16"	155.18	148.43	141.69	134.94
	21861	.6094	39/64"	15.479	6-3/16"	3-11/16"	171.76	164.30	156.83	149.36
20866		.6102		15.500	129	71	155.99	149.20	142.42	135.64
	21866	.6102		15.500	160	94	172.56	165.06	157.55	150.05
20871		.6250	5/8"	15.875	5-1/4"	3-1/8"	156.77	149.95	143.14	136.32
	21871	.6250	5/8"	15.875	6-5/16"	3-3/4"	173.36	165.83	158.29	150.75
20876		.6299		16.000	133	79	160.55	153.57	146.59	139.61
	21876	.6299		16.000	160	95	177.25	169.54	161.84	154.13