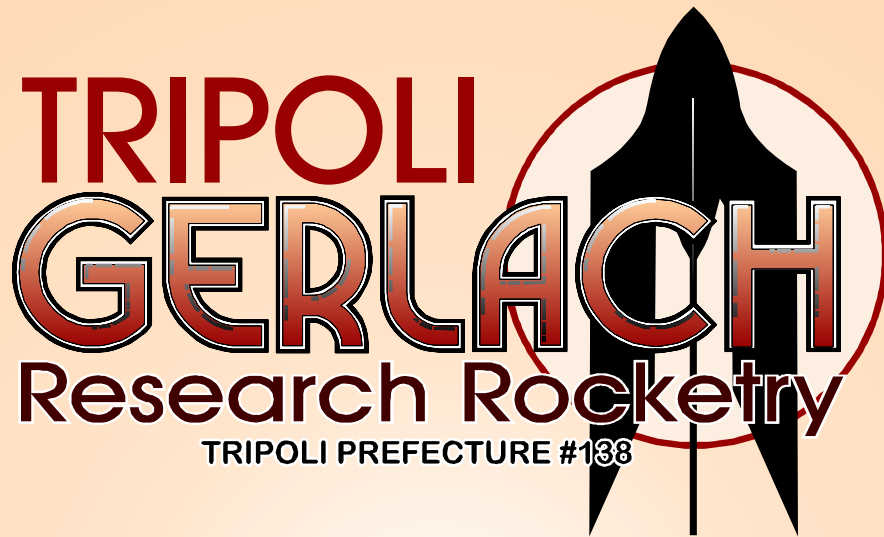




WEIGHT & THRUST TABLES

WEIGHT & THRUST

When trying to figure out what motor to use for a given rocket, life can get confusing. Most people use the old trial and error method of getting a good deal on a motor and using it. The results show if you should consider using it again, or that you don't have a chance to use it again!

Life can be easier if you just use a little “technology” and be the rocket scientist you think you are. Rocket Motors use a classification system containing metric values, Newton Seconds. Our rocket vehicles are weighed in American Standard values, Pounds. The conversion factor for this situation is a number 4.5 (rounded off and very acceptable).

To convert Newton Seconds to Pounds divide Newton Seconds by 4.5. The result is Pounds.

To convert Pounds to Newton Seconds multiply Pounds by 4.5. The results are Newton Seconds.

The next important item you need to accept is an accepted safety value. Most good RSO's use a factor of 5:1 to determine if a rocket could be launched safely. So accept 5 as your safety value.

Last understand that with ALL motors, no matter what Class of motor they are, Average Thrust is Average Thrust. A J350, K350, M350 etc. all generate 350 Newton Seconds average thrust. We can determine how heavy a rocket can be successfully (safely) launched only by considering the Newton Seconds NOT the motor Class.

This understood and it should be a basic knowledge for all persons into any type of rocketry activity; let us look at two examples:

We have a J350 in hand and want to know what is the most a rocket can weight to safely use this motor. The 350 is the average thrust, in Newton

Seconds. This means that is the most “power” the motor will generate. You do not want to use this motor on a rocket that exceeds the weight of 350 Newton Seconds.

Take 350 Newton Seconds and divide by 4.5 and the results will be 77.77 Pounds. Now divide the 77.77 Pounds by the Safety Factor of 5 and the result is 15.5 Pounds. So any motor having an average thrust of 350 Newton Seconds, be it a G, H, I, J, K, etc., will only lift 15.5 Pounds of rocket. Exceeding this weight and using this motor may be hazardous to the life of your rocket.

Now we have a rocket weighing 18 Pounds and we want to find out what motor we should use. It's simple, just reverse the process. Multiply the rocket's weight, 18 Pounds, by the safety factor 5. In this case we get 90 Pounds. Now multiply the 90 Pounds by 4.5 and the result is 405 Newton Seconds. It will be safe to launch this 18 Pound rocket on any Class motor that has an Average Thrust of no less than 405 Newton Seconds. Of course you can use a motor with a higher Newton Second average thrust but not less, again, it could be hazardous to the life of your rocket.

Keep in mind when you calculate your weight: this is lift-off weight and must include the entire loaded weight of the rocket *INCLUDING* the motor.

Although this method will give you a safe starting point, it will not select the perfect motor for your rocket. Rocketry is a vast mixture of options and choices. With time, experience will permit you to make knowledgeable decisions, but until then be safe and follow this guideline.

The following is a Weight / Average Thrust Table you may find useful.

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
1	0.04		37	1.66		73	3.28
2	0.09		38	1.71		74	3.33
3	0.13		39	1.75		75	3.37
4	0.18		40	1.80		76	3.42
5	0.22		41	1.84		77	3.46
6	0.27		42	1.89		78	3.51
7	0.31		43	1.93		79	3.55
8	0.36		44	1.98		80	3.60
9	0.40		45	2.02		81	3.64
10	0.45		46	2.07		82	3.69
11	0.49		47	2.11		83	3.73
12	0.54		48	2.16		84	3.78
13	0.58		49	2.20		85	3.82
14	0.63		50	2.25		86	3.87
15	0.67		51	2.29		87	3.91
16	0.72		52	2.34		88	3.96
17	0.76		53	2.38		89	4.00
18	0.81		54	2.43		90	4.04
19	0.85		55	2.47		91	4.09
20	0.90		56	2.52		92	4.13
21	0.94		57	2.56		93	4.18
22	0.99		58	2.61		94	4.22
23	1.03		59	2.65		95	4.27
24	1.08		60	2.70		96	4.31
25	1.12		61	2.74		97	4.36
26	1.17		62	2.79		98	4.40
27	1.21		63	2.83		99	4.45
28	1.26		64	2.88		100	4.49
29	1.30		65	2.92		101	4.54
30	1.35		66	2.97		102	4.58
31	1.39		67	3.01		103	4.63
32	1.44		68	3.06		104	4.67
33	1.48		69	3.10		105	4.72
34	1.53		70	3.15		106	4.76
35	1.57		71	3.19		107	4.81
36	1.62		72	3.24		108	4.85

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
109	4.90		145	6.52		181	8.13
110	4.94		146	6.56		182	8.18
111	4.99		147	6.61		183	8.22
112	5.03		148	6.65		184	8.27
113	5.08		149	6.70		185	8.31
114	5.12		150	6.74		186	8.36
115	5.17		151	6.79		187	8.40
116	5.21		152	6.83		188	8.45
117	5.26		153	6.88		189	8.49
118	5.30		154	6.92		190	8.54
119	5.35		155	6.97		191	8.58
120	5.39		156	7.01		192	8.63
121	5.44		157	7.06		193	8.67
122	5.48		158	7.10		194	8.72
123	5.53		159	7.15		195	8.76
124	5.57		160	7.19		196	8.81
125	5.62		161	7.24		197	8.85
126	5.66		162	7.28		198	8.90
127	5.71		163	7.33		199	8.94
128	5.75		164	7.37		200	8.99
129	5.80		165	7.42		201	9.03
130	5.84		166	7.46		202	9.08
131	5.89		167	7.51		203	9.12
132	5.93		168	7.55		204	9.17
133	5.98		169	7.60		205	9.21
134	6.02		170	7.64		206	9.26
135	6.07		171	7.69		207	9.30
136	6.11		172	7.73		208	9.35
137	6.16		173	7.78		209	9.39
138	6.20		174	7.82		210	9.44
139	6.25		175	7.87		211	9.48
140	6.29		176	7.91		212	9.53
141	6.34		177	7.96		213	9.57
142	6.38		178	8.00		214	9.62
143	6.43		179	8.04		215	9.66
144	6.47		180	8.09		216	9.71

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
217	9.75		253	11.37		289	12.99
218	9.80		254	11.42		290	13.03
219	9.84		255	11.46		291	13.08
220	9.89		256	11.51		292	13.12
221	9.93		257	11.55		293	13.17
222	9.98		258	11.60		294	13.21
223	10.02		259	11.64		295	13.26
224	10.07		260	11.69		296	13.30
225	10.11		261	11.73		297	13.35
226	10.16		262	11.78		298	13.39
227	10.20		263	11.82		299	13.44
228	10.25		264	11.87		300	13.48
229	10.29		265	11.91		301	13.53
230	10.34		266	11.96		302	13.57
231	10.38		267	12.00		303	13.62
232	10.43		268	12.04		304	13.66
233	10.47		269	12.09		305	13.71
234	10.52		270	12.13		306	13.75
235	10.56		271	12.18		307	13.80
236	10.61		272	12.22		308	13.84
237	10.65		273	12.27		309	13.89
238	10.70		274	12.31		310	13.93
239	10.74		275	12.36		311	13.98
240	10.79		276	12.40		312	14.02
241	10.83		277	12.45		313	14.07
242	10.88		278	12.49		314	14.11
243	10.92		279	12.54		315	14.16
244	10.97		280	12.58		316	14.20
245	11.01		281	12.63		317	14.25
246	11.06		282	12.67		318	14.29
247	11.10		283	12.72		319	14.34
248	11.15		284	12.76		320	14.38
249	11.19		285	12.81		321	14.43
250	11.24		286	12.85		322	14.47
251	11.28		287	12.90		323	14.52
252	11.33		288	12.94		324	14.56

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
325	14.61		361	16.22		397	17.84
326	14.65		362	16.27		398	17.89
327	14.70		363	16.31		399	17.93
328	14.74		364	16.36		400	17.98
329	14.79		365	16.40		401	18.02
330	14.83		366	16.45		402	18.07
331	14.88		367	16.49		403	18.11
332	14.92		368	16.54		404	18.16
333	14.97		369	16.58		405	18.20
334	15.01		370	16.63		406	18.25
335	15.06		371	16.67		407	18.29
336	15.10		372	16.72		408	18.34
337	15.15		373	16.76		409	18.38
338	15.19		374	16.81		410	18.43
339	15.24		375	16.85		411	18.47
340	15.28		376	16.90		412	18.52
341	15.33		377	16.94		413	18.56
342	15.37		378	16.99		414	18.61
343	15.42		379	17.03		415	18.65
344	15.46		380	17.08		416	18.70
345	15.51		381	17.12		417	18.74
346	15.55		382	17.17		418	18.79
347	15.60		383	17.21		419	18.83
348	15.64		384	17.26		420	18.88
349	15.69		385	17.30		421	18.92
350	15.73		386	17.35		422	18.97
351	15.78		387	17.39		423	19.01
352	15.82		388	17.44		424	19.06
353	15.87		389	17.48		425	19.10
354	15.91		390	17.53		426	19.15
355	15.96		391	17.57		427	19.19
356	16.00		392	17.62		428	19.24
357	16.04		393	17.66		429	19.28
358	16.09		394	17.71		430	19.33
359	16.13		395	17.75		431	19.37
360	16.18		396	17.80		432	19.42

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
433	19.46		469	21.08		505	22.70
434	19.51		470	21.12		506	22.74
435	19.55		471	21.17		507	22.79
436	19.60		472	21.21		508	22.83
437	19.64		473	21.26		509	22.88
438	19.69		474	21.30		510	22.92
439	19.73		475	21.35		511	22.97
440	19.78		476	21.39		512	23.01
441	19.82		477	21.44		513	23.06
442	19.87		478	21.48		514	23.10
443	19.91		479	21.53		515	23.15
444	19.96		480	21.57		516	23.19
445	20.00		481	21.62		517	23.24
446	20.04		482	21.66		518	23.28
447	20.09		483	21.71		519	23.33
448	20.13		484	21.75		520	23.37
449	20.18		485	21.80		521	23.42
450	20.22		486	21.84		522	23.46
451	20.27		487	21.89		523	23.51
452	20.31		488	21.93		524	23.55
453	20.36		489	21.98		525	23.60
454	20.40		490	22.02		526	23.64
455	20.45		491	22.07		527	23.69
456	20.49		492	22.11		528	23.73
457	20.54		493	22.16		529	23.78
458	20.58		494	22.20		530	23.82
459	20.63		495	22.25		531	23.87
460	20.67		496	22.29		532	23.91
461	20.72		497	22.34		533	23.96
462	20.76		498	22.38		534	24.00
463	20.81		499	22.43		535	24.04
464	20.85		500	22.47		536	24.09
465	20.90		501	22.52		537	24.13
466	20.94		502	22.56		538	24.18
467	20.99		503	22.61		539	24.22
468	21.03		504	22.65		540	24.27

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
541	24.31		577	25.93		613	27.55
542	24.36		578	25.98		614	27.60
543	24.40		579	26.02		615	27.64
544	24.45		580	26.07		616	27.69
545	24.49		581	26.11		617	27.73
546	24.54		582	26.16		618	27.78
547	24.58		583	26.20		619	27.82
548	24.63		584	26.25		620	27.87
549	24.67		585	26.29		621	27.91
550	24.72		586	26.34		622	27.96
551	24.76		587	26.38		623	28.00
552	24.81		588	26.43		624	28.04
553	24.85		589	26.47		625	28.09
554	24.90		590	26.52		626	28.13
555	24.94		591	26.56		627	28.18
556	24.99		592	26.61		628	28.22
557	25.03		593	26.65		629	28.27
558	25.08		594	26.70		630	28.31
559	25.12		595	26.74		631	28.36
560	25.17		596	26.79		632	28.40
561	25.21		597	26.83		633	28.45
562	25.26		598	26.88		634	28.49
563	25.30		599	26.92		635	28.54
564	25.35		600	26.97		636	28.58
565	25.39		601	27.01		637	28.63
566	25.44		602	27.06		638	28.67
567	25.48		603	27.10		639	28.72
568	25.53		604	27.15		640	28.76
569	25.57		605	27.19		641	28.81
570	25.62		606	27.24		642	28.85
571	25.66		607	27.28		643	28.90
572	25.71		608	27.33		644	28.94
573	25.75		609	27.37		645	28.99
574	25.80		610	27.42		646	29.03
575	25.84		611	27.46		647	29.08
576	25.89		612	27.51		648	29.12

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
649	29.17		685	30.79		721	32.40
650	29.21		686	30.83		722	32.45
651	29.26		687	30.88		723	32.49
652	29.30		688	30.92		724	32.54
653	29.35		689	30.97		725	32.58
654	29.39		690	31.01		726	32.63
655	29.44		691	31.06		727	32.67
656	29.48		692	31.10		728	32.72
657	29.53		693	31.15		729	32.76
658	29.57		694	31.19		730	32.81
659	29.62		695	31.24		731	32.85
660	29.66		696	31.28		732	32.90
661	29.71		697	31.33		733	32.94
662	29.75		698	31.37		734	32.99
663	29.80		699	31.42		735	33.03
664	29.84		700	31.46		736	33.08
665	29.89		701	31.51		737	33.12
666	29.93		702	31.55		738	33.17
667	29.98		703	31.60		739	33.21
668	30.02		704	31.64		740	33.26
669	30.07		705	31.69		741	33.30
670	30.11		706	31.73		742	33.35
671	30.16		707	31.78		743	33.39
672	30.20		708	31.82		744	33.44
673	30.25		709	31.87		745	33.48
674	30.29		710	31.91		746	33.53
675	30.34		711	31.96		747	33.57
676	30.38		712	32.00		748	33.62
677	30.43		713	32.04		749	33.66
678	30.47		714	32.09		750	33.71
679	30.52		715	32.13		751	33.75
680	30.56		716	32.18		752	33.80
681	30.61		717	32.22		753	33.84
682	30.65		718	32.27		754	33.89
683	30.70		719	32.31		755	33.93
684	30.74		720	32.36		756	33.98

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
757	34.02		793	35.64		829	37.26
758	34.07		794	35.69		830	37.30
759	34.11		795	35.73		831	37.35
760	34.16		796	35.78		832	37.39
761	34.20		797	35.82		833	37.44
762	34.25		798	35.87		834	37.48
763	34.29		799	35.91		835	37.53
764	34.34		800	35.96		836	37.57
765	34.38		801	36.00		837	37.62
766	34.43		802	36.04		838	37.66
767	34.47		803	36.09		839	37.71
768	34.52		804	36.13		840	37.75
769	34.56		805	36.18		841	37.80
770	34.61		806	36.22		842	37.84
771	34.65		807	36.27		843	37.89
772	34.70		808	36.31		844	37.93
773	34.74		809	36.36		845	37.98
774	34.79		810	36.40		846	38.02
775	34.83		811	36.45		847	38.07
776	34.88		812	36.49		848	38.11
777	34.92		813	36.54		849	38.16
778	34.97		814	36.58		850	38.20
779	35.01		815	36.63		851	38.25
780	35.06		816	36.67		852	38.29
781	35.10		817	36.72		853	38.34
782	35.15		818	36.76		854	38.38
783	35.19		819	36.81		855	38.43
784	35.24		820	36.85		856	38.47
785	35.28		821	36.90		857	38.52
786	35.33		822	36.94		858	38.56
787	35.37		823	36.99		859	38.61
788	35.42		824	37.03		860	38.65
789	35.46		825	37.08		861	38.70
790	35.51		826	37.12		862	38.74
791	35.55		827	37.17		863	38.79
792	35.60		828	37.21		864	38.83

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
865	38.88		901	40.49		937	42.11
866	38.92		902	40.54		938	42.16
867	38.97		903	40.58		939	42.20
868	39.01		904	40.63		940	42.25
869	39.06		905	40.67		941	42.29
870	39.10		906	40.72		942	42.34
871	39.15		907	40.76		943	42.38
872	39.19		908	40.81		944	42.43
873	39.24		909	40.85		945	42.47
874	39.28		910	40.90		946	42.52
875	39.33		911	40.94		947	42.56
876	39.37		912	40.99		948	42.61
877	39.42		913	41.03		949	42.65
878	39.46		914	41.08		950	42.70
879	39.51		915	41.12		951	42.74
880	39.55		916	41.17		952	42.79
881	39.60		917	41.21		953	42.83
882	39.64		918	41.26		954	42.88
883	39.69		919	41.30		955	42.92
884	39.73		920	41.35		956	42.97
885	39.78		921	41.39		957	43.01
886	39.82		922	41.44		958	43.06
887	39.87		923	41.48		959	43.10
888	39.91		924	41.53		960	43.15
889	39.96		925	41.57		961	43.19
890	40.00		926	41.62		962	43.24
891	40.04		927	41.66		963	43.28
892	40.09		928	41.71		964	43.33
893	40.13		929	41.75		965	43.37
894	40.18		930	41.80		966	43.42
895	40.22		931	41.84		967	43.46
896	40.27		932	41.89		968	43.51
897	40.31		933	41.93		969	43.55
898	40.36		934	41.98		970	43.60
899	40.40		935	42.02		971	43.64
900	40.45		936	42.07		972	43.69

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
973	43.73		1009	45.35		1045	46.97
974	43.78		1010	45.39		1046	47.01
975	43.82		1011	45.44		1047	47.06
976	43.87		1012	45.48		1048	47.10
977	43.91		1013	45.53		1049	47.15
978	43.96		1014	45.57		1050	47.19
979	44.00		1015	45.62		1051	47.24
980	44.04		1016	45.66		1052	47.28
981	44.09		1017	45.71		1053	47.33
982	44.13		1018	45.75		1054	47.37
983	44.18		1019	45.80		1055	47.42
984	44.22		1020	45.84		1056	47.46
985	44.27		1021	45.89		1057	47.51
986	44.31		1022	45.93		1058	47.55
987	44.36		1023	45.98		1059	47.60
988	44.40		1024	46.02		1060	47.64
989	44.45		1025	46.07		1061	47.69
990	44.49		1026	46.11		1062	47.73
991	44.54		1027	46.16		1063	47.78
992	44.58		1028	46.20		1064	47.82
993	44.63		1029	46.25		1065	47.87
994	44.67		1030	46.29		1066	47.91
995	44.72		1031	46.34		1067	47.96
996	44.76		1032	46.38		1068	48.00
997	44.81		1033	46.43		1069	48.04
998	44.85		1034	46.47		1070	48.09
999	44.90		1035	46.52		1071	48.13
1000	44.94		1036	46.56		1072	48.18
1001	44.99		1037	46.61		1073	48.22
1002	45.03		1038	46.65		1074	48.27
1003	45.08		1039	46.70		1075	48.31
1004	45.12		1040	46.74		1076	48.36
1005	45.17		1041	46.79		1077	48.40
1006	45.21		1042	46.83		1078	48.45
1007	45.26		1043	46.88		1079	48.49
1008	45.30		1044	46.92		1080	48.54

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
1081	48.58		1117	50.20		1153	51.82
1082	48.63		1118	50.25		1154	51.87
1083	48.67		1119	50.29		1155	51.91
1084	48.72		1120	50.34		1156	51.96
1085	48.76		1121	50.38		1157	52.00
1086	48.81		1122	50.43		1158	52.04
1087	48.85		1123	50.47		1159	52.09
1088	48.90		1124	50.52		1160	52.13
1089	48.94		1125	50.56		1161	52.18
1090	48.99		1126	50.61		1162	52.22
1091	49.03		1127	50.65		1163	52.27
1092	49.08		1128	50.70		1164	52.31
1093	49.12		1129	50.74		1165	52.36
1094	49.17		1130	50.79		1166	52.40
1095	49.21		1131	50.83		1167	52.45
1096	49.26		1132	50.88		1168	52.49
1097	49.30		1133	50.92		1169	52.54
1098	49.35		1134	50.97		1170	52.58
1099	49.39		1135	51.01		1171	52.63
1100	49.44		1136	51.06		1172	52.67
1101	49.48		1137	51.10		1173	52.72
1102	49.53		1138	51.15		1174	52.76
1103	49.57		1139	51.19		1175	52.81
1104	49.62		1140	51.24		1176	52.85
1105	49.66		1141	51.28		1177	52.90
1106	49.71		1142	51.33		1178	52.94
1107	49.75		1143	51.37		1179	52.99
1108	49.80		1144	51.42		1180	53.03
1109	49.84		1145	51.46		1181	53.08
1110	49.89		1146	51.51		1182	53.12
1111	49.93		1147	51.55		1183	53.17
1112	49.98		1148	51.60		1184	53.21
1113	50.02		1149	51.64		1185	53.26
1114	50.07		1150	51.69		1186	53.30
1115	50.11		1151	51.73		1187	53.35
1116	50.16		1152	51.78		1188	53.39

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
1189	53.44		1225	55.06		1261	56.67
1190	53.48		1226	55.10		1262	56.72
1191	53.53		1227	55.15		1263	56.76
1192	53.57		1228	55.19		1264	56.81
1193	53.62		1229	55.24		1265	56.85
1194	53.66		1230	55.28		1266	56.90
1195	53.71		1231	55.33		1267	56.94
1196	53.75		1232	55.37		1268	56.99
1197	53.80		1233	55.42		1269	57.03
1198	53.84		1234	55.46		1270	57.08
1199	53.89		1235	55.51		1271	57.12
1200	53.93		1236	55.55		1272	57.17
1201	53.98		1237	55.60		1273	57.21
1202	54.02		1238	55.64		1274	57.26
1203	54.07		1239	55.69		1275	57.30
1204	54.11		1240	55.73		1276	57.35
1205	54.16		1241	55.78		1277	57.39
1206	54.20		1242	55.82		1278	57.44
1207	54.25		1243	55.87		1279	57.48
1208	54.29		1244	55.91		1280	57.53
1209	54.34		1245	55.96		1281	57.57
1210	54.38		1246	56.00		1282	57.62
1211	54.43		1247	56.04		1283	57.66
1212	54.47		1248	56.09		1284	57.71
1213	54.52		1249	56.13		1285	57.75
1214	54.56		1250	56.18		1286	57.80
1215	54.61		1251	56.22		1287	57.84
1216	54.65		1252	56.27		1288	57.89
1217	54.70		1253	56.31		1289	57.93
1218	54.74		1254	56.36		1290	57.98
1219	54.79		1255	56.40		1291	58.02
1220	54.83		1256	56.45		1292	58.07
1221	54.88		1257	56.49		1293	58.11
1222	54.92		1258	56.54		1294	58.16
1223	54.97		1259	56.58		1295	58.20
1224	55.01		1260	56.63		1296	58.25

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
1297	58.29		1333	59.91		1369	61.53
1298	58.34		1334	59.96		1370	61.57
1299	58.38		1335	60.00		1371	61.62
1300	58.43		1336	60.04		1372	61.66
1301	58.47		1337	60.09		1373	61.71
1302	58.52		1338	60.13		1374	61.75
1303	58.56		1339	60.18		1375	61.80
1304	58.61		1340	60.22		1376	61.84
1305	58.65		1341	60.27		1377	61.89
1306	58.70		1342	60.31		1378	61.93
1307	58.74		1343	60.36		1379	61.98
1308	58.79		1344	60.40		1380	62.02
1309	58.83		1345	60.45		1381	62.07
1310	58.88		1346	60.49		1382	62.11
1311	58.92		1347	60.54		1383	62.16
1312	58.97		1348	60.58		1384	62.20
1313	59.01		1349	60.63		1385	62.25
1314	59.06		1350	60.67		1386	62.29
1315	59.10		1351	60.72		1387	62.34
1316	59.15		1352	60.76		1388	62.38
1317	59.19		1353	60.81		1389	62.43
1318	59.24		1354	60.85		1390	62.47
1319	59.28		1355	60.90		1391	62.52
1320	59.33		1356	60.94		1392	62.56
1321	59.37		1357	60.99		1393	62.61
1322	59.42		1358	61.03		1394	62.65
1323	59.46		1359	61.08		1395	62.70
1324	59.51		1360	61.12		1396	62.74
1325	59.55		1361	61.17		1397	62.79
1326	59.60		1362	61.21		1398	62.83
1327	59.64		1363	61.26		1399	62.88
1328	59.69		1364	61.30		1400	62.92
1329	59.73		1365	61.35		1401	62.97
1330	59.78		1366	61.39		1402	63.01
1331	59.82		1367	61.44		1403	63.06
1332	59.87		1368	61.48		1404	63.10

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
1405	63.15		1441	64.76		1477	66.38
1406	63.19		1442	64.81		1478	66.43
1407	63.24		1443	64.85		1479	66.47
1408	63.28		1444	64.90		1480	66.52
1409	63.33		1445	64.94		1481	66.56
1410	63.37		1446	64.99		1482	66.61
1411	63.42		1447	65.03		1483	66.65
1412	63.46		1448	65.08		1484	66.70
1413	63.51		1449	65.12		1485	66.74
1414	63.55		1450	65.17		1486	66.79
1415	63.60		1451	65.21		1487	66.83
1416	63.64		1452	65.26		1488	66.88
1417	63.69		1453	65.30		1489	66.92
1418	63.73		1454	65.35		1490	66.97
1419	63.78		1455	65.39		1491	67.01
1420	63.82		1456	65.44		1492	67.06
1421	63.87		1457	65.48		1493	67.10
1422	63.91		1458	65.53		1494	67.15
1423	63.96		1459	65.57		1495	67.19
1424	64.00		1460	65.62		1496	67.24
1425	64.04		1461	65.66		1497	67.28
1426	64.09		1462	65.71		1498	67.33
1427	64.13		1463	65.75		1499	67.37
1428	64.18		1464	65.80		1500	67.42
1429	64.22		1465	65.84		1501	67.46
1430	64.27		1466	65.89		1502	67.51
1431	64.31		1467	65.93		1503	67.55
1432	64.36		1468	65.98		1504	67.60
1433	64.40		1469	66.02		1505	67.64
1434	64.45		1470	66.07		1506	67.69
1435	64.49		1471	66.11		1507	67.73
1436	64.54		1472	66.16		1508	67.78
1437	64.58		1473	66.20		1509	67.82
1438	64.63		1474	66.25		1510	67.87
1439	64.67		1475	66.29		1511	67.91
1440	64.72		1476	66.34		1512	67.96

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
1513	68.00		1549	69.62		1585	71.24
1514	68.04		1550	69.66		1586	71.28
1515	68.09		1551	69.71		1587	71.33
1516	68.13		1552	69.75		1588	71.37
1517	68.18		1553	69.80		1589	71.42
1518	68.22		1554	69.84		1590	71.46
1519	68.27		1555	69.89		1591	71.51
1520	68.31		1556	69.93		1592	71.55
1521	68.36		1557	69.98		1593	71.60
1522	68.40		1558	70.02		1594	71.64
1523	68.45		1559	70.07		1595	71.69
1524	68.49		1560	70.11		1596	71.73
1525	68.54		1561	70.16		1597	71.78
1526	68.58		1562	70.20		1598	71.82
1527	68.63		1563	70.25		1599	71.87
1528	68.67		1564	70.29		1600	71.91
1529	68.72		1565	70.34		1601	71.96
1530	68.76		1566	70.38		1602	72.00
1531	68.81		1567	70.43		1603	72.04
1532	68.85		1568	70.47		1604	72.09
1533	68.90		1569	70.52		1605	72.13
1534	68.94		1570	70.56		1606	72.18
1535	68.99		1571	70.61		1607	72.22
1536	69.03		1572	70.65		1608	72.27
1537	69.08		1573	70.70		1609	72.31
1538	69.12		1574	70.74		1610	72.36
1539	69.17		1575	70.79		1611	72.40
1540	69.21		1576	70.83		1612	72.45
1541	69.26		1577	70.88		1613	72.49
1542	69.30		1578	70.92		1614	72.54
1543	69.35		1579	70.97		1615	72.58
1544	69.39		1580	71.01		1616	72.63
1545	69.44		1581	71.06		1617	72.67
1546	69.48		1582	71.10		1618	72.72
1547	69.53		1583	71.15		1619	72.76
1548	69.57		1584	71.19		1620	72.81

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
1621	72.85		1657	74.47		1693	76.09
1622	72.90		1658	74.52		1694	76.13
1623	72.94		1659	74.56		1695	76.18
1624	72.99		1660	74.61		1696	76.22
1625	73.03		1661	74.65		1697	76.27
1626	73.08		1662	74.70		1698	76.31
1627	73.12		1663	74.74		1699	76.36
1628	73.17		1664	74.79		1700	76.40
1629	73.21		1665	74.83		1701	76.45
1630	73.26		1666	74.88		1702	76.49
1631	73.30		1667	74.92		1703	76.54
1632	73.35		1668	74.97		1704	76.58
1633	73.39		1669	75.01		1705	76.63
1634	73.44		1670	75.06		1706	76.67
1635	73.48		1671	75.10		1707	76.72
1636	73.53		1672	75.15		1708	76.76
1637	73.57		1673	75.19		1709	76.81
1638	73.62		1674	75.24		1710	76.85
1639	73.66		1675	75.28		1711	76.90
1640	73.71		1676	75.33		1712	76.94
1641	73.75		1677	75.37		1713	76.99
1642	73.80		1678	75.42		1714	77.03
1643	73.84		1679	75.46		1715	77.08
1644	73.89		1680	75.51		1716	77.12
1645	73.93		1681	75.55		1717	77.17
1646	73.98		1682	75.60		1718	77.21
1647	74.02		1683	75.64		1719	77.26
1648	74.07		1684	75.69		1720	77.30
1649	74.11		1685	75.73		1721	77.35
1650	74.16		1686	75.78		1722	77.39
1651	74.20		1687	75.82		1723	77.44
1652	74.25		1688	75.87		1724	77.48
1653	74.29		1689	75.91		1725	77.53
1654	74.34		1690	75.96		1726	77.57
1655	74.38		1691	76.00		1727	77.62
1656	74.43		1692	76.04		1728	77.66

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
1729	77.71		1765	79.33		1801	80.94
1730	77.75		1766	79.37		1802	80.99
1731	77.80		1767	79.42		1803	81.03
1732	77.84		1768	79.46		1804	81.08
1733	77.89		1769	79.51		1805	81.12
1734	77.93		1770	79.55		1806	81.17
1735	77.98		1771	79.60		1807	81.21
1736	78.02		1772	79.64		1808	81.26
1737	78.07		1773	79.69		1809	81.30
1738	78.11		1774	79.73		1810	81.35
1739	78.16		1775	79.78		1811	81.39
1740	78.20		1776	79.82		1812	81.44
1741	78.25		1777	79.87		1813	81.48
1742	78.29		1778	79.91		1814	81.53
1743	78.34		1779	79.96		1815	81.57
1744	78.38		1780	80.00		1816	81.62
1745	78.43		1781	80.04		1817	81.66
1746	78.47		1782	80.09		1818	81.71
1747	78.52		1783	80.13		1819	81.75
1748	78.56		1784	80.18		1820	81.80
1749	78.61		1785	80.22		1821	81.84
1750	78.65		1786	80.27		1822	81.89
1751	78.70		1787	80.31		1823	81.93
1752	78.74		1788	80.36		1824	81.98
1753	78.79		1789	80.40		1825	82.02
1754	78.83		1790	80.45		1826	82.07
1755	78.88		1791	80.49		1827	82.11
1756	78.92		1792	80.54		1828	82.16
1757	78.97		1793	80.58		1829	82.20
1758	79.01		1794	80.63		1830	82.25
1759	79.06		1795	80.67		1831	82.29
1760	79.10		1796	80.72		1832	82.34
1761	79.15		1797	80.76		1833	82.38
1762	79.19		1798	80.81		1834	82.43
1763	79.24		1799	80.85		1835	82.47
1764	79.28		1800	80.90		1836	82.52

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
1837	82.56		1873	84.18		1909	85.80
1838	82.61		1874	84.22		1910	85.84
1839	82.65		1875	84.27		1911	85.89
1840	82.70		1876	84.31		1912	85.93
1841	82.74		1877	84.36		1913	85.98
1842	82.79		1878	84.40		1914	86.02
1843	82.83		1879	84.45		1915	86.07
1844	82.88		1880	84.49		1916	86.11
1845	82.92		1881	84.54		1917	86.16
1846	82.97		1882	84.58		1918	86.20
1847	83.01		1883	84.63		1919	86.25
1848	83.06		1884	84.67		1920	86.29
1849	83.10		1885	84.72		1921	86.34
1850	83.15		1886	84.76		1922	86.38
1851	83.19		1887	84.81		1923	86.43
1852	83.24		1888	84.85		1924	86.47
1853	83.28		1889	84.90		1925	86.52
1854	83.33		1890	84.94		1926	86.56
1855	83.37		1891	84.99		1927	86.61
1856	83.42		1892	85.03		1928	86.65
1857	83.46		1893	85.08		1929	86.70
1858	83.51		1894	85.12		1930	86.74
1859	83.55		1895	85.17		1931	86.79
1860	83.60		1896	85.21		1932	86.83
1861	83.64		1897	85.26		1933	86.88
1862	83.69		1898	85.30		1934	86.92
1863	83.73		1899	85.35		1935	86.97
1864	83.78		1900	85.39		1936	87.01
1865	83.82		1901	85.44		1937	87.06
1866	83.87		1902	85.48		1938	87.10
1867	83.91		1903	85.53		1939	87.15
1868	83.96		1904	85.57		1940	87.19
1869	84.00		1905	85.62		1941	87.24
1870	84.04		1906	85.66		1942	87.28
1871	84.09		1907	85.71		1943	87.33
1872	84.13		1908	85.75		1944	87.37

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
1945	87.42		1981	89.03		2017	90.65
1946	87.46		1982	89.08		2018	90.70
1947	87.51		1983	89.12		2019	90.74
1948	87.55		1984	89.17		2020	90.79
1949	87.60		1985	89.21		2021	90.83
1950	87.64		1986	89.26		2022	90.88
1951	87.69		1987	89.30		2023	90.92
1952	87.73		1988	89.35		2024	90.97
1953	87.78		1989	89.39		2025	91.01
1954	87.82		1990	89.44		2026	91.06
1955	87.87		1991	89.48		2027	91.10
1956	87.91		1992	89.53		2028	91.15
1957	87.96		1993	89.57		2029	91.19
1958	88.00		1994	89.62		2030	91.24
1959	88.04		1995	89.66		2031	91.28
1960	88.09		1996	89.71		2032	91.33
1961	88.13		1997	89.75		2033	91.37
1962	88.18		1998	89.80		2034	91.42
1963	88.22		1999	89.84		2035	91.46
1964	88.27		2000	89.89		2036	91.51
1965	88.31		2001	89.93		2037	91.55
1966	88.36		2002	89.98		2038	91.60
1967	88.40		2003	90.02		2039	91.64
1968	88.45		2004	90.07		2040	91.69
1969	88.49		2005	90.11		2041	91.73
1970	88.54		2006	90.16		2042	91.78
1971	88.58		2007	90.20		2043	91.82
1972	88.63		2008	90.25		2044	91.87
1973	88.67		2009	90.29		2045	91.91
1974	88.72		2010	90.34		2046	91.96
1975	88.76		2011	90.38		2047	92.00
1976	88.81		2012	90.43		2048	92.04
1977	88.85		2013	90.47		2049	92.09
1978	88.90		2014	90.52		2050	92.13
1979	88.94		2015	90.56		2051	92.18
1980	88.99		2016	90.61		2052	92.22

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
2053	92.27		2089	93.89		2125	95.51
2054	92.31		2090	93.93		2126	95.55
2055	92.36		2091	93.98		2127	95.60
2056	92.40		2092	94.02		2128	95.64
2057	92.45		2093	94.07		2129	95.69
2058	92.49		2094	94.11		2130	95.73
2059	92.54		2095	94.16		2131	95.78
2060	92.58		2096	94.20		2132	95.82
2061	92.63		2097	94.25		2133	95.87
2062	92.67		2098	94.29		2134	95.91
2063	92.72		2099	94.34		2135	95.96
2064	92.76		2100	94.38		2136	96.00
2065	92.81		2101	94.43		2137	96.04
2066	92.85		2102	94.47		2138	96.09
2067	92.90		2103	94.52		2139	96.13
2068	92.94		2104	94.56		2140	96.18
2069	92.99		2105	94.61		2141	96.22
2070	93.03		2106	94.65		2142	96.27
2071	93.08		2107	94.70		2143	96.31
2072	93.12		2108	94.74		2144	96.36
2073	93.17		2109	94.79		2145	96.40
2074	93.21		2110	94.83		2146	96.45
2075	93.26		2111	94.88		2147	96.49
2076	93.30		2112	94.92		2148	96.54
2077	93.35		2113	94.97		2149	96.58
2078	93.39		2114	95.01		2150	96.63
2079	93.44		2115	95.06		2151	96.67
2080	93.48		2116	95.10		2152	96.72
2081	93.53		2117	95.15		2153	96.76
2082	93.57		2118	95.19		2154	96.81
2083	93.62		2119	95.24		2155	96.85
2084	93.66		2120	95.28		2156	96.90
2085	93.71		2121	95.33		2157	96.94
2086	93.75		2122	95.37		2158	96.99
2087	93.80		2123	95.42		2159	97.03
2088	93.84		2124	95.46		2160	97.08

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
2161	97.12		2197	98.74		2233	100.36
2162	97.17		2198	98.79		2234	100.40
2163	97.21		2199	98.83		2235	100.45
2164	97.26		2200	98.88		2236	100.49
2165	97.30		2201	98.92		2237	100.54
2166	97.35		2202	98.97		2238	100.58
2167	97.39		2203	99.01		2239	100.63
2168	97.44		2204	99.06		2240	100.67
2169	97.48		2205	99.10		2241	100.72
2170	97.53		2206	99.15		2242	100.76
2171	97.57		2207	99.19		2243	100.81
2172	97.62		2208	99.24		2244	100.85
2173	97.66		2209	99.28		2245	100.90
2174	97.71		2210	99.33		2246	100.94
2175	97.75		2211	99.37		2247	100.99
2176	97.80		2212	99.42		2248	101.03
2177	97.84		2213	99.46		2249	101.08
2178	97.89		2214	99.51		2250	101.12
2179	97.93		2215	99.55		2251	101.17
2180	97.98		2216	99.60		2252	101.21
2181	98.02		2217	99.64		2253	101.26
2182	98.07		2218	99.69		2254	101.30
2183	98.11		2219	99.73		2255	101.35
2184	98.16		2220	99.78		2256	101.39
2185	98.20		2221	99.82		2257	101.44
2186	98.25		2222	99.87		2258	101.48
2187	98.29		2223	99.91		2259	101.53
2188	98.34		2224	99.96		2260	101.57
2189	98.38		2225	100.00		2261	101.62
2190	98.43		2226	100.04		2262	101.66
2191	98.47		2227	100.09		2263	101.71
2192	98.52		2228	100.13		2264	101.75
2193	98.56		2229	100.18		2265	101.80
2194	98.61		2230	100.22		2266	101.84
2195	98.65		2231	100.27		2267	101.89
2196	98.70		2232	100.31		2268	101.93

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
2269	101.98		2305	103.60		2341	105.21
2270	102.02		2306	103.64		2342	105.26
2271	102.07		2307	103.69		2343	105.30
2272	102.11		2308	103.73		2344	105.35
2273	102.16		2309	103.78		2345	105.39
2274	102.20		2310	103.82		2346	105.44
2275	102.25		2311	103.87		2347	105.48
2276	102.29		2312	103.91		2348	105.53
2277	102.34		2313	103.96		2349	105.57
2278	102.38		2314	104.00		2350	105.62
2279	102.43		2315	104.04		2351	105.66
2280	102.47		2316	104.09		2352	105.71
2281	102.52		2317	104.13		2353	105.75
2282	102.56		2318	104.18		2354	105.80
2283	102.61		2319	104.22		2355	105.84
2284	102.65		2320	104.27		2356	105.89
2285	102.70		2321	104.31		2357	105.93
2286	102.74		2322	104.36		2358	105.98
2287	102.79		2323	104.40		2359	106.02
2288	102.83		2324	104.45		2360	106.07
2289	102.88		2325	104.49		2361	106.11
2290	102.92		2326	104.54		2362	106.16
2291	102.97		2327	104.58		2363	106.20
2292	103.01		2328	104.63		2364	106.25
2293	103.06		2329	104.67		2365	106.29
2294	103.10		2330	104.72		2366	106.34
2295	103.15		2331	104.76		2367	106.38
2296	103.19		2332	104.81		2368	106.43
2297	103.24		2333	104.85		2369	106.47
2298	103.28		2334	104.90		2370	106.52
2299	103.33		2335	104.94		2371	106.56
2300	103.37		2336	104.99		2372	106.61
2301	103.42		2337	105.03		2373	106.65
2302	103.46		2338	105.08		2374	106.70
2303	103.51		2339	105.12		2375	106.74
2304	103.55		2340	105.17		2376	106.79

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
2377	106.83		2413	108.45		2449	110.07
2378	106.88		2414	108.49		2450	110.11
2379	106.92		2415	108.54		2451	110.16
2380	106.97		2416	108.58		2452	110.20
2381	107.01		2417	108.63		2453	110.25
2382	107.06		2418	108.67		2454	110.29
2383	107.10		2419	108.72		2455	110.34
2384	107.15		2420	108.76		2456	110.38
2385	107.19		2421	108.81		2457	110.43
2386	107.24		2422	108.85		2458	110.47
2387	107.28		2423	108.90		2459	110.52
2388	107.33		2424	108.94		2460	110.56
2389	107.37		2425	108.99		2461	110.61
2390	107.42		2426	109.03		2462	110.65
2391	107.46		2427	109.08		2463	110.70
2392	107.51		2428	109.12		2464	110.74
2393	107.55		2429	109.17		2465	110.79
2394	107.60		2430	109.21		2466	110.83
2395	107.64		2431	109.26		2467	110.88
2396	107.69		2432	109.30		2468	110.92
2397	107.73		2433	109.35		2469	110.97
2398	107.78		2434	109.39		2470	111.01
2399	107.82		2435	109.44		2471	111.06
2400	107.87		2436	109.48		2472	111.10
2401	107.91		2437	109.53		2473	111.15
2402	107.96		2438	109.57		2474	111.19
2403	108.00		2439	109.62		2475	111.24
2404	108.04		2440	109.66		2476	111.28
2405	108.09		2441	109.71		2477	111.33
2406	108.13		2442	109.75		2478	111.37
2407	108.18		2443	109.80		2479	111.42
2408	108.22		2444	109.84		2480	111.46
2409	108.27		2445	109.89		2481	111.51
2410	108.31		2446	109.93		2482	111.55
2411	108.36		2447	109.98		2483	111.60
2412	108.40		2448	110.02		2484	111.64

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
2485	111.69		2521	113.30		2557	114.92
2486	111.73		2522	113.35		2558	114.97
2487	111.78		2523	113.39		2559	115.01
2488	111.82		2524	113.44		2560	115.06
2489	111.87		2525	113.48		2561	115.10
2490	111.91		2526	113.53		2562	115.15
2491	111.96		2527	113.57		2563	115.19
2492	112.00		2528	113.62		2564	115.24
2493	112.04		2529	113.66		2565	115.28
2494	112.09		2530	113.71		2566	115.33
2495	112.13		2531	113.75		2567	115.37
2496	112.18		2532	113.80		2568	115.42
2497	112.22		2533	113.84		2569	115.46
2498	112.27		2534	113.89		2570	115.51
2499	112.31		2535	113.93		2571	115.55
2500	112.36		2536	113.98		2572	115.60
2501	112.40		2537	114.02		2573	115.64
2502	112.45		2538	114.07		2574	115.69
2503	112.49		2539	114.11		2575	115.73
2504	112.54		2540	114.16		2576	115.78
2505	112.58		2541	114.20		2577	115.82
2506	112.63		2542	114.25		2578	115.87
2507	112.67		2543	114.29		2579	115.91
2508	112.72		2544	114.34		2580	115.96
2509	112.76		2545	114.38		2581	116.00
2510	112.81		2546	114.43		2582	116.04
2511	112.85		2547	114.47		2583	116.09
2512	112.90		2548	114.52		2584	116.13
2513	112.94		2549	114.56		2585	116.18
2514	112.99		2550	114.61		2586	116.22
2515	113.03		2551	114.65		2587	116.27
2516	113.08		2552	114.70		2588	116.31
2517	113.12		2553	114.74		2589	116.36
2518	113.17		2554	114.79		2590	116.40
2519	113.21		2555	114.83		2591	116.45
2520	113.26		2556	114.88		2592	116.49

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
2593	116.54		2629	118.16		2665	119.78
2594	116.58		2630	118.20		2666	119.82
2595	116.63		2631	118.25		2667	119.87
2596	116.67		2632	118.29		2668	119.91
2597	116.72		2633	118.34		2669	119.96
2598	116.76		2634	118.38		2670	120.00
2599	116.81		2635	118.43		2671	120.04
2600	116.85		2636	118.47		2672	120.09
2601	116.90		2637	118.52		2673	120.13
2602	116.94		2638	118.56		2674	120.18
2603	116.99		2639	118.61		2675	120.22
2604	117.03		2640	118.65		2676	120.27
2605	117.08		2641	118.70		2677	120.31
2606	117.12		2642	118.74		2678	120.36
2607	117.17		2643	118.79		2679	120.40
2608	117.21		2644	118.83		2680	120.45
2609	117.26		2645	118.88		2681	120.49
2610	117.30		2646	118.92		2682	120.54
2611	117.35		2647	118.97		2683	120.58
2612	117.39		2648	119.01		2684	120.63
2613	117.44		2649	119.06		2685	120.67
2614	117.48		2650	119.10		2686	120.72
2615	117.53		2651	119.15		2687	120.76
2616	117.57		2652	119.19		2688	120.81
2617	117.62		2653	119.24		2689	120.85
2618	117.66		2654	119.28		2690	120.90
2619	117.71		2655	119.33		2691	120.94
2620	117.75		2656	119.37		2692	120.99
2621	117.80		2657	119.42		2693	121.03
2622	117.84		2658	119.46		2694	121.08
2623	117.89		2659	119.51		2695	121.12
2624	117.93		2660	119.55		2696	121.17
2625	117.98		2661	119.60		2697	121.21
2626	118.02		2662	119.64		2698	121.26
2627	118.07		2663	119.69		2699	121.30
2628	118.11		2664	119.73		2700	121.35

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
2701	121.39		2737	123.01		2773	124.63
2702	121.44		2738	123.06		2774	124.67
2703	121.48		2739	123.10		2775	124.72
2704	121.53		2740	123.15		2776	124.76
2705	121.57		2741	123.19		2777	124.81
2706	121.62		2742	123.24		2778	124.85
2707	121.66		2743	123.28		2779	124.90
2708	121.71		2744	123.33		2780	124.94
2709	121.75		2745	123.37		2781	124.99
2710	121.80		2746	123.42		2782	125.03
2711	121.84		2747	123.46		2783	125.08
2712	121.89		2748	123.51		2784	125.12
2713	121.93		2749	123.55		2785	125.17
2714	121.98		2750	123.60		2786	125.21
2715	122.02		2751	123.64		2787	125.26
2716	122.07		2752	123.69		2788	125.30
2717	122.11		2753	123.73		2789	125.35
2718	122.16		2754	123.78		2790	125.39
2719	122.20		2755	123.82		2791	125.44
2720	122.25		2756	123.87		2792	125.48
2721	122.29		2757	123.91		2793	125.53
2722	122.34		2758	123.96		2794	125.57
2723	122.38		2759	124.00		2795	125.62
2724	122.43		2760	124.04		2796	125.66
2725	122.47		2761	124.09		2797	125.71
2726	122.52		2762	124.13		2798	125.75
2727	122.56		2763	124.18		2799	125.80
2728	122.61		2764	124.22		2800	125.84
2729	122.65		2765	124.27		2801	125.89
2730	122.70		2766	124.31		2802	125.93
2731	122.74		2767	124.36		2803	125.98
2732	122.79		2768	124.40		2804	126.02
2733	122.83		2769	124.45		2805	126.07
2734	122.88		2770	124.49		2806	126.11
2735	122.92		2771	124.54		2807	126.16
2736	122.97		2772	124.58		2808	126.20

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
2809	126.25		2845	127.87		2881	129.48
2810	126.29		2846	127.91		2882	129.53
2811	126.34		2847	127.96		2883	129.57
2812	126.38		2848	128.00		2884	129.62
2813	126.43		2849	128.04		2885	129.66
2814	126.47		2850	128.09		2886	129.71
2815	126.52		2851	128.13		2887	129.75
2816	126.56		2852	128.18		2888	129.80
2817	126.61		2853	128.22		2889	129.84
2818	126.65		2854	128.27		2890	129.89
2819	126.70		2855	128.31		2891	129.93
2820	126.74		2856	128.36		2892	129.98
2821	126.79		2857	128.40		2893	130.02
2822	126.83		2858	128.45		2894	130.07
2823	126.88		2859	128.49		2895	130.11
2824	126.92		2860	128.54		2896	130.16
2825	126.97		2861	128.58		2897	130.20
2826	127.01		2862	128.63		2898	130.25
2827	127.06		2863	128.67		2899	130.29
2828	127.10		2864	128.72		2900	130.34
2829	127.15		2865	128.76		2901	130.38
2830	127.19		2866	128.81		2902	130.43
2831	127.24		2867	128.85		2903	130.47
2832	127.28		2868	128.90		2904	130.52
2833	127.33		2869	128.94		2905	130.56
2834	127.37		2870	128.99		2906	130.61
2835	127.42		2871	129.03		2907	130.65
2836	127.46		2872	129.08		2908	130.70
2837	127.51		2873	129.12		2909	130.74
2838	127.55		2874	129.17		2910	130.79
2839	127.60		2875	129.21		2911	130.83
2840	127.64		2876	129.26		2912	130.88
2841	127.69		2877	129.30		2913	130.92
2842	127.73		2878	129.35		2914	130.97
2843	127.78		2879	129.39		2915	131.01
2844	127.82		2880	129.44		2916	131.06

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
2917	131.10		2953	132.72		2989	134.34
2918	131.15		2954	132.76		2990	134.38
2919	131.19		2955	132.81		2991	134.43
2920	131.24		2956	132.85		2992	134.47
2921	131.28		2957	132.90		2993	134.52
2922	131.33		2958	132.94		2994	134.56
2923	131.37		2959	132.99		2995	134.61
2924	131.42		2960	133.03		2996	134.65
2925	131.46		2961	133.08		2997	134.70
2926	131.51		2962	133.12		2998	134.74
2927	131.55		2963	133.17		2999	134.79
2928	131.60		2964	133.21		3000	134.83
2929	131.64		2965	133.26		3001	134.88
2930	131.69		2966	133.30		3002	134.92
2931	131.73		2967	133.35		3003	134.97
2932	131.78		2968	133.39		3004	135.01
2933	131.82		2969	133.44		3005	135.06
2934	131.87		2970	133.48		3006	135.10
2935	131.91		2971	133.53		3007	135.15
2936	131.96		2972	133.57		3008	135.19
2937	132.00		2973	133.62		3009	135.24
2938	132.04		2974	133.66		3010	135.28
2939	132.09		2975	133.71		3011	135.33
2940	132.13		2976	133.75		3012	135.37
2941	132.18		2977	133.80		3013	135.42
2942	132.22		2978	133.84		3014	135.46
2943	132.27		2979	133.89		3015	135.51
2944	132.31		2980	133.93		3016	135.55
2945	132.36		2981	133.98		3017	135.60
2946	132.40		2982	134.02		3018	135.64
2947	132.45		2983	134.07		3019	135.69
2948	132.49		2984	134.11		3020	135.73
2949	132.54		2985	134.16		3021	135.78
2950	132.58		2986	134.20		3022	135.82
2951	132.63		2987	134.25		3023	135.87
2952	132.67		2988	134.29		3024	135.91

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
3025	135.96		3061	137.57		3097	139.19
3026	136.00		3062	137.62		3098	139.24
3027	136.04		3063	137.66		3099	139.28
3028	136.09		3064	137.71		3100	139.33
3029	136.13		3065	137.75		3101	139.37
3030	136.18		3066	137.80		3102	139.42
3031	136.22		3067	137.84		3103	139.46
3032	136.27		3068	137.89		3104	139.51
3033	136.31		3069	137.93		3105	139.55
3034	136.36		3070	137.98		3106	139.60
3035	136.40		3071	138.02		3107	139.64
3036	136.45		3072	138.07		3108	139.69
3037	136.49		3073	138.11		3109	139.73
3038	136.54		3074	138.16		3110	139.78
3039	136.58		3075	138.20		3111	139.82
3040	136.63		3076	138.25		3112	139.87
3041	136.67		3077	138.29		3113	139.91
3042	136.72		3078	138.34		3114	139.96
3043	136.76		3079	138.38		3115	140.00
3044	136.81		3080	138.43		3116	140.04
3045	136.85		3081	138.47		3117	140.09
3046	136.90		3082	138.52		3118	140.13
3047	136.94		3083	138.56		3119	140.18
3048	136.99		3084	138.61		3120	140.22
3049	137.03		3085	138.65		3121	140.27
3050	137.08		3086	138.70		3122	140.31
3051	137.12		3087	138.74		3123	140.36
3052	137.17		3088	138.79		3124	140.40
3053	137.21		3089	138.83		3125	140.45
3054	137.26		3090	138.88		3126	140.49
3055	137.30		3091	138.92		3127	140.54
3056	137.35		3092	138.97		3128	140.58
3057	137.39		3093	139.01		3129	140.63
3058	137.44		3094	139.06		3130	140.67
3059	137.48		3095	139.10		3131	140.72
3060	137.53		3096	139.15		3132	140.76

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
3133	140.81		3169	142.43		3205	144.04
3134	140.85		3170	142.47		3206	144.09
3135	140.90		3171	142.52		3207	144.13
3136	140.94		3172	142.56		3208	144.18
3137	140.99		3173	142.61		3209	144.22
3138	141.03		3174	142.65		3210	144.27
3139	141.08		3175	142.70		3211	144.31
3140	141.12		3176	142.74		3212	144.36
3141	141.17		3177	142.79		3213	144.40
3142	141.21		3178	142.83		3214	144.45
3143	141.26		3179	142.88		3215	144.49
3144	141.30		3180	142.92		3216	144.54
3145	141.35		3181	142.97		3217	144.58
3146	141.39		3182	143.01		3218	144.63
3147	141.44		3183	143.06		3219	144.67
3148	141.48		3184	143.10		3220	144.72
3149	141.53		3185	143.15		3221	144.76
3150	141.57		3186	143.19		3222	144.81
3151	141.62		3187	143.24		3223	144.85
3152	141.66		3188	143.28		3224	144.90
3153	141.71		3189	143.33		3225	144.94
3154	141.75		3190	143.37		3226	144.99
3155	141.80		3191	143.42		3227	145.03
3156	141.84		3192	143.46		3228	145.08
3157	141.89		3193	143.51		3229	145.12
3158	141.93		3194	143.55		3230	145.17
3159	141.98		3195	143.60		3231	145.21
3160	142.02		3196	143.64		3232	145.26
3161	142.07		3197	143.69		3233	145.30
3162	142.11		3198	143.73		3234	145.35
3163	142.16		3199	143.78		3235	145.39
3164	142.20		3200	143.82		3236	145.44
3165	142.25		3201	143.87		3237	145.48
3166	142.29		3202	143.91		3238	145.53
3167	142.34		3203	143.96		3239	145.57
3168	142.38		3204	144.00		3240	145.62

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
3241	145.66		3277	147.28		3313	148.90
3242	145.71		3278	147.33		3314	148.94
3243	145.75		3279	147.37		3315	148.99
3244	145.80		3280	147.42		3316	149.03
3245	145.84		3281	147.46		3317	149.08
3246	145.89		3282	147.51		3318	149.12
3247	145.93		3283	147.55		3319	149.17
3248	145.98		3284	147.60		3320	149.21
3249	146.02		3285	147.64		3321	149.26
3250	146.07		3286	147.69		3322	149.30
3251	146.11		3287	147.73		3323	149.35
3252	146.16		3288	147.78		3324	149.39
3253	146.20		3289	147.82		3325	149.44
3254	146.25		3290	147.87		3326	149.48
3255	146.29		3291	147.91		3327	149.53
3256	146.34		3292	147.96		3328	149.57
3257	146.38		3293	148.00		3329	149.62
3258	146.43		3294	148.04		3330	149.66
3259	146.47		3295	148.09		3331	149.71
3260	146.52		3296	148.13		3332	149.75
3261	146.56		3297	148.18		3333	149.80
3262	146.61		3298	148.22		3334	149.84
3263	146.65		3299	148.27		3335	149.89
3264	146.70		3300	148.31		3336	149.93
3265	146.74		3301	148.36		3337	149.98
3266	146.79		3302	148.40		3338	150.02
3267	146.83		3303	148.45		3339	150.07
3268	146.88		3304	148.49		3340	150.11
3269	146.92		3305	148.54		3341	150.16
3270	146.97		3306	148.58		3342	150.20
3271	147.01		3307	148.63		3343	150.25
3272	147.06		3308	148.67		3344	150.29
3273	147.10		3309	148.72		3345	150.34
3274	147.15		3310	148.76		3346	150.38
3275	147.19		3311	148.81		3347	150.43
3276	147.24		3312	148.85		3348	150.47

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
3349	150.52		3385	152.13		3421	153.75
3350	150.56		3386	152.18		3422	153.80
3351	150.61		3387	152.22		3423	153.84
3352	150.65		3388	152.27		3424	153.89
3353	150.70		3389	152.31		3425	153.93
3354	150.74		3390	152.36		3426	153.98
3355	150.79		3391	152.40		3427	154.02
3356	150.83		3392	152.45		3428	154.07
3357	150.88		3393	152.49		3429	154.11
3358	150.92		3394	152.54		3430	154.16
3359	150.97		3395	152.58		3431	154.20
3360	151.01		3396	152.63		3432	154.25
3361	151.06		3397	152.67		3433	154.29
3362	151.10		3398	152.72		3434	154.34
3363	151.15		3399	152.76		3435	154.38
3364	151.19		3400	152.81		3436	154.43
3365	151.24		3401	152.85		3437	154.47
3366	151.28		3402	152.90		3438	154.52
3367	151.33		3403	152.94		3439	154.56
3368	151.37		3404	152.99		3440	154.61
3369	151.42		3405	153.03		3441	154.65
3370	151.46		3406	153.08		3442	154.70
3371	151.51		3407	153.12		3443	154.74
3372	151.55		3408	153.17		3444	154.79
3373	151.60		3409	153.21		3445	154.83
3374	151.64		3410	153.26		3446	154.88
3375	151.69		3411	153.30		3447	154.92
3376	151.73		3412	153.35		3448	154.97
3377	151.78		3413	153.39		3449	155.01
3378	151.82		3414	153.44		3450	155.06
3379	151.87		3415	153.48		3451	155.10
3380	151.91		3416	153.53		3452	155.15
3381	151.96		3417	153.57		3453	155.19
3382	152.00		3418	153.62		3454	155.24
3383	152.04		3419	153.66		3455	155.28
3384	152.09		3420	153.71		3456	155.33

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)		Average Impulse(ns)	Maximum Weight (lbs)
3457	155.37		3493	156.99		3529	158.61
3458	155.42		3494	157.03		3530	158.65
3459	155.46		3495	157.08		3531	158.70
3460	155.51		3496	157.12		3532	158.74
3461	155.55		3497	157.17		3533	158.79
3462	155.60		3498	157.21		3534	158.83
3463	155.64		3499	157.26		3535	158.88
3464	155.69		3500	157.30		3536	158.92
3465	155.73		3501	157.35		3537	158.97
3466	155.78		3502	157.39		3538	159.01
3467	155.82		3503	157.44		3539	159.06
3468	155.87		3504	157.48		3540	159.10
3469	155.91		3505	157.53		3541	159.15
3470	155.96		3506	157.57		3542	159.19
3471	156.00		3507	157.62		3543	159.24
3472	156.04		3508	157.66		3544	159.28
3473	156.09		3509	157.71		3545	159.33
3474	156.13		3510	157.75		3546	159.37
3475	156.18		3511	157.80		3547	159.42
3476	156.22		3512	157.84		3548	159.46
3477	156.27		3513	157.89		3549	159.51
3478	156.31		3514	157.93		3550	159.55
3479	156.36		3515	157.98		3551	159.60
3480	156.40		3516	158.02		3552	159.64
3481	156.45		3517	158.07		3553	159.69
3482	156.49		3518	158.11		3554	159.73
3483	156.54		3519	158.16		3555	159.78
3484	156.58		3520	158.20		3556	159.82
3485	156.63		3521	158.25		3557	159.87
3486	156.67		3522	158.29		3558	159.91
3487	156.72		3523	158.34		3559	159.96
3488	156.76		3524	158.38		3560	160.00
3489	156.81		3525	158.43		3561	160.04
3490	156.85		3526	158.47		3562	160.09
3491	156.90		3527	158.52		3563	160.13
3492	156.94		3528	158.56		3564	160.18

TRIPOLI GERLACH • THRUST to WEIGHT TABLE - 5:1 Ratio

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