



**ISORAN SILVER & SILVER 2**



## ISORAN SILVER AND SILVER 2

Megadyne Isoran Silver belts have been developed to give a more powerful alternative to Isoran RPP belts. Competing against high performance transmission systems, using chains and gears, that always have a disadvantage in terms of weight, noise, lubrication and maintenance costs.

Due to the greater power they can transmit compared to Isoran RPP, Isoran Silver can be used to improve and easily upgrade existing drives working with Isoran. Interchangeability is the key factor to flexible approach when upgrading with ISORAN SILVER, ensure that the other key equipments component are able to handle the increased transmitted power.

The new generation of RPP SILVER is made with materials of the highest quality and strength. Employing innovative manufacturing processes and techniques, the homogeneous construction of all components and a higher cohesive bond, imparts superior torque capacity, thus positioning the new SILVER 2 at a high performance level.

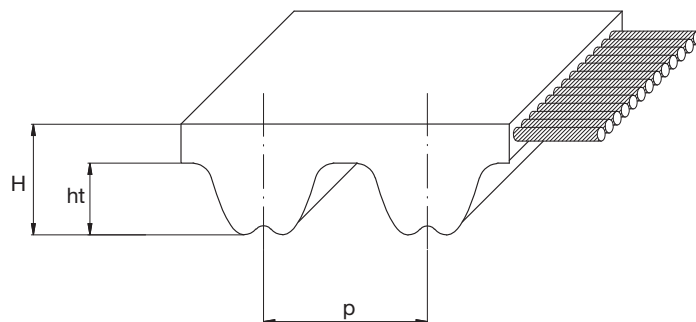
New SILVER 2 offers a wealth of improved properties and is distinguished above all, by the increased power capacity. Thanks to the use of “state of the art” materials, the SILVER 2 is particularly recommended for efficient and compact drives which experience high starting torques and allow the designer more flexibility due to the following advantages:

1. Increase of power load capacity by up to +50%, compared to the previous Silver; consequently more compact and lightweight drives are possible under the same power rating;
2. Break the equation “More Performance”=“More Cost”, as the Silver 2 retains the same selling price of the previous Silver generation, while offering a consistent improvement in performance;
3. Maintain the proven RPP tooth profile of Silver, thus continuing to give a full functional interchangeability with other deep profile systems;
4. Allows the existing RPP and SILVER systems to be upgraded without the necessity to replace the pulleys; thus extending the service life of existing drives at zero-cost.

The new SILVER 2 belts will be available in 8M and 14M pitches, with the same range of lengths of the previous SILVER generation. Each type will be available both in sleeves and single belts, maintaining the same basic dimensions and widths.

ISORAN SILVER 2 belts have RPP profile, designed even to be interchangeable with existing deep groove profiles and run on pulleys according to ISO 13050.

Isoran Silver belts are antistatic according to BS 2050.



Pitch		SILVER 5	SILVER 2 8M	SILVER 2 14M
Pitch length (mm)	p	5	8	14
Teeth height (mm)	ht	2,00	3,20	6,00
Belt height (mm)	H	3,80	5,40	9,70

Resistance to:	Standard belt resistance
Water	Medium
Acids / Alkalis	None
Solvents	None
Mineral oils	Low
Oils	Low
Greases	Medium
Fuels	None
Environmental agents	Medium

Other features	
Temperature range	Min: -25 °C
	Max: 80 °C
	Max peak: 100 °C
Hardness	90 +/-4 ShA
Antistatic	According to BS 2050

# ISORAN SILVER AND SILVER 2

## STANDARD TOLERANCES

Width tolerances				
Belt width (mm)		Tolerance on belt width		
		Belt length (mm)		
More than	Up to	Up to 838	More than 838 up to 1676	More than 1676
-	11,1	+0,5 -0,8	+0,5 -0,8	-
11,1	38,1	±0,8	+0,8 -1,3	+0,8 -1,3
38,1	50,8	+0,8 -1,3	±1,3	+1,3 -1,5
50,8	76,2	+1,3 -1,5	±1,5	+1,5 -2,0
76,2	170,0	+1,3 -1,5	+1,3 -2,0	±2,0

Length tolerances			
Belt length (mm)		Tolerance (mm)	Centre distance tolerance (mm)
More than	Up to		
254	381	±0,45	±0,225
381	508	±0,50	±0,250
508	762	±0,60	±0,300
762	991	±0,65	±0,325
991	1,220	±0,75	±0,375
1,220	1,524	±0,80	±0,400
1,524	1,778	±0,85	±0,425
1,778	2,032	±0,90	±0,450
2,032	2,286	±0,95	±0,475
over 2,286		$\pm \left[ 0,95 + \left( \frac{L - 2286}{254} \cdot 0,03 \right) \right]$	$\pm \left[ 0,475 + \left( \frac{L - 2286}{254} \cdot 0,015 \right) \right]$

For specific application where you might require different tolerances, please contact our Application Department.

Thickness tolerances				
Pitch	Nominal belt thickness (mm)	Tolerance degree (mm)		
		Standard belt	Grade 2	Grade 1
<b>SILVER 5</b>	3,80	±0,60	±0,25	±0,15
<b>SILVER 2 8M</b>	5,40	±0,60	±0,25	±0,15
<b>SILVER 2 14M</b>	9,70	±0,60	±0,25	±0,15

STANDARD WIDTHS											
Pitch	Belt widths										
	9	15	20	25	30	40	50	55	85	115	170
<b>SILVER 5</b>	•	•		•							
<b>SILVER 2 8M</b>			•		•		•		•		
<b>SILVER 2 14M</b>						•		•	•	•	•

## RANGE

SILVER 5	
Code	Pitch length [mm]
180 SLV5	180
225 SLV5	225
235 SLV5	235
245 SLV5	245
255 SLV5	255
265 SLV5	265
270 SLV5	270
280 SLV5	280
285 SLV5	285
295 SLV5	295
300 SLV5	300
305 SLV5	305
325 SLV5	325
330 SLV5	330
345 SLV5	345
350 SLV5	350
375 SLV5	375
400 SLV5	400
420 SLV5	420
425 SLV5	425
450 SLV5	450
455 SLV5	455
460 SLV5	460
465 SLV5	465
475 SLV5	475
500 SLV5	500
525 SLV5	525
535 SLV5	535
565 SLV5	565
575 SLV5	575
580 SLV5	580
600 SLV5	600
610 SLV5	610
615 SLV5	615
635 SLV5	635
640 SLV5	640
670 SLV5	670
675 SLV5	675
700 SLV5	700
705 SLV5	705
710 SLV5	710
725 SLV5	725
740 SLV5	740
750 SLV5	750
755 SLV5	755
800 SLV5	800
835 SLV5	835
850 SLV5	850
890 SLV5	890
900 SLV5	900
935 SLV5	935
940 SLV5	940
950 SLV5	950
980 SLV5	980
1000 SLV5	1000
1025 SLV5	1025
1050 SLV5	1050
1100 SLV5	1100
1125 SLV5	1125
1135 SLV5	1135
1195 SLV5	1195
1200 SLV5	1200
1240 SLV5	1240
1270 SLV5	1270
1420 SLV5	1420
1500 SLV5	1500
1595 SLV5	1595
1605 SLV5	1605
1690 SLV5	1690
1790 SLV5	1790
1800 SLV5	1800
1870 SLV5	1870
1895 SLV5	1895
1945 SLV5	1945
2000 SLV5	2000
2250 SLV5	2250
2350 SLV5	2350
2525 SLV5	2525

SILVER 2 8M	
Code	Pitch length [mm]
248 SLV2 8M	248
288 SLV2 8M	288
320 SLV2 8M	320
352 SLV2 8M	352
360 SLV2 8M	360
376 SLV2 8M	376
384 SLV2 8M	384
408 SLV2 8M	408
416 SLV2 8M	416
456 SLV2 8M	456
480 SLV2 8M	480
536 SLV2 8M	536
544 SLV2 8M	544
560 SLV2 8M	560
600 SLV2 8M	600
608 SLV2 8M	608
632 SLV2 8M	632
640 SLV2 8M	640
680 SLV2 8M	680
720 SLV2 8M	720
760 SLV2 8M	760
800 SLV2 8M	800
840 SLV2 8M	840
880 SLV2 8M	880
896 SLV2 8M	896
920 SLV2 8M	920
960 SLV2 8M	960
1000 SLV2 8M	1000
1040 SLV2 8M	1040
1080 SLV2 8M	1080
1120 SLV2 8M	1120
1160 SLV2 8M	1160
1200 SLV2 8M	1200
1224 SLV2 8M	1224
1280 SLV2 8M	1280
1352 SLV2 8M	1352
1424 SLV2 8M	1424
1440 SLV2 8M	1440
1464 SLV2 8M	1464
1600 SLV2 8M	1600
1680 SLV2 8M	1680
1760 SLV2 8M	1760
1800 SLV2 8M	1800
1904 SLV2 8M	1904
2000 SLV2 8M	2000
2200 SLV2 8M	2200
2240 SLV2 8M	2240
2272 SLV2 8M	2272
2400 SLV2 8M	2400
2520 SLV2 8M	2520
2600 SLV2 8M	2600
2800 SLV2 8M	2800
3048 SLV2 8M	3048
3200 SLV2 8M	3200
3280 SLV2 8M	3280
3600 SLV2 8M	3600
4000 SLV2 8M	4000
4400 SLV2 8M	4400

SILVER 2 14M	
Code	Pitch length [mm]
966 SLV2 14M	966
994 SLV2 14M	994
1092 SLV2 14M	1092
1106 SLV2 14M	1106
1120 SLV2 14M	1120
1190 SLV2 14M	1190
1260 SLV2 14M	1260
1288 SLV2 14M	1288
1344 SLV2 14M	1344
1400 SLV2 14M	1400
1442 SLV2 14M	1442
1512 SLV2 14M	1512
1568 SLV2 14M	1568
1610 SLV2 14M	1610
1750 SLV2 14M	1750
1764 SLV2 14M	1764
1778 SLV2 14M	1778
1848 SLV2 14M	1848
1890 SLV2 14M	1890
1904 SLV2 14M	1904
1960 SLV2 14M	1960
2100 SLV2 14M	2100
2240 SLV2 14M	2240
2310 SLV2 14M	2310
2380 SLV2 14M	2380
2450 SLV2 14M	2450
2520 SLV2 14M	2520
2590 SLV2 14M	2590
2660 SLV2 14M	2660
2800 SLV2 14M	2800
2968 SLV2 14M	2968
3136 SLV2 14M	3136
3150 SLV2 14M	3150
3304 SLV2 14M	3304
3360 SLV2 14M	3360
3500 SLV2 14M	3500
3850 SLV2 14M	3850
3920 SLV2 14M	3920
4326 SLV2 14M	4326
4410 SLV2 14M	4410
4578 SLV2 14M	4578
4956 SLV2 14M	4956



# ISORAN SILVER 5

BASIC PERFORMANCE Pb IN W FOR SILVER 5 - 9 mm wide (W / 9 mm)															
d (mm)	28,65	31,83	35,01	38,20	41,38	44,56	50,93	57,30	63,66	70,03	76,39	89,13	101,86	114,59	127,32
z	18	20	22	24	26	28	32	36	40	44	48	56	64	72	80
rpm															
10	7	8	8	9	10	11	12	14	15	17	18	21	25	28	31
20	12	15	17	18	20	21	25	28	31	34	37	43	49	55	61
30	17	21	25	28	30	32	37	41	46	51	55	64	74	83	92
50	26	32	39	46	50	54	61	69	77	84	92	107	123	138	153
70	35	43	51	61	70	75	86	97	107	118	129	150	172	193	215
100	48	58	70	82	96	107	123	138	153	169	184	215	245	276	307
200	86	105	126	149	173	200	245	276	307	337	368	429	491	552	613
300	122	149	173	211	245	282	363	414	460	506	552	644	736	828	920
400	156	191	229	269	314	361	465	552	613	675	736	859	981	1104	1227
500	189	231	277	326	380	437	563	690	767	843	920	1073	1227	1380	1533
600	221	270	323	381	444	510	657	822	920	1012	1104	1288	1472	1656	1840
700	252	308	369	435	506	582	750	938	1073	1181	1288	1503	1717	1932	2146
800	283	345	413	487	567	653	841	1051	1227	1349	1472	1717	1962	2208	2453
900	313	382	457	539	627	722	930	1162	1380	1518	1656	1932	2208	2483	2759
1000	342	418	500	590	687	790	1017	1272	1533	1686	1840	2146	2453	2759	3065
1100	371	453	543	640	745	857	1104	1380	1685	1855	2024	2361	2698	3035	3372
1200	400	488	585	689	802	923	1189	1486	1815	2024	2208	2575	2943	3310	3678
1300	428	523	626	738	859	989	1273	1592	1943	2192	2391	2790	3188	3586	3984
1400	456	557	667	786	915	1053	1356	1696	2070	2361	2575	3004	3433	3861	4290
1500	484	591	707	834	971	1117	1439	1799	2196	2529	2759	3218	3678	4137	4596
1600	511	624	748	882	1026	1181	1520	1901	2321	2698	2943	3433	3923	4412	4901
1700	538	657	787	928	1080	1243	1601	2002	2444	2866	3127	3647	4167	4687	5207
1800	565	690	827	975	1135	1306	1681	2102	2566	3035	3310	3861	4412	4962	5512
1900	592	723	866	1021	1188	1367	1761	2201	2688	3203	3494	4076	4657	5237	5818
2000	618	755	905	1067	1241	1429	1840	2300	2808	3363	3678	4290	4901	5512	6123
2400	707	863	1034	1219	1419	1632	2102	2628	3208	3843	4412	5146	5879	6611	7342
2800	824	1007	1206	1422	1655	1904	2452	3065	3742	4482	5146	6001	6854	7707	8557
3000	875	1068	1279	1508	1755	2020	2601	3251	3969	4754	5512	6428	7342	8254	9164
3200	908	1109	1329	1567	1823	2098	2701	3376	4122	4937	5821	6854	7828	8800	9770
3600	1022	1248	1494	1762	2050	2359	3038	3797	4636	5552	6546	7707	8800	9891	10978
4000	1118	1365	1635	1928	2243	2581	3324	4154	5070	6073	7160	8557	9770	10978	12181
4500	1236	1509	1807	2131	2480	2853	3674	4591	5604	6712	7912	9618	10978	12331	
5000	1352	1651	1977	2331	2713	3121	4018	5021	6128	7339	8651	10676	12181		
6000	1579	1928	2309	2722	3167	3643	4690	5860	7151	8561	10090	12781			
7000	1800	2197	2631	3102	3609	4151	5342	6673	8142	9746	11484				
8000	2016	2460	2946	3172	4039	4646	5978	7465	9105	10896					
10000	2434	2970	3555	4189	4871	5601	7202								
12000	2836	3459	4139	4875	5667	6514									
14000	3224	3930	4701	5534											

# ISORAN SILVER 2 8M

BASIC PERFORMANCE IN kW FOR SILVER 2 8M - 20 mm WIDE (kW / 20 mm)																
d (mm)	56,02	61,12	66,21	71,30	76,39	81,49	86,58	91,67	96,77	101,86	112,05	122,23	142,60	162,97	183,53	203,72
z	22	24	26	28	30	32	34	36	38	40	44	48	56	64	72	80
rpm																
10	0,06	0,07	0,08	0,09	0,09	0,10	0,10	0,11	0,12	0,12	0,13	0,15	0,17	0,19	0,22	0,24
20	0,11	0,13	0,15	0,17	0,18	0,19	0,21	0,22	0,23	0,24	0,27	0,29	0,34	0,39	0,44	0,49
30	0,16	0,18	0,22	0,24	0,27	0,29	0,31	0,33	0,35	0,36	0,40	0,44	0,51	0,58	0,66	0,73
50	0,26	0,29	0,35	0,39	0,43	0,47	0,51	0,55	0,58	0,61	0,67	0,73	0,85	0,97	1,09	1,22
70	0,36	0,40	0,48	0,53	0,58	0,64	0,69	0,75	0,81	0,85	0,94	1,02	1,19	1,36	1,53	1,70
100	0,49	0,56	0,66	0,73	0,81	0,88	0,96	1,04	1,12	1,20	1,34	1,46	1,70	1,95	2,19	2,43
200	0,94	1,06	1,26	1,39	1,53	1,67	1,82	1,97	2,12	2,28	2,60	2,92	3,40	3,89	4,38	4,86
300	1,36	1,53	1,83	2,02	2,22	2,43	2,64	2,86	3,08	3,31	3,77	4,25	5,10	5,83	6,56	7,29
400	1,77	2,00	2,38	2,64	2,90	3,17	3,45	3,73	4,02	4,31	4,92	5,54	6,80	7,77	8,74	9,71
500	2,18	2,46	2,92	3,24	3,56	3,89	4,23	4,58	4,93	5,29	6,04	6,81	8,42	9,71	10,92	12,13
600	2,58	2,91	3,46	3,83	4,21	4,60	5,00	5,41	5,83	6,26	7,14	7,92	9,23	10,54	11,85	13,16
700	2,97	3,35	3,98	4,41	4,85	5,30	5,77	6,24	6,72	7,21	8,23	9,23	10,76	12,29	13,81	15,32
800	3,36	3,79	4,51	4,99	5,49	6,00	6,52	7,05	7,60	8,15	9,30	10,48	12,29	14,02	15,76	17,48
900	3,74	4,22	5,02	5,56	6,11	6,68	7,26	7,86	8,47	9,08	10,36	11,67	13,81	15,76	17,69	19,62
1000	4,12	4,65	5,53	6,12	6,74	7,36	8,00	8,66	9,32	10,00	11,40	12,85	15,32	17,48	19,62	21,75
1100	4,50	5,07	6,04	6,68	7,35	8,03	8,73	9,44	10,17	10,92	12,44	14,02	16,83	19,19	21,54	23,86
1200	4,87	5,49	6,54	7,24	7,96	8,70	9,45	10,23	11,01	11,82	13,47	15,17	18,34	20,90	23,44	25,95
1300	5,25	5,91	7,04	7,79	8,56	9,36	10,17	11,00	11,85	12,71	14,48	16,31	19,83	22,59	25,32	28,02
1400	5,61	6,33	7,53	8,34	9,16	10,01	10,88	11,77	12,67	13,60	15,49	17,44	21,32	24,28	27,20	30,07
1500	5,98	6,74	8,02	8,88	9,76	10,66	11,59	12,53	13,49	14,47	16,48	18,56	22,80	25,95	29,05	32,10
1600	6,34	7,15	8,51	9,42	10,35	11,31	12,29	13,29	14,30	15,34	17,47	19,67	24,24	27,61	30,88	34,10
1700	6,71	7,56	8,99	9,95	10,94	11,95	12,98	14,03	15,11	16,20	18,45	20,76	25,58	29,25	32,70	36,07
1800	7,07	7,96	9,47	10,48	11,52	12,58	13,67	14,78	15,91	17,06	19,42	21,85	26,90	30,88	34,50	38,02
1900	7,42	8,36	9,95	11,01	12,10	13,21	14,35	15,51	16,70	17,90	20,38	22,92	28,21	32,50	36,27	39,94
2000	7,78	8,76	10,42	11,53	12,67	13,84	15,03	16,24	17,48	18,74	21,32	23,98	29,50	34,10	38,02	41,82
2500	10,54	11,86	14,11	15,59	17,12	18,67	20,26	21,87	23,51	25,17	28,57	32,04	39,17	46,20	51,04	55,55
3000	10,95	12,32	14,64	16,18	17,76	19,37	21,01	22,68	24,38	26,10	29,60	33,18	40,51	47,90	52,82	
3500	12,86	14,45	17,17	18,97	20,79	22,65	24,55	26,46	28,41	30,37	34,35	38,40	46,59	54,83		
4000	14,45	16,23	19,28	21,27	23,29	25,35	27,43	29,54	31,66	33,81	38,14	42,49	51,21			
4500	15,99	17,94	21,30	23,47	25,67	27,90	30,15	32,42	34,70	37,00	41,59	46,17				
5000	17,48	19,59	23,24	25,57	27,93	30,31	32,70	35,10	37,51	39,91	44,69					
5500	18,92	21,16	25,08	27,56	30,05	32,56	35,06	37,57	40,06	42,54						

<b>BASIC PERFORMANCE IN kW FOR SILVER 2 14M - 40 mm WIDE (kW / 40 mm)</b>																	
<b>d (mm)</b>	124,78	129,23	133,69	142,60	151,52	160,43	169,34	178,25	196,08	213,90	231,73	249,55	267,38	285,21	303,03	320,86	356,51
<b>z</b>	28	29	30	32	34	36	38	40	44	48	52	56	60	64	68	72	80
<b>rpm</b>																	
10	0,42	0,44	0,46	0,49	0,52	0,55	0,58	0,61	0,67	0,73	0,79	0,85	0,91	0,97	1,03	1,09	1,21
20	0,85	0,88	0,91	0,97	1,03	1,09	1,15	1,21	1,33	1,46	1,58	1,70	1,82	1,94	2,06	2,18	2,43
30	1,24	1,29	1,34	1,45	1,55	1,64	1,73	1,82	2,00	2,18	2,37	2,55	2,73	2,91	3,09	3,28	3,64
50	1,95	2,03	2,12	2,28	2,45	2,62	2,80	2,97	3,32	3,64	3,94	4,25	4,55	4,85	5,16	5,46	6,07
70	2,63	2,74	2,85	3,08	3,30	3,54	3,77	4,00	4,48	4,96	5,46	5,94	6,37	6,79	7,22	7,64	8,49
100	3,61	3,76	3,91	4,22	4,53	4,85	5,17	5,49	6,15	6,81	7,49	8,17	8,86	9,56	10,27	10,92	12,13
200	6,67	6,95	7,23	7,81	8,38	8,97	9,56	10,16	11,36	12,59	13,84	15,10	16,38	17,68	18,99	20,31	22,99
300	9,55	9,96	10,36	11,18	12,01	12,85	13,69	14,55	16,28	18,03	19,82	21,62	23,45	25,30	27,18	29,07	32,90
400	12,33	12,85	13,37	14,43	15,49	16,57	17,66	18,76	20,99	23,26	25,55	27,88	30,23	32,61	35,02	37,45	42,37
500	15,02	15,65	16,29	17,57	18,87	20,19	21,51	22,85	25,56	28,31	31,10	33,93	36,79	39,68	42,59	45,54	51,50
600	17,64	18,39	19,14	20,65	22,17	23,71	25,27	26,84	30,01	33,24	36,50	39,81	43,15	46,53	49,94	53,37	60,32
720	20,72	21,60	22,48	24,25	26,03	27,84	29,66	31,50	35,22	38,99	42,81	46,67	50,57	54,51	58,47	62,47	70,54
800	22,74	23,70	24,66	26,60	28,56	30,54	32,53	34,55	38,62	42,74	46,91	51,13	55,39	59,68	64,01	68,36	77,13
900	25,22	26,28	27,35	29,50	31,67	33,86	36,06	38,29	42,79	47,34	51,94	56,59	61,28	66,00	70,75	75,52	85,12
1000	27,67	28,83	30,00	32,35	34,72	37,12	39,53	41,96	46,87	51,84	56,86	61,92	67,02	72,14	77,29	82,46	92,83
1100	30,08	31,34	32,60	35,15	37,73	40,32	42,93	45,57	50,88	56,25	61,67	67,12	72,61	78,12	83,65	89,18	100,27
1200	32,45	33,81	35,17	37,91	40,68	43,47	46,28	49,11	54,81	60,57	66,37	72,20	78,05	83,93	89,80	95,68	107,40
1300	34,79	36,24	37,70	40,64	43,59	46,57	49,57	52,59	58,67	64,80	70,96	77,15	83,35	89,55	95,75	101,94	114,24
1400	37,10	38,65	40,20	43,32	46,46	49,63	52,81	56,01	62,45	68,93	75,44	81,96	88,49	95,00	101,50	107,96	120,76
1460	38,48	40,07	41,68	44,91	48,16	51,43	54,72	58,03	64,68	71,37	78,07	84,79	91,49	98,18	104,84	111,46	124,52
1600	41,63	43,36	45,09	48,56	52,06	55,58	59,11	62,66	69,78	76,92	84,06	91,19	98,29	105,34	112,33	119,25	132,80
1700	43,86	45,66	47,48	51,13	54,80	58,48	62,18	65,89	73,33	80,77	88,20	95,59	102,94	110,21	117,40	124,49	
1800	46,05	47,94	49,84	53,65	57,49	61,33	65,19	69,06	76,79	84,52	92,22	99,85	107,42	114,88	122,24	129,45	
1900	48,21	50,19	52,17	56,14	60,13	64,14	68,15	72,16	80,18	88,17	96,72	103,97	111,72	119,34	126,82		
2000	50,34	52,40	54,46	58,59	62,74	66,89	71,04	75,20	83,49	91,72	99,88	107,93	115,84	123,59			
2400	58,59	60,94	63,29	67,99	72,69	77,37	82,03	86,67	95,85	104,84	113,62						
2800	66,36	68,96	71,56	76,73	81,88	86,97	92,01	96,99	106,72								
2920	68,59	71,26	73,92	79,22	84,47	89,67	94,79	99,84	109,67								
3000	70,05	72,77	75,47	80,85	86,16	91,42	96,59	101,68	111,55								
3500	78,72	81,66	84,57	90,31	95,93	101,42											
4000	86,52	89,58	92,61	98,52													
4500	93,35	96,46															