

INTENSITY LEVEL RECKONER

IN THE ABSENSE OF BEING ABLE TO RECORD THE INDIVIDUAL'S HEART RATE THE FOLLOWING CHART PROVIDES INDICATIVE INTENSITY LEVELS FROM AEROBIC TO ANAEROBIC THRESHOLD LEVELS FOR ERGOMETER WORK BASED ON ONE'S AVERAGE OPTIMAL TIME OVER 1000 METRES

AVERAGE OPTIMAL TIME [ERGO DRAG FACTOR 100-110 FOR WOMEN AND 110-120 FOR MEN]	60% OF OPTIMAL	70% OFOPTIMAL	80% OF OPTIMAL	85% OF OPTIMAL	90% OF OPTIMAL
MIN.SEC/500M	MINS.SEC/500M	MINS.SEC/500M	MINS.SEC/500M	MINS.SEC/500M	MINS.SEC/500M
1.35	2.13	2.04	1.54	1.49	1.45
1.36	2.14	2.05	1.55	1.50	1.46
1.37	2.16	2.06	1.57	1.52	1.47
1.38	2.17	2.07	1.58	1.53	1.48
1.39	2.19	2.09	1.60	1.54	1.49
1.40	2.20	2.10	2.00	1.55	1.50
1.41	2.21	2.11	2.01	1.56	1.51
1.42	2.23	2.13	2.02	1.57	1.52
1.43	2.24	2.14	2.04	1.58	1.53
1.44	2.26	2.15	2.05	2.00	1.54
1.45	2.27	2.17	2.06	2.01	1.56
1.46	2.28	2.18	2.07	2.02	1.57
1.47	2.30	2.19	2.08	2.03	1.58
1.48	2.31	2.20	2.09	2.04	1.59
1.49	2.32	2.22	2.10	2.05	2.00
1.50	2.34	2.23	2.12	2.07	2.01
1.51	2.35	2.24	2.13	2.08	2.02
1.52	2.37	2.26	2.15	2.09	2.03
1.53	2.38	2.27	2.16	2.10	2.04
1.54	2.40	2.28	2.17	2.11	2.05
1.55	2.41	2.30	2.18	2.12	2.07
1.56	2.42	2.31	2.19	2.13	2.08
1.57	2.44	2.32	2.20	2.15	2.09
1.58	2.45	2.34	2.22	2.16	2.10
1.59	2.46	2.35	2.23	2.17	2.11
2.00	2.48	2.36	2.24	2.18	2.12
2.01	2.49	2.37	2.25	2.19	2.13
2.02	2.51	2.39	2.26	2.20	2.14
2.03	2.52	2.40	2.28	2.21	2.15
2.04	2.53	2.41	2.29	2.23	2.16
2.05	2.55	2.43	2.30	2.24	2.18
2.06	2.56	2.44	2.31	2.25	2.19
2.07	2.58	2.45	2.32	2.26	2.20
2.08	2.59	2.46	2.34	2.27	2.21
2.09	3.01	2.48	2.35	2.28	2.22
2.10	3.02	2.49	2.36	2.30	2.23
2.11	3.03	2.50	2.37	2.32	2.24
2.12	3.05	2.52	2.38	2.32	2.25
2.13	3.06	2.53	2.40	2.33	2.26
2.14	3.08	2.54	2.42	2.34	2.27
2.15	3.09	2.56	2.42	2.35	2.29
2.16	3.10	2.57	2.43	2.36	2.30

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TANAKA FORMULA

WHERE HEART RATE CAN BE MONITORED THE FOLLOWING CHART PROVIDES INDICATIVE MAX. HEART RATE (MHR) LEVELS FOR AEROBIC TO ANAEROBIC THRESHOLD LEVELS BASED ON THE TANAKA FORMULA OF $208 - (\text{AGE} \times 0.7)$

TO DETERMINE A PERCENTAGE OF MAXIMUM HEART RATE (MHR) USING THE TANAKA FORMULA IS AS FOLLOWS WHERE:

RESTING HEART RATE (RHR) - BEST TAKEN WHEN YOU FIRST WAKE UP IN THE MORNING AND WILL VARY FROM INDIVIDUAL TO INDIVIDUAL

WORKING HEART RATE (WHR) = MHR-RHR

A PERCENTAGE OF MHR IS: $\text{WHR} \times \% + \text{RHR}$

EXAMPLE

ASSUME A WORKLOAD AT 80% MHR FOR A 50 YEAR OLD PERSON USING DATA FROM THE TABLE BELOW

MHR 173

RHR 60 (ASSUMED)

WHR 113

MAX HEART RATE $\text{WHR (113)} \times 80\% + \text{RHR (60)} = 150 \text{ BPM}$

AGE	MHR $208 - (\text{AGE} \times 0.7)$	WHR (MHR-RHR) [ASSUME A RHR OF 60 BPM]	MHR FOR 60% INTENSITY	MHR FOR 80% INTENSITY	MHR FOR 85% INTENSITY	MHR FOR 90% INTENSITY
30	187	127	136	162	168	174
35	184	124	147	159	165	172
40	180	120	132	156	162	168
45	177	117	130	154	159	165
50	173	113	128	150	156	162
55	170	110	126	148	154	159
60	166	106	124	145	150	155
65	163	103	122	142	148	153
70	159	99	119	139	144	149
75	156	96	118	137	142	146
80	152	92	115	134	138	143