

INTENSITY LEVEL RECKONER

IN THE ABSENCE 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
2.17	3.12	2.58	2.44	2.38	2.31
2.18	3.13	2.59	2.46	2.39	2.32
2.19	3.15	3.01	2.47	2.40	2.33
2.20	3.16	3.02	2.48	2.41	2.34

INTENSITY LEVEL RECKONER

TANAKA FORMULA FOR HEART RATE LEVELS

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 $208 - (\text{AGE} \times 0.7)$ assumed as 100%	WHR (MHR-RHR) [ASSUME A RHR OF 60 BPM]	MHR FOR 60% INTENSITY	MHR FOR 70% INTENSITY	MHR FOR 80% INTENSITY	MHR FOR 85% INTENSITY	MHR FOR 90% INTENSITY
30	187	127	136	149	162	168	174
35	184	124	134	147	159	165	172
40	180	120	132	144	156	162	168
45	177	117	130	142	154	159	165
50	173	113	128	139	150	156	162
55	170	110	126	137	148	154	159
60	166	106	124	134	145	150	155
65	163	103	122	132	142	148	153
70	159	99	119	129	139	144	149
75	156	96	118	127	137	142	146
80	152	92	115	124	134	138	143