NOME		
COGNOME		
PESO		
ALTEZZA		
1RM (kg)	176,7	

Load (kg)	V (m/s)	F (N)	P (W)
40	1,03	392,4	404,17
65	0,84	637,65	535,63
85	0,85	833,85	708,77
100	0,76	981	745,56
110	0,72	1079,1	776,95
120	0,64	1177,2	753,41
140	0,51	1373,4	700,43
		0	0,00
MVT (m/s)	0,35	1733,5	606,71
	Theoretical 1RM (N)	176,7	

F_{isom} (N)   2416,5 F_{isom} (kg)

Theoretical 1RM (2098,7   Theoretical 1RM (kg)

V_{max} (m/s)   1,24 V_{1RM} (m/s)

P_{max} (W)   #NOME?

P_{max} load (N)   #NOME? P_{max} load (kg)

VP_{max} (m/s)   #NOME?

P_{max} %F_{isom} #NOME? P_{max} %1RM

%90 P_{max} (W)   #NOME?

Fmin %90 P_{max} (N   #NOME?   Fmin %90 P_{max} (kg)

Fmax %90 P_{max} (N   #NOME?   Fmax %90 P_{max} (kg)

Vmin %90 P_{max} (m   #NOME?

Vmax %90 P_{max} (m   #NOME?
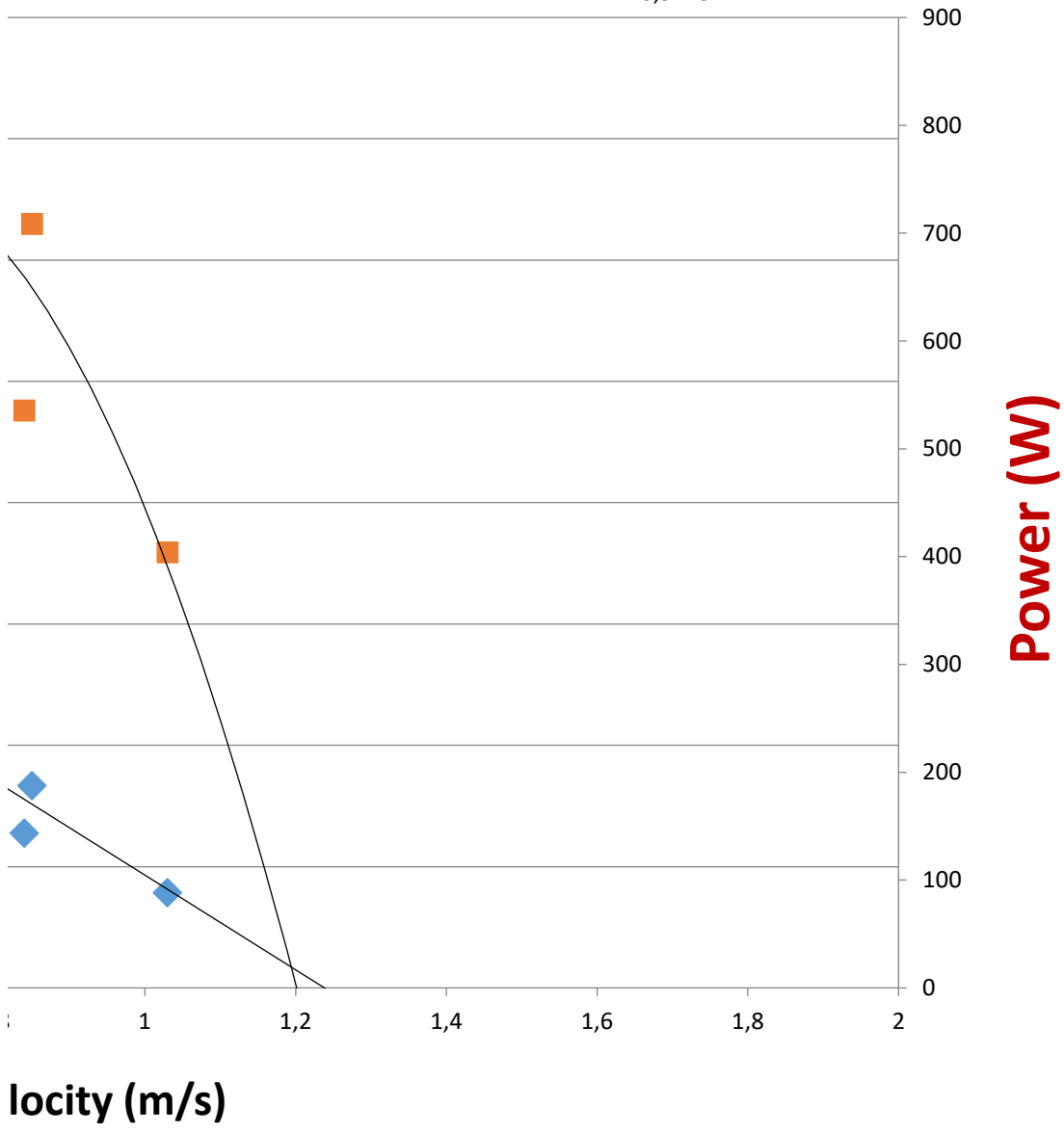
Coefficients	Linear trend coeffs.	
a	0,00	#
b	-1951,60	#
c	2416,52408	#
R^2	0,9479	#
SEE	#NOME?	
	V at	
	#	
	V at	
	#	

246,3

213,9

0,35

#NOME?

#NOME?

#NOME?
#NOME?

F-V

Force (N)

Ve

and P-V chart

y = -1951,6x + 2416,5
R² = 0,9479

Power (W)

900

800

700

600

500

400

300

200

100

0

1   1,2   1,4   1,6   1,8   2

locity (m/s)

Relative load (%1RM)	Mean velocity (m/s)	Load (kg)	Power (W)
20 %1RM	1,06	35,3	367,7
25 %1RM	1,02	44,2	440,4
30 %1RM	0,97	53,0	505,4
35 %1RM	0,93	61,8	562,6
40 %1RM	0,88	70,7	612,2
45 %1RM	0,84	79,5	654,1
50 %1RM	0,79	88,4	688,3
55 %1RM	0,75	97,2	714,8
60 %1RM	0,71	106,0	733,6
65 %1RM	0,66	114,9	744,6
70 %1RM	0,62	123,7	748,0
75 %1RM	0,57	132,5	743,7
80 %1RM	0,53	141,4	731,7
85 %1RM	0,48	150,2	712,0
90 %1RM	0,44	159,0	684,6
95 %1RM	0,39	167,9	649,5
100 %1RM	0,35	176,7	606,7

Velocity-

Weakley, Jonathon
Ramos, Amador P

Author Informatic

Strength and Con

Exercise	
Bench press	
Prone bench pull	
Prone pull-up	
Seated military press	
Lat pulldown	
Seated cable row	
Squat	
Deadlift	
Hip-thrust	
Leg press	

[a]Smith machine va

1RM = one repetit

Based Training: From Theory to Application

n PhD[1,2]; Mann, Bryan PhD[3]; Banyard, Harry PhD[4]; McLaren, Shaun PhD[2,5]; Scott, Tannath PhD[2,6]; Garcia-
hD[7,8]

on ⊙

	Table 2		
Minimum velocity threshold for commonly used resistance training exercises			
Study	**Sample**	**1RM MV (mean ± SD)**	**V1RM**
González-Badillo and Sánchez-Medina[a] (32)	120 young healthy males	0.16 ± 0.04 m/s	0.17 m/s
Sánchez-Medina[a] et al. (75)	75 athletes	0.17 ± 0.04 m/s	
García-Ramos[a] et al. (27)	30 healthy males	0.17 ± 0.03 m/s	
Helms et al. (38)	15 powerlifters	0.10 ± 0.04 m/s	
Loturco et al. (54)	30 athletes	0.51 ± 0.07 m/s	0.50 m/s
Sánchez-Medina[a] et al. (75)	75 athletes	0.52 ± 0.06 m/s	
García-Ramos et al. (30)	26 athletes	0.48 ± 0.04 m/s	
Sánchez-Moreno et al. (78)	52 firefighter candidates	0.20 ± 0.05 m/s	0.23 m/s
Muñoz-Lopez et al. (58)	82 resistance-trained males	0.26 ± 0.05 m/s	
Balsalobre-Fernández[a] et al. (3)	39 resistance trained participants	0.19 ± 0.05 m/s	0.19 m/s
García-Ramos[a] et al. (29)	24 healthy participants	0.20 ± 0.05 m/s	
Perez-Castilla et al. (69)	23 healthy participants	0.47 ± 0.04 m/s	0.47 m/s
Perez-Castilla et al. (69)	23 healthy participants	0.40 ± 0.05 m/s	0.40 m/s
Conceição[a] et al. (13)	15 male athletes	0.32 ± 0.04 m/s	0.30 m/s
Sánchez-Medina and[a] González-Badillo (74)[a]	80 strength-trained males	0.32 ± 0.03 m/s	
	17 strength-trained males	0.24 ± 0.06 m/s	
Banyard et al. (6)	15 powerlifters	0.23 ± 0.05 m/s	
Helms et al. (38)			
Ruf et al. (73)	11 resistance-trained athletes	Not stated	0.15 m/s
Helms et al. (38)	15 powerlifters	0.14 ± 0.05 m/s	
Lake et al. (51)	12 active males	0.16 ± 0.05 m/s	
de Hoyo et al. (20)	102 sport science students	0.25 ± 0.03 m/s	0.25 m/s
Conceição et al. (13)	15 male athletes	0.21 ± 0.04 m/s	0.21 m/s
ariation of the exercise.			
tion maximum; MV = mean velocity; V1RM = velocity at 1RM.			