

Throwing Implement Specifications Summary WEIGHT & SUPERWEIGHT

Implement		56 lb	20 kg	35 lb	25 lb	20 lb	16 lb	12 lb	4 kg
	UNITS								
Allowable Weight	MIN kg	25.400	20.000	15.880	11.340	9.080	7.260	5.450	4.000
Overall Length (USATF Open, NCAA)	MAX mm	406.4		406.4		406.4			
Overall Length (USATF Masters, WMA)	MAX mm	410.0	410.0	410.0	410.0	410.0	410.0	410.0	410.0
Handle* (triangular**, inside measurement)	MAX mm	190	190	190	190	190	190	190	190
	MIN mm	100	100	100	100	100	100	100	100
Connection, # of steel links***	MAX	2	2	2	2	2	2	2	2
Center of Gravity (off-center)	MAX mm	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Head Diameter (outdoor)	MIN mm	---	---	145	130	120	110	100	95
	MAX mm	---	---	165	150	140	130	120	110
Head Diameter (indoor)	MAX mm	---	---	180	165	155	145	135	125

* USATF, WMA Indoor, NCAA rules only.
WMA Outdoor rules do not specify handle type or dimensions.

** USATF allows truncated triangle

*** USATF rules only. WMA does not limit # of links.
NCAA allows chain link, links or steel line

Sources:

USATF Rule 195.8
WMA Rule 221
NCAA Rule 10-9.4

Throwing Implement Specifications Summary HAMMER

Implement		7.26 kg	6 kg	12 lb ¹	5 kg	4 kg	3 kg	2 kg
	UNITS							
Overall length²	MIN ⁴ mm	1175	1175	1175	1165	1160	1160	1160
	MAX mm	1215	1215	1215	1200	1195	1195	1195
Allowable Weight	MIN kg	7.260	6.000	5.443	5.000	4.000	3.000	2.000
Head Diameter	MIN mm	110	105	98.4	100	95	85	80
	MAX mm	130	125	117.5	120	110	100	90
Wire Diameter	MIN mm	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Center of Gravity (off-center)	MAX mm	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Internal Movement		none	none	none	none	none	none	none
Handle Length³	MAX mm	110	110	110	110	110	110	110
Loop Diameter (USATF only)	MAX mm	19.5	19.5	19.5	19.5	19.5	19.5	19.5

NOTES:

- 1 For USATF Youth competition
12 lb suggested for NFHS boys competition, 4 kg for NFHS girls
- 2 From inside of handle grip to bottom of the ball
- 3 From bottom of grip to bottom of loop
- 4 NCAA and WMA only

Sources:
 USATF Rules 191.9
 IAAF Rule 191.9
 WMA Rule 191
 NCAA Rule 2-10.5
 NFHS Rule 8.2.1

Throwing Implement Specifications Summary DISCUS

Implement		2.0 kg	1.75 kg	1.6 kg	1.5 kg	1.0 kg	0.75 kg
	UNITS						
Diameter (overall)	MIN mm	219	210	209	200	180	166
	MAX mm	221	212	211	202	182	169
Thickness (at center plates)	MIN mm	44	41	40	38	37	33
	MAX mm	46	43	42	40	39	37
Diameter (center plates)	MIN mm	50	50	50	50	50	50
	MAX mm	57	57	57	57	57	57
Thickness (rim @ 6mm from edge)	MIN mm	13	13	13	13	13	13
	MAX mm	12	12	12	12	12	10

Sources:

- USATF Rules 189.3
- IAAF Rule 189.2
- WMA Rule 189
- NCAA Rule 2-9.3
- NFHS Rule 6.4.2

Throwing Implement Specifications Summary SHOT

Implement		16 lb	6 kg	12 lb	5 kg	4 kg	3 kg	6 lb	2 kg
	UNITS								
Allowable Min Weight	kg	7.260	6.000	5.443	5.000	4.000	3.000	2.720	2.000
Min Diameter (for all)	mm	110	105	98.4	100	95	85	n/a	80
Max Diameter (outdoors):									
USATF Open, USATF Masters Women	mm	130				110	110		110
USATF Masters Men	mm	130	130		130	130	130		
IAAF	mm	130	125		120	110	110		
WMA Men	mm	130	125		120	120	120		
WMA Women	mm					110	110		90
NCAA	mm	130				110			
USATF Youth	mm			117.5		110		n/a	90
NFHS	mm			117.5		110			
Max Diameter (indoors):									
USATF Open, IAAF, NCAA, WMA	mm	145				130			
USATF Masters Men	mm	145	145		145	145	145		
USATF Masters Women	mm					130	130		110
USATF Youth	mm			132.5		130		n/a	110

Sources:

USATF Rules 188.4, 221.5
 NCAA Rules 2-8.3, 10-7.3
 IAAF Rules 188.5, 221.6
 WMA Rule 188
 NFHS Rule 6.5.2

Notes:

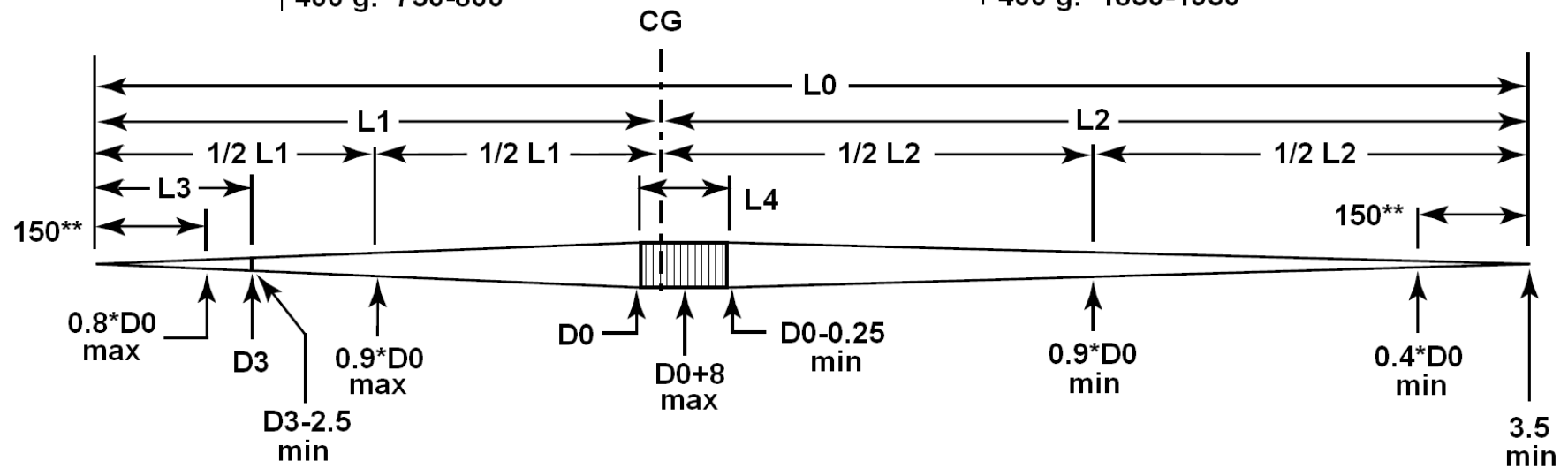
- IAAF does not specify indoor diameters for 6 kg, 5 kg & 3 kg shots
- WMA does not specify indoor diameters other than referencing IAAF rules
- NFHS does not specify indoor diameters

forward CG length

L1	800 g:	900-1060
	700 g:	860-1000
	600 g:	800-920
	500 g:	780-880
	400 g:	750-800

overall length

L0	800 g:	2600-2700
	700 g:	2300-2400
	600 g:	2200-2300
	500 g:	2000-2100
	400 g:	1850-1950



** 125 for 400 g

metal head

L3	800 g:	250-330
	700 g:	250-330
	600 g:	250-330
	500 g:	220-270
	400 g:	200-250

max diameter

D0	800 g:	25-30
	700 g:	23-28
	600 g:	20-25
	500 g:	20-24
	400 g:	20-23

grip length

L4	800 g:	150-160
	700 g:	150-160
	600 g:	140-150
	500 g:	135-145
	400 g:	130-140

IAAF & WMA Javelins

(all dimensions in mm)

Throwing Implement Specifications Summary JAVELIN

Name	800 g	700g	600 g	500g	400 g
Nominal Wt. G	800	700	600	500	400
Minimum Record Wt. G	800	700	600	500	400
Overall Length min. mm	2600	2300	2200	2000	1850
Overall Length max. mm	2700	2400	2300	2100	1950
Length – Metal Head min. mm	250	250	250	220	200
Length – Metal Head max. mm	330	330	330	270	250
Dist. From tip to CG min. mm	900	860	800	780	750
Dist. From tip to CG max. mm	1060	1000	920	880	800
Diameter of Shaft at thickest point min. mm	25	23	20	20	20
Diameter of Shaft at thickest point max. mm	30	28	25	24	23
Width of cord grip, min. mm	150	150	140	135	130
Width of cord grip max. mm	160	160	150	145	140
Taper Meas. from Tip mm	150	150	150	150	125
Taper Meas. from Tail mm	150	150	150	150	125
Diameter at Tip Taper Measurement Point	<0.80dia*	<0.80dia*	< 0.80dia	<0.80dia*	<.80dia*
Diameter at Tail Taper Measurement Point	>0.40dia*	>0.40dia*	> 0.40dia	>0.40dia*	>0.40dia
Diam. at Mid Point Tip to CG	<0.90dia*	<0.90dia*	< 0.90dia	<0.90dia*	<0.90dia
Diam. at Mid Point Tail to CG	>0.90dia*	>0.90dia*	> 0.90dia	>0.90dia*	>0.80dia
Tail Diameter min mm	3.5	3.5	3.5	3.5	3.5

* *diam* is the maximum diameter for the implement.

NOTE 1: While the cross-section should be circular, a maximum difference between the largest and the smallest diameter of 2% is permitted. The mean value of these two diameters must correspond to the specification of a circular javelin.

NOTE 2: The shape of the longitudinal profile may be quickly and easily checked using a metal straightedge at least 50cm long and two feeler gauges 0.20mm and 1.25mm thick. For slightly convex sections of the profile, the straightedge will rock while being in firm contact with a short section of the javelin. For straight sections of the profile, with the straightedge held firmly against it, it must be impossible to insert the 0.20mm gauge between the Javelin and the straightedge anywhere over the length of contact. This shall not apply immediately behind the joint between the head and the shaft. At this point it must be impossible to insert the 1.25mm gauge.