38. Javelin Throw

Competition

38.1 The javelin shall be held at the grip with one hand only. It shall be thrown over the shoulder or upper part of the throwing arm and shall not be slung or hurled. Non-orthodox styles are not permitted.

38.2 A throw shall be valid only if the metal head strikes the ground before any other part of the javelin.

Previous references in the Rules to the "tip" of the javelin have been removed and are replaced by a generic reference to the head. This acknowledges that the shape of the head varies greatly, making it harder to separately define the tip. It means that Judges in determining whether the javelin has landed correctly in terms of Rule 32.16 of the Technical Rules and this Rule 38.2 and the reference point for measurement in terms of Rule 32.20.2 of the Technical Rules now have a bigger area with which to assess. But the principles remain as before and there must be some angle on landing, however small, for the throw to be valid. Flat or "tail-first" landings are still to be red flagged.

38.3 Until the javelin has been thrown, an athlete shall not at any time turn completely around, so that their back is towards the throwing arc.

Note: This Rules refers to the run-up and the act of throwing, not to an athlete walking back before starting their attempt or after having interrupted it.

38.4 If the javelin breaks during a throw or while in the air, it shall not count as a failure, provided the trial was otherwise made in accordance with this Rule. Nor shall it count as a failure if an athlete thereby loses their balance and as a result contravenes any part of this Rule. In both cases the athlete shall be awarded a replacement trial.

Javelin

38.5 The javelin shall consist of three main parts: a shaft, a head and a cord grip.

38.6 The shaft may be solid or hollow and shall be constructed of metal or other suitable material so as to constitute a fixed and integrated whole. The surface of the shaft shall have no dimples or pimples, grooves or ridges, holes or roughness, and the finish shall be smooth (see Rule 33.4 of the Technical Rules) and uniform throughout.

38.7 The shaft shall have fixed to it a metal head terminating in a sharp point. The head shall be constructed completely of metal. It may contain a reinforced tip of other metal alloy fixed to the front end of the head provided that the completed head is smooth (see Rule 33.4 of the Technical Rules) and uniform along the whole of its surface. The angle of the tip shall not exceed 40°.

Note: The metal head up to 3mm from the tip may be disregarded for the angle of the point, when the construction of the tip is made with safety measures implemented.

38.8 The cord grip, which shall cover the centre of gravity, shall not exceed the average diameter of the shaft by more than 8mm. It may have a regular non-slip pattern surface but without thongs, notches or indentations of any kind. The grip shall be of uniform thickness.

38.9 The cross-section shall be regularly circular throughout (see Note (i)). The maximum diameter of the shaft shall be immediately in front of the grip. The central portion of the shaft, including the part under the grip, may be cylindrical or slightly tapered towards the rear but in no case may the reduction in diameter, from immediately in front of the grip to immediately behind, exceed 0.25mm. From the grip, the javelin shall taper regularly to the tip at the front and the tail at the rear. The

longitudinal profile from the grip to the front tip and to the tail shall be straight or slightly convex (see Note (ii)), and there shall be no abrupt alteration in the overall diameter, except immediately behind the head and at the front and rear of the grip, throughout the length of the javelin. At the rear of the head, the reduction in the diameter may not exceed 2.5mm.

Note (i): Whilst the cross section throughout should be circular, a maximum difference between the largest and the smallest diameter at any cross section of 2% is permitted. The mean value of these two diameters, at any nominated cross section, shall meet the specifications of a circular javelin in the tables hereunder.

Note (ii): The shape of the longitudinal profile may be quickly and easily checked using a metal straight edge at least 500mm long and two feeler gauges 0.20mm and 1.25mm thick. For slightly convex sections of the profile, the straight edge will rock while being in firm contact with a short section of the javelin. For straight sections of the profile, with the straight edge held firmly against it, it must be impossible to insert the 0.20mm gauge between the javelin and the straight edge 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.

38.10 The javelin shall conform to the following specifications:

Minimum weight and diameter limits for admission to competition and acceptance of a Record (inclusive of the cord grip):				
	500g	600g	700g	800g
Overall length (L0):				
Minimum	2000mm	2200mm	2300mm (2400mm*)	2600mm
Maximum	2100mm	2300mm	2400mm (2500mm*)	2700mm
Distance from tip of metal head to centre of gravity (L1):				
Minimum	780mm	800mm	860mm (850mm*)	900mm
Maximum	880mm	920mm	1000mm (990mm*)	1060mm
Distance from tail to centre of gravity (L2):				
Minimum	1120mm	1280mm	1300mm (1410mm*)	1540mm
Maximum	1320mm	1500mm	1540mm (1650mm*)	1800mm
Length of metal head (L3):				
Minimum	220mm	250mm	250mm	250mm
Maximum	270mm	330mm	330mm	330mm
Width of cord grip (L4):				
Minimum	135mm	140mm	150mm	150mm
Maximum	145mm	150mm	160mm	160mm
Diameter of shaft at thickest point (in front of grip - D0):				
Minimum	20mm	20mm	23mm	25mm
Maximum	24mm	25mm	28mm	30mm

* Amended in August 2023 and in force from 1 April 2025.

38.11 The javelin shall have no mobile parts or other apparatus, which during the throw could change its centre of gravity or throwing characteristics.

38.12 The tapering of the javelin to the tip of the metal head shall be such that the angle of the point shall be not more than 40°. The diameter, at a point 0.15m from the tip, shall not exceed 80% of the maximum diameter of the shaft. At the midpoint between the centre of gravity and the tip of

the metal head, the diameter shall not exceed 90% of the maximum diameter of the shaft.

38.13 The tapering of the shaft to the tail at the rear shall be such that the diameter, at the midpoint between the centre of gravity and the tail, shall not be less than 90% of the maximum diameter of the shaft. At a point 0.15m from the tail, the diameter shall be not less than 40% of the maximum diameter of the shaft. The diameter of the shaft at the end of the tail shall not be less than 3.5mm.

Team of Officials

For a Javelin Throw event, it is recommended to allocate the available officials as follows:

a. The Chief Judge will watch over the whole of the event.

b. Two Judges checking whether the throw has been made correctly and measuring the trial. One must be provided with two flags - white to indicate if the trial is valid and red if it is a failure. When the throw has been measured, it is advised that the Judge stands on the runway holding the red flag, while the implement is returned and the landing area is cleared. A cone may be placed on the runway instead. (In some competitions this position is assumed by the Chief Judge of the event.)

   Where EDM is not in use, the second Judge should pull through and hold the measuring tape in such a way that it passes through the 8m point marked on the runway.

c. one or two Judges immediately after the throw placing a marker indicating the point from which the trial is to be measured. If the implement lands outside the sector either this Judge or the one with the spike/prism (whichever is closer to the line) should indicate this by holding their arm outstretched. An appropriate indication is also required if these Judges determine that the implement has not landed “head first”. It is recommended that some form of signal other than flags is used for this purpose. No indication is required for a valid trial.

d. Judge positioning the spike / prism at the point where the marker has been placed ensuring the tape is on the zero mark.

e. one or more Judges or assistants in charge of retrieving the implements and returning them to the implement stand or placing them in the return device. Where a tape is used for measurement, one of these Judges or assistants should ensure that the tape measure is taut in order to ensure a correct measurement.

f. Judge - a recorder scoring the results sheet and calling each athlete (and the one who is to follow).

g. Judge in charge of the scoreboard (trial-number-result).

h. Judge in charge of the clock indicating to the athletes that they have a certain time to take their trial.

i. Judge in charge of athletes.

j. Judge in charge of the implement stand.

Note (i): This is the traditional setting-up of the officials. In major competitions, where a data system and electronic scoreboards are available, specialised personnel are certainly required. To be clear in these cases, the progress and scoring of a Field Event is followed by both the recorder and by the data system.

Note (ii): Officials and equipment must be placed in such a way as not to obstruct the athlete’s way nor impede the view of the spectators.

Note (iii): A space must be reserved for a wind-sock to indicate the wind direction and strength.

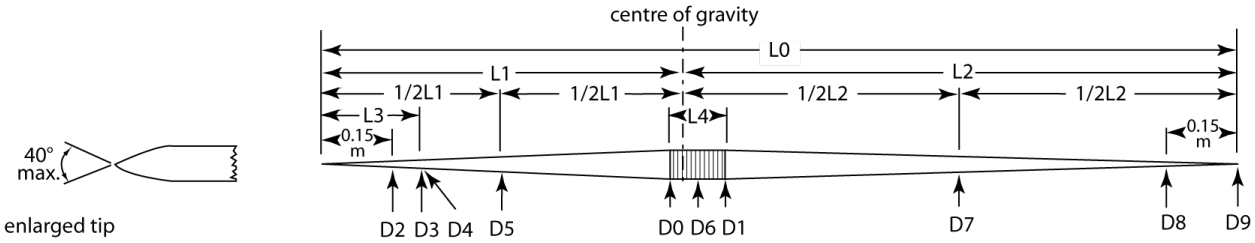

Figure TR38 - International Javelin

Lengths		Diameters		Maximum	Minimum
L0	Overall	D0	In front of grip	–	–
L1	Tip to C of G	D1	At rear of grip	D0	D0-0.25mm
1/2L1	Half L1	D2	150mm from tip	0.8 D0	–
L2	Tail to C of G	D3	At rear of head	–	–
1/2L2	Half L2	D4	Immediately behind head	–	D3-2.5mm
L3	Head	D5	Half way tip to C of G	0.9 D0	–
L4	Grip	D6	Over grip	D0+8mm	–
		D7	Half way tail to C of G	–	0.9 D0
		D8	150mm from tail	–	0.4 D0
C of G	Centre of Gravity	D9	At tail	–	3.5mm

Note: All measurements of diameters must be made with an uncertainty of not more than 0.1 mm.