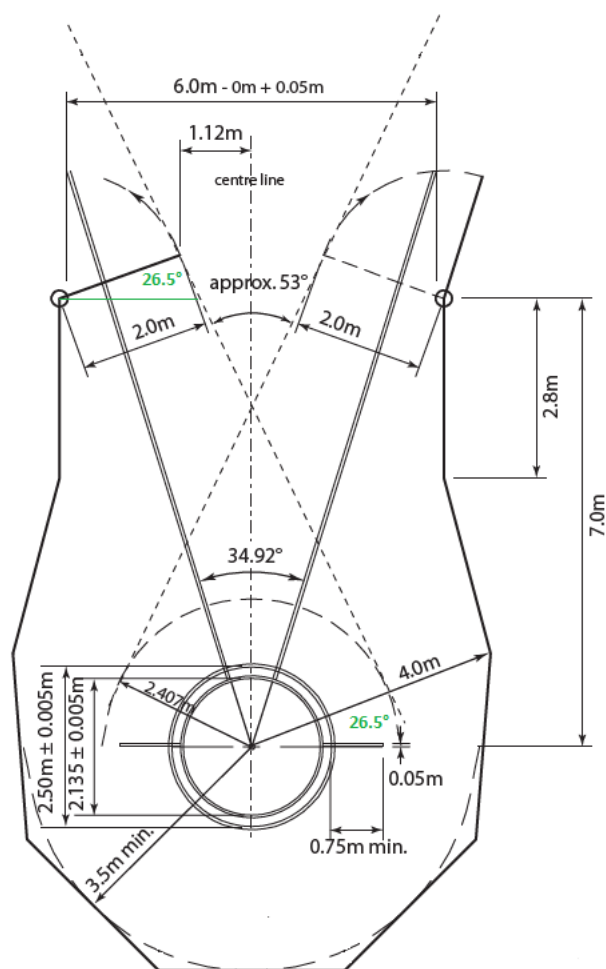


CAGE DANGER ZONE CALCULATIONS

Combined Hammer & Discus cage – calculation of hammer danger zone

Figure 1.0 IAAF Hammer and Discus Cage – Hammer danger zone calculation



Danger zone calculation

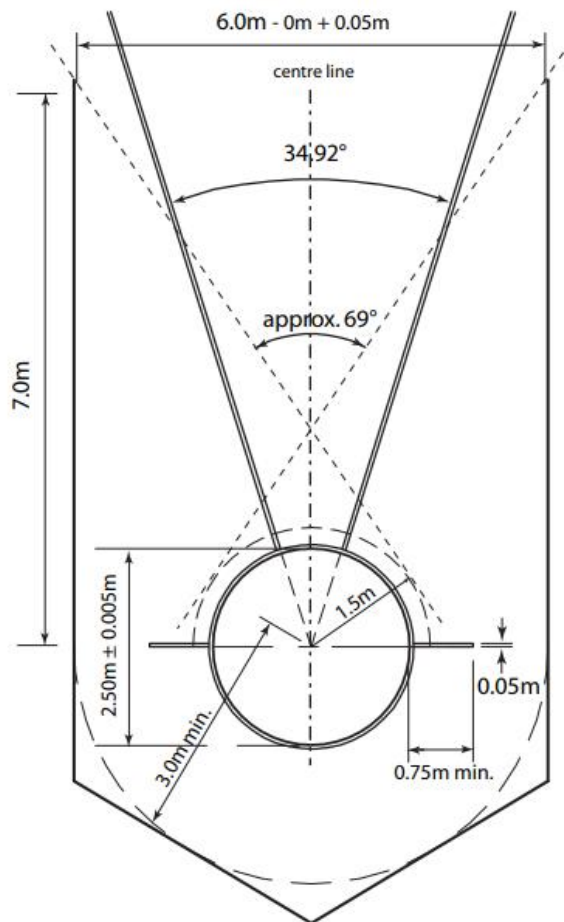
To determine the approximate maximum danger zone, the release of the hammer head is arbitrarily taken as being tangential to a circumscribing circle 1.4m outside the hammer circle (i.e. 2.407m radius from the centre of the circle) as indicated in Figure 1.0 (above).

IAAF specification hammer/discus cage (single circle)

- The IAAF cage illustrated in Figure 1.0 has gates 2.00m wide, is 10m high and has two side panels at least 10m high that move the gate pivot points out 2.80m parallel to the centreline of the 34.92° landing sector.
- The hammer danger zone for this cage is approximately 53° compared with 85° for pre-2018 UKA specification cages.
- The IAAF specification dramatically reduces the danger of errant discus/hammer throws landing outside the main throws infield area.

Discus only cage specification – calculation of discus danger zone

Figure 2.0 IAAF Discus only cage danger zone calculation



Danger zone calculation

To determine the approximate maximum danger zone, the release of the discus is arbitrarily taken as being tangential to a circumscribing circle 1.50m radius from the centre of the circle - as indicated in Figure 2.0 (above).

IAAF specification discus only cage

- The discus safety cage illustrated in Figure 2.0, is U-shaped in plan and the width of the mouth is 6.00m wide, positioned 7.00m in front of the centre of the throwing circle. The height of the netting panels or draped netting at their lowest point is 4.00m and it should be at least 6.00m for the 3.00m nearest the front of the cage on each side. [from 1st January 2020]
- The danger zone for this cage is approximately 69° compared with 92° for pre-2018 UKA specification discus only cages.
- The IAAF cage specification reduces the risk of an errant discus throw landing outside the main throws infield area.