

NSA Photosequence 10

Shot Put

Ulf Timmermann
Werner Günthör
Alessandro Andrei

All sequences by Helmar Hommel (© Hommel AVS 1990)

Ulf TIMMERMANN (GDR)

Born: 1 November 1962

Height: 1.94m

Weight: 120 kg

Best Mark: 23.06m

1988 Olympic Champion

The sequence shown is TIMMERMANN's first attempt in the 1988 Olympic Final on which he recorded the winning mark and Olympic Record of 22.47m

Werner GÜNTHÖR (SUI)

Born: 1 June 1961

Height: 2.00m

Weight: 126 kg

Best Mark: 22.75m

1986 European Champion and 1987 World Champion

The sequence shown is GÜNTHÖR's third attempt in the 1988 Olympic Final on which he recorded a mark of 21.70m. On his fifth attempt GÜNTHÖR achieved a mark of 21.99m to place third in the competition.

Alessandro ANDREI (ITA)

Born: 3 January 1959

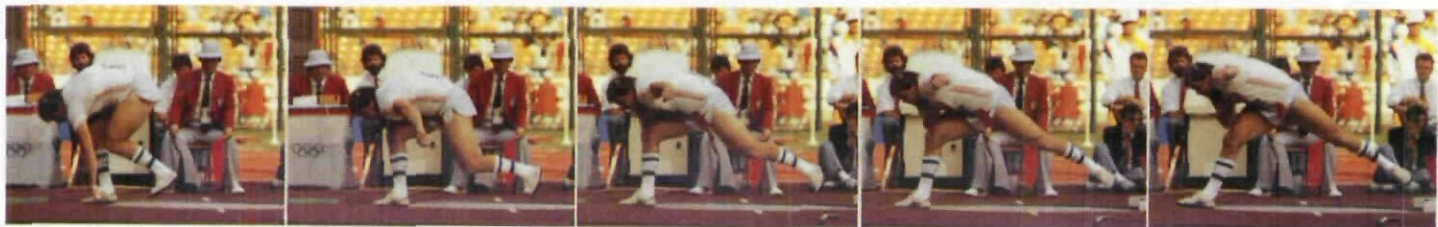
Height: 1.91m

Weight: 118 kg

Best Mark 22.91m

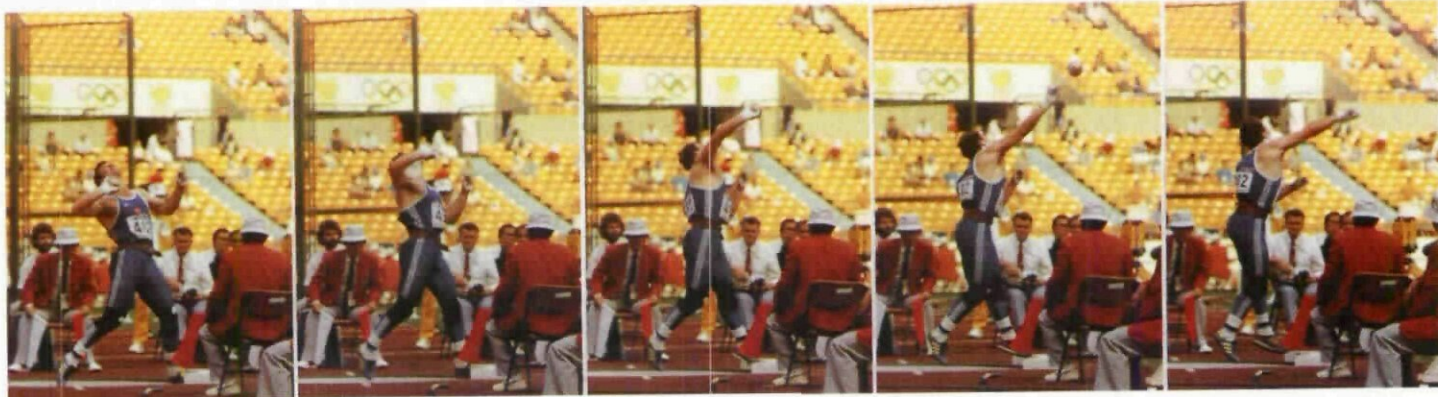
1984 Olympic Champion

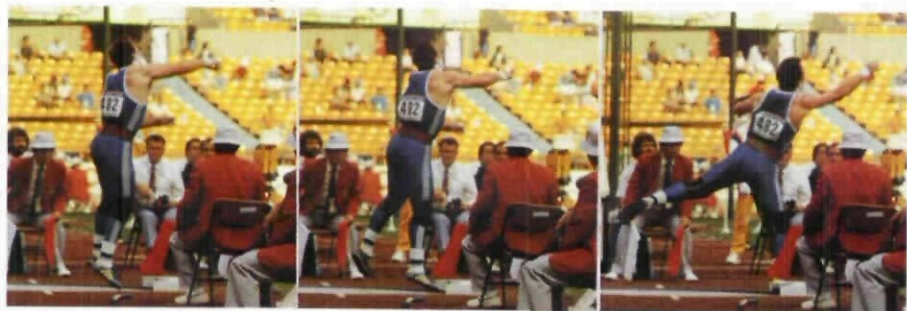
The sequence shown is ANDREI's sixth attempt in the 1988 Olympic Final on which he recorded a mark of 20.26m. On his fifth attempt he achieved 20.36m to place seventh in the competition.











Commentary

Jean-Pierre Egger

Jean-Pierre Egger is a lecturer at the Eidgenössische Sportschule in Magglingen Switzerland and is the Swiss National Coach for the shot put. As a competitor he participated in the shot put in the Games of the XXIst and XXIIInd Olympiads in Montreal and Moscow. Among the athletes he coaches personally are the 1987 World Champion Werner Günthör and the 1990 European Indoor Champion Klaus Bodenmüller (AUT)

In these sequences, which were taken during the Final of the Men's Shot Put at the Games of the XXIVth Olympiad in Seoul, 1988, the essential elements of shot put technique are well demonstrated by Timmermann, who won the gold medal, and Günthör, who placed third. The defending champion Andrei, on the other hand, displays some problems, particularly in the glide phase, and placed a relatively disappointing seventh with a mark 2.55m below his best.

Timmermann manages to make the glide phase (pictures 1 to 11), highly dynamic by using a strange "swinging movement" starting in squat position (pictures 3 to 5). Günthör also achieves good horizontal thrust in the direction of the stopboard (note the extension of his left leg). However, Timmermann's better state of fitness and higher aggressiveness are responsible for the faster grounding of his left foot at the stopboard (picture 11). Because of this he can exert pressure to the implement sooner. In this phase, Andrei sets a bad example. The use of his left leg is poor, which leads to a delayed blocking at the stopboard.

Both the faster grounding of the left foot at the stopboard and the excellent horizontal thrust generated during the glide give Timmermann and Günthör the possibility for a better buildup of the pre-tense or hollow-back position (pictures 15 to 17). This position is the result of a more active pushing forward of the pelvis and the turning of the lower leg to the front. Assuming proper elasticity of the muscles and trunk, the more the left side of the body is bent (pre-tensed), the greater the transmission of force to the putting arm and the shot. Since the grounding of his left foot at the stopboard comes too late, Andrei does not succeed in building

up a genuine pre-tension. This leads to the shortening of his putting phase.

Although all three athletes show a similar power position (picture 11), the more optimal hollow-back positions achieved by Timmermann and Günthör make possible the exertion of greater pressure on the implement over a longer period of time. This pressure can be additionally increased through the upward rising of the left arm which leads to an even more pronounced pre-tension of the trunk.

In the putting phase (pictures 12 to 19), the decisive difference between Timmermann and Günthör is Timmermann's two-legged activity (vertical thrust), which results in a supportless throwing phase, whereas Günthör delivers the shot over his left leg or foot (one-legged support phase). Pictures 18 to 19 show this difference very clearly.

My opinion regarding the question whether this is a different technique or individual style is as follows: Depending on the strength abilities of the legs (explosiveness) in the putting phase as well as the ability to transfer the initial velocity developed during the horizontal glide to the release of the shot (angle of release), the athlete should decide on what is best for him on the basis of his individual kinesthetic perception.

In conclusion, I would like to say that in these sequences Timmermann and Günthör achieve a better pre-tension of the body than Andrei through their more highly dynamic movement towards the stopboard and the faster blocking of the left side of their bodies. This pre-tension results in a more efficient putting phase.

