Photograph showing the shoulder testing system. A total of 90° of shoulder abduction was achieved by adding upward scapular rotation and glenohumeral abduction. Muscle forces were applied by cables sutured to the tendons.

Screw markers were placed on the scapula and humerus and were digitized during testing. A = coracoid, B = anterolateral acromion, C = posterior acromion, D = proximal bicipital groove, E = distal bicipital groove, F = posterior humeral metaphysis, Ant = anterior, and Post = posterior.
Six markers on the greater tuberosity were digitized after testing. GT = greater tuberosity, H = humeral head, IP = posterior edge of the infraspinatus, SA = anterior edge of supraspinatus, and MP = midpoint between SA and IP.

Sixteen markers on the glenoid were digitized after testing. B = tendon of the long head of biceps, and G = glenoid.