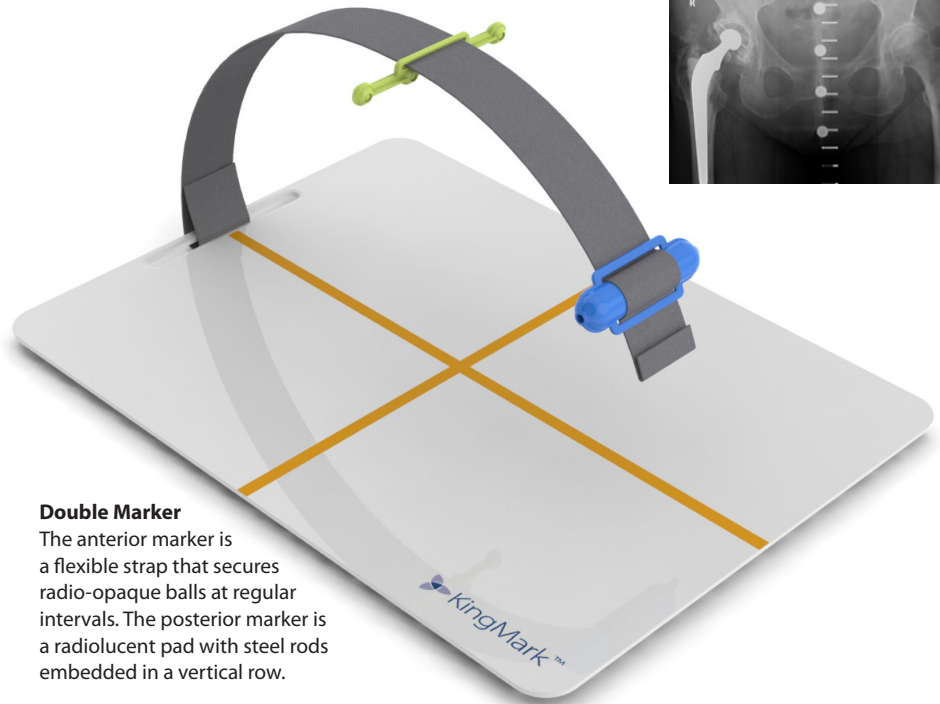


Virtually eliminate errors in positioning calibration markers on patients for hip replacements.

KingMark™ allows you to routinely and accurately calculate the radiological magnification of the hip using two separate radio-opaque markers. In clinical trials, KingMark performed *four times more accurately* than the conventional, single-ball marker because it's easier to position correctly and the technique is the same for all sizes of patients.



Double Marker
The anterior marker is a flexible strap that secures radio-opaque balls at regular intervals. The posterior marker is a radiolucent pad with steel rods embedded in a vertical row.

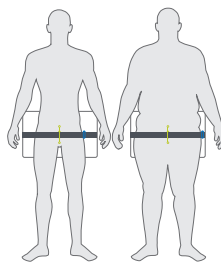
Two is better than one.

Accurate calibration relies on a single marker being exactly located in the coronal plane of the hips—requiring special expertise and extra time from technicians. Surgeons can't easily identify misplaced markers on x-rays, sometimes leading to incorrect results.

KingMark uses two separate markers—one behind the pelvis and the other in front, as the patient lies supine.

- Quick and easy to position correctly—patient lies centrally on the posterior pad. The anterior ball-strip is placed midline over the pelvis.
- Accurate calibration doesn't depend on exact positioning by trained experts.
- It is visually apparent on the radiograph when markers are incorrectly positioned, so surgeons aren't misled.

Accurate in all sizes of patients.



Single markers can be difficult to use on very large patients. Often markers are not imaged when placed adjacent to the patient because the pelvis is wider than the x-ray detector. And positioning a marker between the patient's thighs is socially unacceptable by both patient and technician.

Since KingMark is positioned midline, it always appears within the radiograph. The correct positioning technique is the same for all sizes of patients and is not awkward or invasive. Even on very large patients, calibration accuracy is not diminished.

Automatic calibration in TraumaCad.



TraumaCad will automatically detect the presence of KingMark in an x-ray, determine the magnification percentage, and size the image accurately.

For surgeons who need to perform manual calibration on radiographs with KingMark, precise magnification values can be obtained by using the KingMark Calculator, available at: www.voyanthealth.com/kingmark