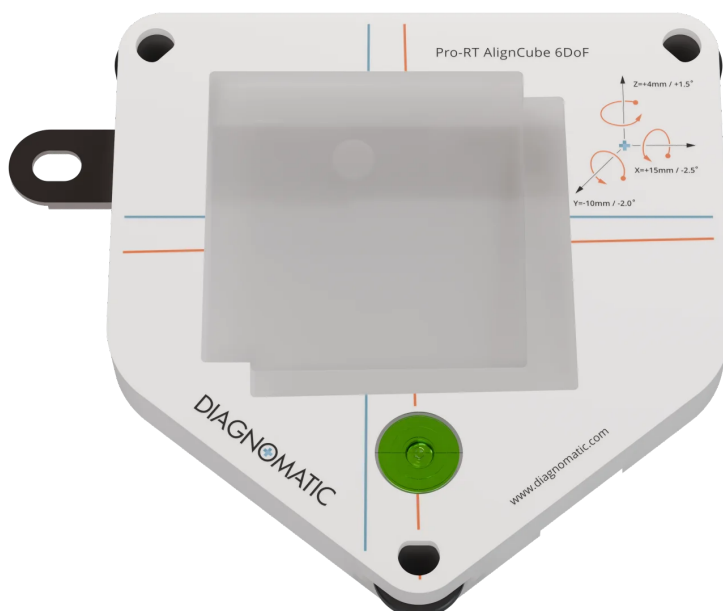
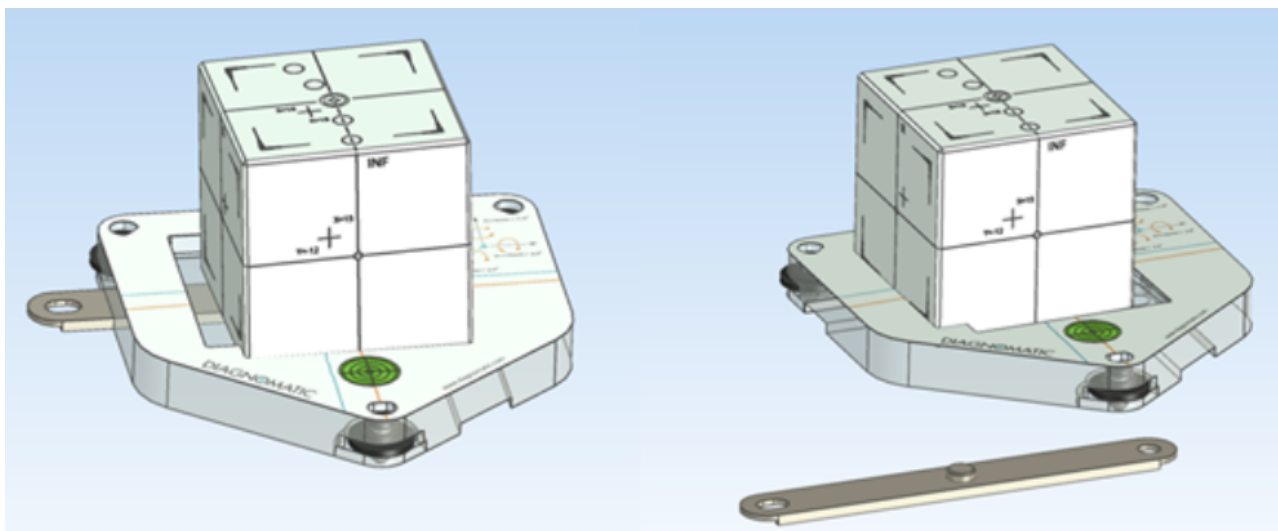


Pro-RT AlignCube 6DoF

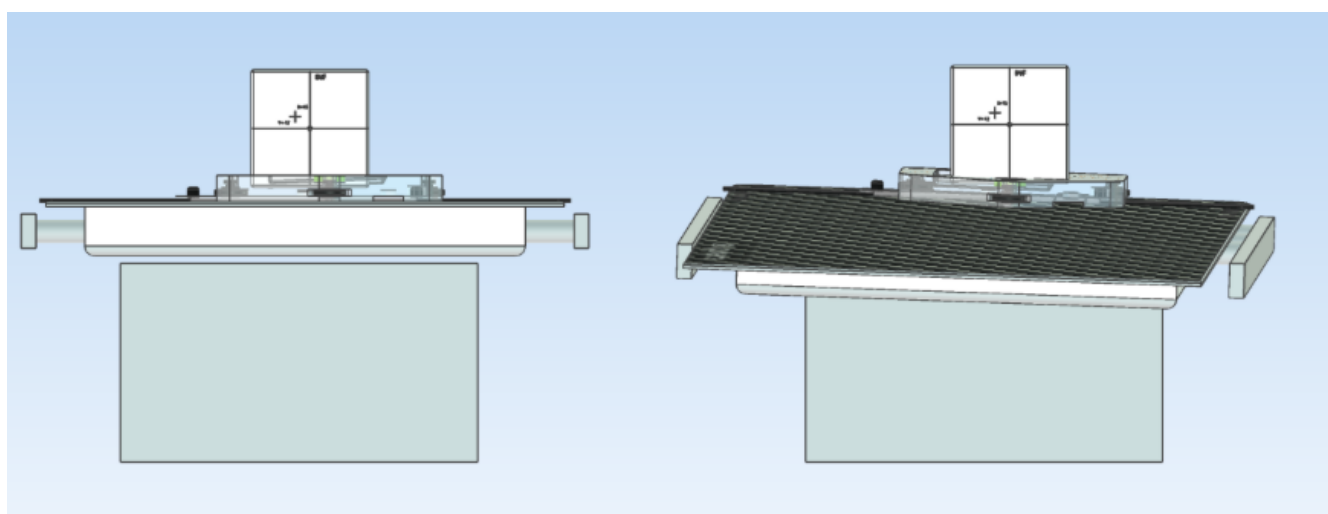


A dedicated accessory for the Pro-RT AlignCube phantom, designed for quality control of 6DoF treatment tables used in radiotherapy. The plate enables quick and repeatable positioning of the phantom in both the upright reference “zero” position and in a predefined offset position with known translational and rotational deviations.



The Pro-RT AlignCube 6DoF Plate contains two positioning cutouts for the Pro-RT AlignCube phantom: the upright reference “zero” position on the left and the predefined 6DoF offset position on the right.

The Pro-RT AlignCube 6DoF Plate contains two positioning cutouts. One cutout is used for the upright reference “zero” position of the cube, while the second introduces defined shifts and rotations of the phantom relative to this position. This allows verification of the accuracy of 6DoF table corrections and automatic couch positioning.



After the Pro-RT AlignCube phantom is placed in the 6DoF plates “offset” position, CBCT positioning verification is performed. The treatment table should apply the calculated 6DoF correction and bring the phantom back to the upright reference position, despite its placement in the offset cutout.

The predefined offset position introduces the following deviations when the plate is mounted in the 12 o'clock orientation:

$X = +15 \text{ mm} / -2.5^\circ$

$Y = -10 \text{ mm} / -2.0^\circ$

$Z = +4 \text{ mm} / +1.5^\circ$

Due to the additional mounting cutouts on the bottom of the plate, it can be installed in four orientations: 12, 3, 6, and 9 o'clock, corresponding to 0°, 90°, 180°, and 270°. This makes it possible to change the direction of the applied shifts and rotations according to the selected plate orientation.



The plate is mounted to the treatment table fixing system using a compatible adapter. It is supplied as an optional accessory and is sold separately from the Pro-RT AlignCube phantom.

It can be used to test:

- 6DoF table correction accuracy
- SGRT systems
- automatic couch shift and rotation adjustment
- phantom positioning repeatability
- image-guided positioning workflows

Technical data (can be modified to customer specifications):

- dimensions 230 x 230 x 30 mm
- material: PMMA
- color: white
- external markings of the central and offset position
- spirit level

Product features:

- CE marked
- the manual provides detailed guidelines for carrying out each test, results assessment and registration

- The Pro-RT AlignCube 6DoF Plate is designed to support QA procedures consistent with AAPM TG-142 recommendations for image-guided positioning/repositioning and treatment couch correction verification.