CLAIMS

1. A workpiece inspection apparatus comprising:

a workpiece transfer apparatus that includes:

a loader configured to load a tray on which workpieces before inspection are placed;

a first transferer configured to guide the workpieces toward a first inspection region by transferring the tray in a first direction;

a second transferer configured to guide the workpieces toward a second inspection region by transferring the tray in a second direction perpendicular to the first direction;

a third transferer configured to transfer the tray on which the workpieces after inspection are placed in a third direction perpendicular to the second direction; and

an unloader configured to unload the tray;

a first inspection device that inspects the workpieces in the first inspection region;

a second inspection device that inspects the workpieces in the second inspection region;

a housing that accommodates the first inspection device and the second inspection device at a same arrangement interval as an arrangement interval between the first inspection region and the second inspection region;

a stage that displaces the housing by a same interval as

an arrangement interval between the workpieces on the tray; and

a supporting body that supports the stage and is fixed to a floor surface.

2. The workpiece inspection apparatus according to claim 1, wherein at least one of the first transferer and the third transferer comprises:

a conveyor configured to transfer the tray from one end to another end; and

a carriage configured to move the conveyor toward the first inspection region or the second inspection region.

3. The workpiece inspection apparatus according to claim 1 or claim 2, wherein the second transferer comprises:

a first bias applier configured to position the tray from the first transferer to the first inspection region by biasing a bottom surface;

a mover configured to load the tray released from bias and guide the tray from the first inspection region to the second inspection region; and

a second bias applier configured to position the tray from the mover to the second inspection region by biasing the bottom surface.

4. The workpiece inspection apparatus according to claim 1

or 2, wherein supporting pillars for fixing the supporting body to the floor surface are provided asymmetrically between a side of the first transferer and a side of the third transferer by providing a larger number of the supporting pillars on one side of the second transferer.

5. A workpiece transfer apparatus comprising:

a loader configured to load a tray on which a workpiece before inspection is placed;

a first transferer configured to guide the workpiece toward a first inspection region by transferring the tray in a first direction;

a second transferer configured to guide the workpiece toward a second inspection region by transferring the tray in a second direction perpendicular to the first direction;

a third transferer configured to transfer the tray on which the workpiece after inspection is placed in a third direction perpendicular to the second direction; and

an unloader configured to unload the tray, wherein:

the second transferer comprises:

a first bias applier configured to position the tray from the first transferer to the first inspection region by biasing a bottom surface,

a mover configured to load the tray released from bias and guide the tray from the first inspection region to the second inspection region, and

a second bias applier configured to position the tray from the mover to the second inspection region by biasing the bottom surface; and

the first bias applier and the second bias applier are synchronized in timing of applying and releasing the bias with respect to each of corresponding trays.