STATEMENTS OF INVENTION

1. A carrier plate that is provided in a double-sided machining device polishing or grinding both upper and lower surfaces of disc-shaped substrates, the carrier plate comprising:

substrate holding holes that hold the disc-shaped substrates; and

strip-shaped blades that are formed on at least one surface of the carrier plate so as to protrude from the surface.

2. The carrier plate according to claim 1,

wherein the strip-shaped blades are formed on both upper and lower surfaces of the carrier plate.

3. The carrier plate according to claim 1 or 2,

wherein the carrier plate has a circular shape in plan views seen from sides facing the upper and lower surfaces of the carrier plate, and

the strip-shaped blades extend in directions crossing a circumferential direction of the carrier plate in the plan view.

4. The carrier plate according to claim 3,

wherein the strip-shaped blades are formed of a plurality of strip-shaped portions that have the same shape in the plan view and are arranged at regular intervals in the circumferential direction.

5. A method of manufacturing disc-shaped substrates, the method comprising:

a step of polishing or grinding both upper and lower surfaces of the disc-shaped substrates,

wherein the step of polishing or grinding both the upper and lower surfaces includes

a step of holding the disc-shaped substrates in substrate holding holes provided in a carrier plate,

a step of disposing the disc-shaped substrates, which are held by the carrier plate, between a pair of upper and lower surface plates, and

a surface machining step of polishing or grinding both the upper and lower surfaces of the disc-shaped substrates by making the carrier plates and the pair of upper and lower surface plates move relative to each other while supplying polishing liquid or grinding liquid to the disc-shaped substrates, and moving polishing waste or grinding waste and the polishing liquid or the grinding liquid present on surfaces of the pair of upper and lower surface plates, which face strip-shaped blades formed on at least one surface of the carrier plate so as to protrude from the surface, by the strip-shaped blades.

6. The method according to claim 5,

wherein a carrier plate of which both upper and lower surfaces are provided with the strip-shaped blades is used as the carrier plate.

7. The method according to claim 5 or 6,

wherein grinding surface plates are used as the pair of upper and lower surface plates, and

both the upper and lower surfaces of the disc-shaped substrates are ground while

a coolant is supplied as the grinding liquid in the surface machining step.

8. The method according to claim 5 or 6,

wherein polishing surface plates are used as the pair of upper and lower surface plates, and

both the upper and lower surfaces of the disc-shaped substrates are polished while slurry containing an abrasive is supplied as the polishing liquid in the surface machining step.

9. A double-sided machining device for polishing or grinding both upper and lower surfaces of disc-shaped substrates, the double-sided machining device comprising:

a carrier plate that includes substrate holding holes holding the disc-shaped substrates and strip-shaped blades formed on at least one surface of the carrier plate so as to protrude from the surface;

a pair of upper and lower surface plates that are disposed so as to face each other with the carrier plate interposed therebetween;

supply means for supplying polishing liquid or grinding liquid to the disc-shaped substrates; and

drive means for making the carrier plate and the pair of upper and lower surface plates move relative to each other.