[0091]

Subsequently, as shown in Fig. 10(c), the exit-side delivery portion 52 moves in a direction to be spaced from the detachment transfer mechanism 72 and stops. At this time, the inclined posture of the disk 10 is converted into the vertical posture. Then, as shown in Fig. 3, the disk 10 is passed from the exit-side delivery portion 52 to the disk holding portion (not shown) of the third transfer portion 36.

[0092]

The third transfer portion 36 is moved in a direction to be spaced from the exit-side delivery portion 52 in the Y direction by the transfer drive portion (not shown) and reaches the entry-side delivery portion 51 on the B-surface measuring portion 33 side that measures the B surface. Then, the disk 10 is passed from the disk holding portion of the third transfer portion 36 to the entry-side delivery portion 51 on the B-surface measuring portion 33 side.

[0093] (Measuring the flatness of the B surface)

The measurement of the B surface is performed in the same manner as the measurement of the A surface. Since the A-surface measuring portion 23 and the B-surface measuring portion 33 are disposed to face each other, the direction of transfer of the disk 10 by the first transfer portion 24 and the direction of transfer of the disk 10 by the second transfer portion 34 are opposite to each other. However, throughout the transfer, i.e., after start of transfer by the first robot transfer portion 21, through the first transfer portion 24, the third transfer portion, and the second transfer portion 34, to completion of transfer by the second robot transfer portion 31, the disk 10 itself is transferred and then delivered with its constantly directed in the fixed direction transferring the disk 10 in their respective transfer directions.

[0094]

In the measurement of the B surface, first, as shown in Fig. 3, when the disk 10 is received from the third transfer portion 36, the entry-side delivery portion 51 on the B-surface measuring portion 33 side converts the posture of the

the sensor 63 of the B-surface measuring portion 33 is moved by the sensor moving mechanism, and scans the B surface of the disk 10. The flatness of the B surface is measured by the sensor 63 while scanning the B surface of the disk 10.

[0098]

When the holding portion 81 of the detachment transfer mechanism 72 is placed by the second drive portion 35 in a position where the holding portion 81 faces the support 62 on the measurement reference surface 61a of the B-surface measuring portion 33 and the measurement of the flatness of the B surface by the sensor 63 is completed, the holding portion 81 of the detachment transfer mechanism 72 is moved in a direction to be closer to the measurement reference surface 61a along the Y direction by the width-direction moving portion 92. Then, the hook portion 81a is inserted into the through hole h of the disk 10, the lower disk receiver 81b is placed below the disk 10, and the upper disk receiver 81c is placed in a position where the upper disk receiver 81c faces the upper part of the disk 10.

[0099]

Then, the detachment transfer mechanism 72 raises the holding portion 81 in the Z direction, thereby detaching the disk 10 from the support 62, and moves in a direction to be spaced from the measurement reference surface 61a along the Y direction, and further lowers the holding portion 81 in the Z direction, returns and stops in the original position. In this state, the disk 10 is held in the inclined posture in the holding portion 81 of the detachment transfer mechanism 72.

[0100]

Next, the second transfer portion 34 is moved in the X direction toward the exit side of the second drive portion 35, and the holding portion 81 of the detachment transfer mechanism 72 is stopped in a position where the holding portion 81 faces the exit-side delivery portion 52. Then, the disk 10 is passed from the holding portion 81 of the detachment transfer mechanism 72 to the exit-side delivery portion 52. In this state, the disk 10 is held in the inclined posture