model generated by the machine learning device and machine learning method according to the above embodiment.

[Reference Signs List]

[0179]

1	Substrate processing system,
2	Substrate processing device,
3	Database device,
4, 4a	Machine learning device,
5, 5a	Information processing device,
6	User terminal device,
7	Network,
10	Learning model,
10A	First learning model,
10B	Second learning model,
11A	First learning data,
11B	Second learning data,
20	Housing,
21	Load/unload unit,
22	Polishing unit,
22A	First polishing unit,
22B	Second polishing unit,
22C	Third polishing unit,
22D	Fourth polishing unit,
23	Substrate transport unit,
24	Cleaning unit,
25	Film thickness measurement unit,
26	Control unit,
30	Production history information,
31	Polishing test information,
40	Machine learning control unit,
41	Communication unit,

42 Learning data storage unit,
43 Trained model storage unit,
50 Information processing control unit,
51 Communication unit,
52 Trained model storage unit,
220 Polishing table,
221 Top ring,
222 Polishing fluid supply nozzle,
223 Dresser,
224 Atomizer,
225 Environmental sensor
260 Substrate processing control unit,
261 Communication unit,
262 Input unit,
263 Output unit,
264 Storage unit,
300 Wafer history table,
301 Polishing history table,
310 Polishing test table,
400 Learning data acquisition unit,
401 Machine learning unit,
500 Information acquisition unit,
501 State prediction unit,
502 Output processing unit,
900 Computer
2200 Polishing pad,
2210 Top ring body,
2211 Carrier,
2212 Elastic membrane,
2212a First elastic membrane pressure chamber,
2212b Second elastic membrane pressure chamber,
2212c Third elastic membrane pressure chamber,

2212d Fourth elastic membrane pressure chamber,

2213 Retainer ring,

2214 Retainer ring airbag (retainer ring pressing mechanism),

2214a Retainer ring pressure chamber,

226 Optical sensor