CLAIMS

1. A processing system comprising:

a processing apparatus configured to perform an additive processing on a plurality of objects; and

a control apparatus configured to control the processing apparatus,

the control apparatus being configured to generate, based on a result of a first measurement operation for measuring a shape of a first object of the plurality of objects, first processing control information for controlling the processing apparatus to perform the additive processing on the first object,

the processing apparatus being configured to perform, based on the first processing control information, the additive processing on the first object and the additive processing on a second object of the plurality of objects that is different from the first object.

2. The processing system according to claim 1 further comprising an object placement apparatus on which the plurality of objects are placed,

after the processing apparatus performs the additive processing on a plurality of third objects including the first and second objects, a plurality of fourth objects different from the plurality of third objects being placed on the object placement apparatus,

the processing apparatus being configured to perform, based on the first processing control information, the additive processing on the plurality of fourth objects.

3. The processing system according to claim 1 or 2, wherein

the processing apparatus includes:

an energy beam irradiation part configured to emit an energy beam toward each of the plurality of objects; and

a material supply part configured to supply a build material to a part that is irradiated with the energy beam.

4. The processing system according to any one of claims 1 to 3, wherein

sizes of at least two of the plurality of objects are different from each other.

5. The processing system according to claim 4, wherein

a difference in size between the at least two objects after the processing apparatus performs the additive processing is smaller than a difference in size between the at least two objects before the processing apparatus performs the additive processing.

6. The processing system according to any one of claims 1 to 5, wherein

the processing apparatus is configured to selectively perform the additive processing on the plurality of objects.

7. The processing system according to any one of claims 1 to 6, wherein

the processing apparatus is configured not to complete a repair on a missing part of a fifth object of the plurality of objects.

8. The processing system according to claim 7, wherein

the processing apparatus is configured not to perform the additive processing based on the first processing control information on at least the fifth object of the plurality of objects.

9. The processing system according to claim 8, wherein

the processing apparatus is configured not to perform the additive processing for a repair on at least the fifth object of the plurality of objects.

10. The processing system according to any one of claims 7 to 9, wherein

a second measurement operation for measuring a shape of each of the plurality of objects is performed before the first measurement operation is performed,

the fifth object is an object whose shape measured by the second measurement operation does not satisfy a predetermined shape criterion.

11. The processing system according to claim 10, wherein

the additive processing is not performed on at least the fifth object of the plurality of objects after the second measurement operation is performed.

12. The processing system according to any one of claims 7 to 10, wherein

The processing system is configured not to perform the first measurement operation on the fifth object for generating the first processing control information.

13. The processing system according to any one of claims 7 to 12, wherein

the processing apparatus is configured to perform the additive processing on other object of the plurality of objects other than the fifth object.

14. The processing system according to any one of claims 1 to 5, wherein

a second measurement operation for measuring a shape of each of the plurality of objects is performed before the first measurement operation is performed,

the processing apparatus is configured to perform the additive process on a fifth object, whose shape measured by the second measurement operation does not satisfy a predetermined shape criterion, among the plurality of objects.

15. The processing system according to claim 14, wherein

the control apparatus is configured to generate second processing control information for controlling the processing apparatus to perform the additive processing on the fifth object,

the processing apparatus is configured to perform the additive processing on the fifth object based on the second processing control information.

16. The processing system according to claim 15, wherein

the second processing control information is corrected first processing control information or processing control information generated separately from the first processing control information.

17. The processing system according to claim 15 or 16, wherein

a third measurement operation for measuring a shape of the fifth object of the plurality of objects is performed,

the control apparatus is configured to generate the second processing control information based on a result of the third measurement operation.

18. The processing system according to claim 17, wherein

a measurement field of view in the second measurement operation is wider than a measurement field of view in the third measurement operation.

19. The processing system according to claim 17 or 18, wherein

an accuracy in the second measurement operation is lower than an accuracy in the third measurement operation.

20. The processing system according to claim 19, wherein

a measurement resolution in the second measurement operation is lower than a measurement resolution in the third measurement operation.

21. The processing system according to any one of claims 10 to 11 and 14 to 20, wherein

a measurement field of view of a measurement apparatus performing the second measurement operation is wider than a measurement field of view of a measurement apparatus performing the first measurement operation.

22. The processing system according to any one of claims 10 to 11 and 14 to 21, wherein

an accuracy in the second measurement operation is lower than an accuracy in the first measurement operation.

23. The processing system according to claim 22, wherein

a measurement resolution in the second measurement operation is lower than a measurement resolution in the first measurement operation.

24. The processing system according to any one of claims 10 to 11 and 14 to 23, wherein

the second measurement operation is performed after a pre-processing process is performed on at least one of the plurality of objects.

25. The processing system according to any one of claims 10 to 11 and 14 to 24, wherein

the second measurement operation is performed before a pre-processing process is performed on at least one of the plurality of objects.

26. The processing system according to claim 24 or 25, wherein

the pre-processing process includes a removal processing process for removing a part of the object and an additive processing for adding a build object to the object.

27. The processing system according to any one of claims 1 to 26, wherein

a fourth measurement operation for measuring a shape of at least one of the first and second objects is performed after the processing apparatus performs the additive processing on at least one of the first and second objects,

the processing apparatus is configured to process at least one of the first and second objects based on a result of the fourth measurement operation.

28. The processing system according to any one of claims 1 to 27, wherein

the processing apparatus is configured to change a processed amount by the processing apparatus by changing a distance between a processing head of the processing apparatus and a build surface of each of the plurality of objects on which the additive processing is performed.

29. The processing system according to any one of claims 1 to 28 further comprising an object placement apparatus on which the plurality of objects are placed,

the control apparatus is configured to change a relative positional relationship between the object placement apparatus and the processing apparatus.

30. The processing system according to claim 29, wherein

the control apparatus is configured to change the relative positional relationship between the object placement apparatus and the processing apparatus by controlling a movement apparatus configured to move the processing apparatus.

31. The processing system according to claim 29 or 30, wherein

the control apparatus is configured to change the relative positional relationship between the object placement apparatus and the processing apparatus by controlling an attitude change apparatus configured to change an attitude of the object placement apparatus.

32. The processing system according to any one of claims 1 to 31, wherein

the processing apparatus is configured to perform the additive processing on the plurality of objects placed on a jig,

the control apparatus is configured to change a relative positional relationship between the processing apparatus and the plurality of objects placed on the jig.

33. The processing system according to any one of claims 29 to 32, wherein

the processing apparatus being configured to perform the additive processing on a first surface of each of the first and second objects, and then, perform the additive processing on a second surface, which is different from the first surface, of each of the first and second objects after the control apparatus changes the relative positional relationship.

34. The processing system according to any one of claims 1 to 33, wherein

at least one of the plurality of objects includes a turbine blade and a turbine shaft.

35. The processing system according to any one of claims 1 to 34, wherein

the processing apparatus configured to perform a repair processing on a plurality of objects.

36. The processing system according to any one of claims 1 to 35, wherein

the control apparatus being configured to generate, based on at least one of shape information related to a shape of a model of a first build object that is formed on the plurality of objects and the result of the first measurement operation, the first processing control information.

37. The processing system according to any one of claims 1 to 36, wherein

the control apparatus being configured to generate, based on at least one of shape information related to a shape of a model of a first build object that is formed on the plurality of objects and the result of the first measurement operation, the first processing control information.

38. The processing system according to any one of claims 1 to 37, wherein

the processing system being configured to perform an additive processing based on a Laser Metal Deposition (LMD).

39. A processing method comprising:

performing a first measurement operation for measuring a shape of a first object of a plurality of objects;

generating, based on a result of the first measurement operation, first processing control information for performing an additive processing on the first object; and

performing, based on the first processing control information, the additive processing on

the first object and the additive processing on a second object of the plurality of objects that is different from the first object.