Claims

1. Method for maintaining equipment in large-scale technical installations or production facilities, comprising the following steps of:

a) providing a data processing system in which equipment comprising a multiplicity of individual equipment units is recorded in equipment data records and from which the current maintenance, inspection or test status of the recorded equipment units can be retrieved,

b) using the data processing system to generate at least one digital or non-digital template which relates to a pending maintenance measure and has an equipment identifier which uniquely identifies a particular equipment unit and can be automatically evaluated by the data processing system,

c) carrying out the maintenance measure on the equipment unit identified by the template generated,

d) marking the template with a result code which characterizes the result of the maintenance measure carried out and can be automatically evaluated by the data processing system,

e) transmitting the digital template marked with the result code or an electronic image of the non-digital template marked with the result code to the data processing system, the data processing system automatically adapting the retrievable current maintenance, inspection or test status using the equipment identifier and the result code for the affected equipment unit characterized in that the data processing system stores the digital template or the image of the non-digital template in a change-proof manner.

2. Method according to the preceding claim, characterized in that the data processing system automatically assigns the digital template or the electronic image of the non-digital template to the equipment data record associated with the equipment unit and stores it in a retrievable manner in a memory of the data processing system.

3. Method according to Claim 2, characterized in that the data processing system stores the digital template or the electronic image of the non-digital template, including an electronic image of a non-digital attachment of external origin, in the memory of the data processing system.

4. Method according to one of the preceding claims, characterized in that the data processing system uses program-related means to automatically allocate a file name for the template to be stored in the memory, at least part of the file name being created on the basis of the equipment identifier.

5. Method according to one of the preceding claims, characterized in that, after carrying out a maintenance measure on an equipment unit which resulted in a negative result, the data processing system uses program-related means to automatically generate a message containing the template provided with the result code and transmits this message to a station responsible for the equipment unit.

6. Method according to one of the preceding claims, characterized in that, after carrying out a maintenance measure on an equipment unit which resulted in a negative result, the data processing system generates a message containing a repair proposal and/or cost proposal, transmits this message to a station responsible for the equipment unit and, after the repair proposal or cost proposal has been approved by the responsible station, initiates the measures needed to repair the equipment according to the repair proposal and/or cost proposal.

7. Method according to one of the preceding claims, characterized in that at least some of the maintained equipment units are not able to self-diagnose their current maintenance, inspection and test status.

8. Method according to one of the preceding claims, characterized in that the data processing system independently uses program-related means to generate a calendar overview of the pending maintenance measures.

9. Method according to one of the preceding claims, characterized in that the data processing system is provided with an interface for recording equipment units which have hitherto not been recorded and/or for deleting equipment units which have already been recorded.

10. Method according to one of the preceding claims, characterized in that the digital or non-digital template relating to the pending maintenance measure is generated with the inclusion of a performance description of the maintenance measure and/or the definition of test boundary conditions and/or test details of the maintenance measure.

11. Method according to one of the preceding claims, comprising a check step during which an overview of the maintenance measures which have been carried out and open maintenance measures is displayed from the data processing system.

12. Method according to one of the preceding claims, comprising a check step during which the current maintenance, inspection and test status of the maintained equipment units is displayed.

13. Method according to Claim 12, characterized in that the current maintenance, inspection and test status of the maintained equipment units is displayed using a colour pattern, the colours of which are assigned to the result codes of the maintenance measures which have been carried out or the pending maintenance measures.

14. Method according to Claim 12 or 13, characterized in that the current maintenance, inspection and test status of the maintained equipment units is displayed in a grouped manner, in particular according to their affiliation to particular equipment.

15. Method according to one of the preceding claims, characterized in that the data processing system is provided in such a manner that it grants different access rights to the equipment data records to different groups of people.

16. Method according to one of the preceding claims, characterized in that a plurality of templates relating to a group of pending maintenance measures are generated, and in that, after the maintenance measures included in the group have been carried out, the individual result codes of the maintenance measures are transmitted to the data processing system in collected form.

17. Computer system for maintaining equipment in large-scale technical installations or production facilities, having a data processing system in which equipment comprising a multiplicity of individual equipment units is recorded in equipment data records and from which the current maintenance, inspection or test status of the recorded equipment units can be retrieved, having an output device for generating digital and/or non-digital templates, having a recording device for reading in digital templates marked with result codes and/or electronic images of non-digital templates marked with result codes, and having transmitting means for forwarding the result codes read in via the recording device to the data processing system, characterized in that the computer system is set up to carry out a method according to one of Claims 1 to 16 by means of a computer program.

18. Use of a computer system according to Claim 17 for carrying out a method according to one of Claims 1 to 16.

19. Computer program having instructions which are set up to carry out a method according to one of Claims 1 to 16.

20. Computer program product having a computer-readable medium with computer program code means, in which, after the computer program has been respectively loaded into a computer,

the computer is set up to carry out a method according to one of Claims 1 to 16 by means of the program.

21. Computer program product having a computer program on an electronic signal, in which, after the computer program has been respectively loaded into a computer, the computer is set up to carry out a method according to one of Claims 1 to 16 by means of the program.