must also be modified over time, and modified intensity entails that the speed of the liquid flow is effected.

The changing speed of the liquid flow may be compensated by revising the operational speed of the flow generating machine, however, this demands for the speed of the liquid flow being monitored by means of expensive speed sensors that are susceptible to disturbances and require regular maintenance.

Object of the disclosure

The present disclosure aims at improving previously known methods for controlling treatment plants with the object of reducing the costs for the operation of the treatment plant and thereby providing an improved method for controlling a treatment plant suitable for treatment of liquid. A basic object of the disclosure is to provide an improved method of initially defined type, which entail that a constant speed of the liquid flow can be achieved without the need for external speed sensors. External speed sensors suffer from the drawbacks that they are expensive and require monitoring and maintenance as they are susceptible to disturbances and thereby risk to provide incorrect information.

In one aspect, there is provided a method for controlling a plant for treatment of waste water, wherein the plant comprises:

- a basin configured to house a liquid,
- at least one flow generating machine arranged in the basin and configured to generate a liquid flow in the basin,
- at least one equipment that is arranged in the basin and that effects the momentum of the liquid flowing in the basin, and
- a control unit that is operatively connected to said at least one flow generating machine,

the method being **characterized** by the steps of:

- in the control unit storing a predetermined relationship between the operational speed N of the flow generating machine and an operational parameter P from which the torque M of the flow generating machine may be derived, which relationship depends on a predetermined liquid flow speed V in the basin at the flow generating machine,
- determining the operational speed N of the flow generating machine,
- from the determined operational speed N determining a set value of the operational parameter P of the flow generating machine based on said relationship between the operational speed N of the flow generating machine and the operational parameter P of the flow generating machine,
- by means of the control unit determining a real value of the operational parameter P of the flow generating machine, and
- by means of the control unit adjusting the operational speed N of the flow generating machine if the real value of the operational parameter P of the flow generating machine is different than the set value of the operational parameter P of the flow generating machine.

In another aspect, there is provided a plant for treatment of waste water, comprising:
- a basin configured to house a liquid,
- at least one flow generating machine arranged in the basin and configured to generate a liquid flow in the basin,
- at least one equipment that is arranged in the basin and that effects the momentum of the liquid flowing in the basin, and
- a control unit that is operatively connected to said at least one flow generating machine,

characterized in that the control unit comprises a

predetermined relationship between the operational speed N of the flow generating machine and an operational parameter P from which the torque M of the flow generating machine may be derived, which relationship depends on a predetermined liquid flow speed V in the basin at the flow generating machine, the control unit being configured to determine from a given operational speed N a set value of the operational parameter P of the flow generating machine based on said relationship between the operational speed N of the flow generating machine and the operational parameter P of the flow generating machine, determine a real value of the operational parameter P of the flow generating machine, and adjust the operational speed N of the flow generating machine if the real value of the operational parameter P of the flow generating machine is different than the set value of the operational parameter P of the flow generating machine.

Brief description of the Invention

According to the invention at least the basic object is obtained by means of the initially defined method, having the features defined in the independent claim. Preferred embodiments of the present invention are further defined in the dependent claims.

According to a first aspect of the present invention it is provided a method of the initially defined type, which method is characterized be the steps of in the control unit storing a predetermined relationship between the operational speed N of the flow generating machine and an operational