

Claims

- [Claim 1] A system comprising:
a planning section that generates a production plan for controlling a production site during a target interval, using a planning model;
a retrospective planning section that generates a retrospective plan, which is a production plan that retrospectively reflects at least one of unplanned events that occurred after generation of the production plan, using the planning model; and
an analyzing section that analyzes production performance of the production site during the target interval, based on the production plan and the retrospective plan.
- [Claim 2] The system according to Claim 1, wherein
the retrospective planning section generates the retrospective plan by changing one or more factors to be input to the planning model in a manner to reflect at least one of the unplanned events.
- [Claim 3] The system according to Claim 2, wherein
the retrospective planning section generates the retrospective plan by changing one or more factors corresponding to each of uncontrollable events that could not be accounted for at the time when the production plan was generated, from a value thereof at the time when the production plan was generated.
- [Claim 4] The system according to Claim 3, wherein
the retrospective planning section generates a plurality of cases of the retrospective plan, where each case is generated by sequentially changing one event at a time among the uncontrollable events, and changing the one or more factors corresponding to the one event from the values thereof at the time when the production plan was generated, and
the analyzing section analyzes the production performance for each event, based on the production plan and the plurality of cases of the retrospective plan.
- [Claim 5] The system according to Claim 3 or 4, wherein
the retrospective planning section generates the retrospective plan without changing factors other than the one or more factors corresponding to each of the uncontrollable events, from the values thereof at the time when the production plan was generated.
- [Claim 6] The system according to any one of Claims 1 to 5, wherein

- the analyzing section analyzes the production performance further based on actual operation at the production site.
- [Claim 7] The system according to any one of Claims 1 to 6, wherein the analyzing section analyzes a deviation of the production performance, caused by the occurrence of at least one of the unplanned events, based on the production plan and the retrospective plan.
- [Claim 8] The system according to any one of Claims 1 to 7, wherein the retrospective planning section generates, as the retrospective plan, an optimal production plan that can be obtained when the occurrence of at least one of the unplanned events is retrospectively reflected.
- [Claim 9] The system according to any one of Claims 1 to 8, further comprising:
a control section that controls the production site based on the production plan.
- [Claim 10] The system according to any one of Claims 1 to 9, wherein the planning model is a linear programming model.
- [Claim 11] A method comprising:
generating a production plan for controlling a production site during a target interval, using a planning model;
generating a retrospective plan, which is a production plan that retrospectively reflects at least one of unplanned events that occurred after generation of the production plan, using the planning model; and
analyzing production performance of the production site during the target interval, based on the production plan and the retrospective plan.
- [Claim 12] A program that, when executed by a computer, causes the computer to function as:
a planning section that generates a production plan for controlling a production site during a target interval, using a planning model;
a retrospective planning section that generates a retrospective plan, which is a production plan that retrospectively reflects at least one of unplanned events that occurred after generation of the production plan, using the planning model; and
an analyzing section that analyzes production performance of the production site during the target interval, based on the production plan and the retrospective plan.