

Interview Fedrigoni Implementation of OnEfficiency.Strength

09/2021

The consulting firm Bain & Company was engaged by Fedrigoni, a leading Italian fine paper manufacturer, to optimize the company's entire value chain, in particular with the help of digitalization. Voith impressed with its digital product portfolio and was commissioned to deliver the advanced process control OnEfficiency. Strength for more efficient paper production. The smooth implementation took place at the Fabriano site. Voith interviewed Libero Grandoni, Production Manager on site, about the realization and advantages of the digital solution.

1 Scope of delivery

1.1 What scope of delivery was ordered from Voith and why?

The scope of delivery was an algorithm that, acting on the continuous regulation of basis weight as a function of targeted caliper and on reduction of variance, optimizes the usage of raw material, reducing production costs and keeping the quality of the final product untouched.

1.2 What was the objective of Fedrigoni with the order?

The objective of Fedrigoni was the reduction of production costs, keeping the final quality of the product unchanged.

1.3 What would you tell your family/friends about the project?

It's a groundbreaking project that revolutionizes the dogmas of the paper machine control and management.

2 Implementation/Project execution/Cooperation with Voith

2.1 How was the project executed? How long did it take to implement OnEfficiency.Strength?

Before the OnEfficiency.Strength implementation, the paper produced was analyzed. With the help of the research, it was possible to identify the necessary technical specifications that lead to an optimal end product. The observation period of all paper quality parameters was 8 months.

2.1.1 What were the specific milestones?

- · Mid-October 2020: start-up of the system
- End of November 2020: optimization of caliper control
- March 2021: hundred percent utilization of OnEfficiency .Strength with higher savings than expected

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2.1.2 When did you see the first savings?

From the first activation of OnEfficiency.Strength.

2.2 What influence did the corona pandemic have? How did remote tools/remote support helps?

Remote support was essential to replace the face-to-face meetings that were cancelled as a result of the Corona pandemic.

2.3 How did the integration into the existing systems work? Extremely easy.

2.4 How has the collaboration between OT/automation team and IT worked out? Which challenges were successfully overcome?

The collaboration was excellent and it brought OnEfficiency. Strength to be operational in a few days.

The following challenges were mastered successfully:

- 1) the data received from different systems, for example laboratory or QCS data, could be transmitted successfully
- 2) the time synchronization of the different systems concerned went smoothly
- 3) the initial distrust of the operators towards the digital system quickly turned into positive evaluations

2.5 How did the cooperation with Voith work?

The cooperation was constructive. Voith was very open to all of Fredrigoni's whishes and requirements and put them into practice.

2.6 What was the best moment in the project?

Every day when I check the paper produced in the morning and realize that with the help of OnEfficiency. Strength I can achieve an optimized product specification that I would not have achieved otherwise.

2.7 What challenges did you have to overcome? See point 2.4.

3 Daily operation

3.1 What was the previous state? What has changed since the implementation?

With the implementation of OnEfficiency. Strength, we reached an even higher level of optimization.

3.1.1 What is the daily work with the new system like? It's perfectly integrated.

3.1.2 What are the biggest advantages in the daily work?

Knowing that at every moment all possibilities are used to produce and save as much as possible.

3.2 If you changed work routines, how did you support this change process/the necessary cultural change?

To increase motivation, we showed the successful results of the first months.

3.3 How did you convince the operators to use the system?

We carefully explained the operating principle of OnEfficiency .Strength and how the control was acting on the plant. In addition, we showed situations where the optimized paper quality could not be achieved without OnEfficiency.Strength.

4 Benefits

4.1 In which areas have you seen improvements with the help of OnEfficiency.Strength?

In order for OnEfficiency. Strength to be accurate, we were forced to revise and monitor the precision/calibration of the QCS sensors (moisture/basis weight/caliper/ash) more regularly as well as implemented further optimization measures.

4.2 Which savings can you achieve? Are there any key figures / KPIs you would like to highlight?

Per corporate policy, we don't share figures. However, we can

confirm that costs have been significantly reduced due to OnEfficiency.Strength.

4.3 What are the three biggest advantages of the new solution/of OnEfficiency.Strength?

- Ensure paper is always produced within technical specifications with the highest possible fiber savings
- · Reduction of production costs
- Improvement in product sustainability

5 Roll out

5.1 Can you imagine / do you plan a roll-out?

Yes we are already working on that.

5.2 Would you recommend OnEfficiency. Strength to your colleagues in other mills? What would you tell them is the biggest advantage?

For sure. The main advantages are described in the previous answers.

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