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Realized Carbon neutrality and Reduction of industrial waste

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One of the world's leading precision manufacturer companies producing more than 5,500 different products. As a leading company in the precision machining industry, the company is also actively involved in the sustainability and CSR.

Summary

Carbon neutrality and Reduction of industrial waste

What was your company's issue?

Contamination and Industrial Waste in the Grinding Process

One of our products, calipers, used to receive complaints from our customers because they are used often, and customers could quickly notice scratches. So, we carefully looked at the manufacturing process. Especially in the grinding process, the risk of damage to the product is high because abrasive grains fall off the whetstone, which has a self-generating action. In the past, it has been a common practice to filter abrasive grains to prevent their contaminations, but there were concerns about environment, cost, and workload which the usage of filters caused.

Why FILSTAR®?

Reduction of Defective Products and Maintenance Improvement

When our company was in the process of introducing a new grinder, a grinder manufacturer told us about how well FILSTAR® worked. We initially had FILSTAR® on a trial basis, and it has the visible drain cup that made maintenance easier. Also, the number of defective products dropped. Considering those merits, we decided to purchase the product.

How FILSTAR® Works?

Improved Productivity, Profitability, and Work Environment

Filters used to become industrial waste, but now that filters no longer need to be processed, the cost of processing them and environmental damages have been reduced. In the past, several staff needed to change the filters and there was a manufacturing downtime due to the replacement of filters. But now, as FILSTAR® requires no filters and manufacturing downtime, our company could increase productivity.

No Stress for Cleaning

Issues in the Grinding Process

There was Nothing We Could Do in a Conventional Way

As mentioned above, we carefully produce products not to receive complaints from customers. Scratches are most likely to occur during the grinding process. Therefore, when using a grinder, it was important to use a paper filter with a fine mesh to ensure that the abrasive grains were filtered before air blasting. However, with conventional methods, a certain amount of grit contamination was regarded as unavoidable. In addition, used paper filters were always disposed of as industrial waste, which was a problem we needed to solve. For these reasons, we found that eliminating filters in the grinding process was the best way to solve many of our problems all at once.

How did you know FILSTAR®?

Its Reputation and High Performance

We had heard that FILSTAR® had a good reputation. We tried other companies' products similar to FILSTAR®, but we were interested in actual FILSTAR® and decided to install the first unit. Many other companies' products allow the coolant liquid after filtration to accumulate under the centrifugal separation mechanism and circulate the clean supernatant portion. We found it inconvenient that we had to shovel the lower part to know whether it should be cleaned or not. In contrast, the drain cup equipped with FILSTAR® is very clear and provides an instant visual reminder when it is time to clean. It is also easy to remove, and can be cleaned quickly by simply turning it over and washing it, making it easy to maintain. In addition, the number of defective products dropped, so the company has continued to buy the same products since then.

Efforts to improve productivity will lead to innovative environmental preservation.

The Benefits FILSTAR® Brings You

Filter-Less and Visualization Improved Productivity

Many people in the industry did not question the fact that there is a certain amount of abrasive contamination in the grinding process. In our company, it was common practice to use paper filters in our grinding machines. Nevertheless, the size of abrasive grains allowed in each process is determined. As we approach the final process, we need to use paper filters with fine mesh. When replacing paper filters, not only does it require multiple people, but the grinding machine also stops, and that caused low productivity.

For the Bright Future

Making Changes in a Different Way

Paper filters are unfortunately disposed of as industrial waste. We are positive about continuing to purchase FILSTAR® to reduce industrial waste as much as possible in order to contribute to carbon neutrality. Since it can accumulate abrasive grains in a very clean way, we would like to cooperate with a grinding whetstone manufacturer company and industria Co.Ltd. to create a system that allows us to recycle abrasive grains to preserve the environment. We are interested in “visualization of production management.” In the future, we do hope that this will lead to overall productivity improvement by visualization.