Fagus GreCon

Case Study

How GreCon helped reduce fires and waste at Luckin Coffee

Regular fire and smoke incidents in the hot-air toaster section at Luckin Coffee are to be detected and stopped using an intelligent fire protection system – the GreCon PROTECTOR. Following a rapid implementation and ongoing optimisations, the GreCon system not only protects from fire and smoke incidents, but also minimises material losses and boosts efficiency beyond the customer's expectations.

> We expected considerably more Material waste – but the system works better than anticipated.

Factory Manager
at Luckin Coffee

luckin coffee

Rapid execution, lasting impact

Luckin Coffee is one of the largest coffeehouse chains in China, operating more than 13,000 outlets and relying on highly digitalised and automated processes. In the hot-air toaster section at Luckin Coffee, fire and smoke incidents caused by sparks occurred regularly – on average once per month. This not only posed safety risks but also led to operational disruptions and cleaning requirements. Given the pace and volume of production, the company was looking for a low-maintenance solution that would ensure safety whilst also boosting efficiency.

Luckin Coffee opted for a fire protection concept from market leader, GreCon. The project began in May 2025, installation took place in June, and the system has been fully operational since July. The GreCon PROTECTOR system was installed at critical points in the production line, where it detects potential sparks and automatically diverts the affected material.

A key advantage: the diversion valve opens and closes in a fraction of a second – thereby reducing material loss to a minimum, well below the customer's expectations. The GreCon system also provides extensive data that helps to optimise the production process, particularly by adjusting toaster parameters such as working temperature and air supply.

Luckin Coffee is currently assessing how the principle of proactive process monitoring and rapid response can be applied to other production lines. The project clearly demonstrates intelligent fire protection not only increases safety but also improves the overall process.

Results that speak for themselves:

- ✔ No more fire and smoke incidents
- ✔ Spark events reduced by 65 %
- ✔ Material waste is kept to a minimum

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READ THE FULL CASE STUDY HERE:

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