

LSG SKY CHEFS

HIGH-FLYING CUISINE

LSG Sky Chefs, the giant in-flight service provider, prepares more than 500 million meals a year. It is absolutely crucial that these meals be of excellent and uniform quality if the Lufthansa subsidiary is to succeed against global competition. With support from Porsche Consulting, the company has further enhanced the quality of its catering services. This makes the day-to-day work of its employees easier as well.

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The Airbus destined for Frankfurt has reached its prescribed flight altitude and is humming along above the clouds. The passengers are leaning back in their seats, reading their papers or scrolling through iPads while the flight attendants start to serve lunch. There is a choice between pasta and chicken, with beverages including water, fruit juices, and red wine. It's just another day at 11,000 meters in the air. Few of the passengers have any idea of the enormous logistics that go into producing these compact meals. But precisely that is the job of LSG Sky Chefs. With 30,000 employees and approximately 26 percent

FOR HIGH FLYERS



of the market, this Lufthansa subsidiary is the world's largest provider in the global in-flight service sector. It makes more than 500 million meals a year for people of every cultural background.

The key to the company's success consists of uniform, superior quality standards for customers all around the world, regardless of whether they are located in Europe, Asia, the Middle East, North America, or South America. For all of them, as far as the company is concerned, a tomato is never just a tomato. If a customer wants a cherry tomato as a garnish, that is what it will be—substituting even a different type of cocktail

tomato would be an error. As would cutting fruit into four instead of the specified six pieces. The industry is known for its high level of pressure, and its zero tolerance for error. A passenger should never feel disadvantaged. "Our delivery must always be 100 percent correct," says Dr. Udo Lange, Senior Vice President Operational Excellence.

In order to further optimize delivery reliability for its more than 300 airline customers, this in-flight service provider sought support from Porsche Consulting. "Our stated aim was to introduce higher quality into the entire system," says Björn Scheel, Vice President →

Operational Excellence Europe. This led to the creation of the company's own Operative Quality Management System, or OQMS, at the production site in Brussels to serve as a pilot project for the entire corporate group. OQMS is a sophisticated yet simple early warning system of quality loops: a system that keeps the LSG Sky Chefs cooks on a clear course and that provides a streamlined overview of individual areas (see "Creating Quality" article on the opposite page).

The customer service center at Brussels International Airport in the suburb of Zaventem is not just a large-scale kitchen. It is a factory. Delivery trucks supply its high-bay warehouse with everything that passengers might desire on board—from infant formula and chocolate mousse to rice soup. The individual products move from the warehouse into the factory's production cycle on demand. Fresh fruit and vegetables are sent to the "cold kitchen," while the "warm kitchen" prepares main courses in huge pots and pans for dishes to be enjoyed by first-class passengers. The meals are then immediately cooled to comply with strict hygiene regulations. After being packaged on airline trays and loaded onto trolleys, they wait in refrigerated storehouses for transport to their respective airplanes. The Brussels site can supply as many as 35,000 meals—per day. Around midday, its spacious work areas and winding corridors are the scene of intense activity. Kettles boil while cooks roll out dough on enormous baking trays. The aromas of cilantro, mango, chicken, and fresh bread waft through the air. Employees at long tables dress rows of identical little salads. Before them stands a golden standard—a model portion that has to be precisely copied a thousand times.

Nearly everything is done by hand by the more than 300 people who work here. Flexibility is of paramount importance because the catering business is extremely fast-moving. Airlines regularly change their culinary offerings in order to provide passengers with variety. So meal designers at LSG Sky Chefs work together with the airlines' catering experts to create new individual courses. These specifications then have to be put into practice in the kitchen. The process is now supported by OQMS. Based on a thorough analysis of production procedures, OQMS has introduced "quality gates" at five interfaces located in the warehouses, the kitchens, and the delivery area itself. Instead of the random checks previously performed on the food items shortly before delivery, quality is now monitored after each stage of production.

"The basic idea was to place the quality checks where the work is done, instead of putting them at the end of the value-added chain," says Scheel. This transfers a greater share of responsibility from the quality department to the production staff. While constant monitoring takes a certain effort, "we save a lot of time thanks to better operating processes," says Tony Green, Managing Director Belgium.

Employees recognize this as well. Whereas it used to be the case that an urgent phone call might require rapid adjustment to a delivery shortly before takeoff because a fork or condiment was missing, the atmosphere in the kitchen is now more relaxed. As Scheel puts it, "the red phone no longer rings." ←



A model is used to fill each plate at LSG Sky Chefs.



To ensure uniform appearance, quality has to be tested and visualized on a continuous basis.

CREATING QUALITY – RIGHT FROM THE START

The Operative Quality Management System (OQMS) provides greater transparency and uniformity for production at LSG Sky Chefs.

The best answers to complicated questions tend to be as simple as possible. Such as the Operative Quality Management System that Porsche Consulting has introduced at LSG Sky Chefs in Brussels. A core element consists of five new quality gates for production located in the warehouses, in the cold and warm kitchens, at the tray preparation station, and on the loading ramp. Visible from afar, these “Q gates” are indicated by red signs hanging from the ceilings of the passages to the next production stage. Here the work done thus far is checked individually for quality and quantity. Only then do the items proceed to the next production area. The basic principle is the following: Never accept an error, and never pass one along!

When breakfast is being prepared for an early flight, for example, all items need to be packed precisely in accordance with the airline’s order list: 80 pats of butter, 80 tiny jars of jam, 80 rolls, and so on. The employees inspect everything on the carts and enter the results onto tables hanging under the red signs. Is anything missing? Might Irish butter have been replaced by German butter? Is everything on schedule? The finished carts of trays will be checked in the same way at the kitchens before being released to roll toward the aircraft.

The five capital letters SQCDP stand for the major indices of Safety, Quality, Costs, Delivery Service, and People. Documentation for every day of the month includes a field headed by one of these big letters, with values marked in green or red depending on whether they are satisfactory. Every employee can therefore see at a glance what is going smoothly and what isn’t. This meticulous accounting is by no means an end in itself. Instead, the results are evaluated on a regular basis in team meetings and on the management level. Each work shift starts with feedback and briefings by co-workers. “OQMS helps us to identify

problems and develop solutions,” says Patrick Vrolix, Director Operations in Brussels. “We explain to our colleagues what we’re doing and why we’re doing it. We now have the facts at hand, so these discussions are less subjective and everyone is motivated to improve things.”

“This simple-sounding principle has an entire series of positive effects,” observes Pieter Claes, Director Special Projects and Reengineering at LSG Sky Chefs in Brussels. Feedback comes in real time from the company itself—not weeks later from customers. The large amount of data makes it easier to identify sources of error. Work processes become more standardized, and training for employees more targeted. In just a few months, OQMS has already measurably improved production: zero-error production rates are up by 16 percent. Waste and trash have been reduced by a quarter, and some throughput times even cut in half.

Porsche consultants had already assisted LSG Sky Chefs in introducing a worldwide production system back in 2010. Thanks to that successful joint effort, the quality management system is now being reorganized as well. Brussels is the pilot project for the entire corporate group. OQMS will be rolled out at major operational sites worldwide, starting with Frankfurt, Hong Kong, and Dallas. “All in all,” says Dr. Lange, “the project will take three years.”

LSG SKY CHEFS FACTS AND FIGURES

LSG Lufthansa Service Holding AG is a wholly owned subsidiary of Deutsche Lufthansa AG. All airline catering activities are consolidated under the LSG Sky Chefs brand.

The companies in the LSG Sky Chefs Group posted revenues of 2.5 billion euros in 2012.

LSG Sky Chefs serves more than 300 airline customers at 209 airports around the world. In 2012 it made a total of 527 million meals.

LSG Sky Chefs employs around 30,000 people at 211 service centers in 52 countries.

